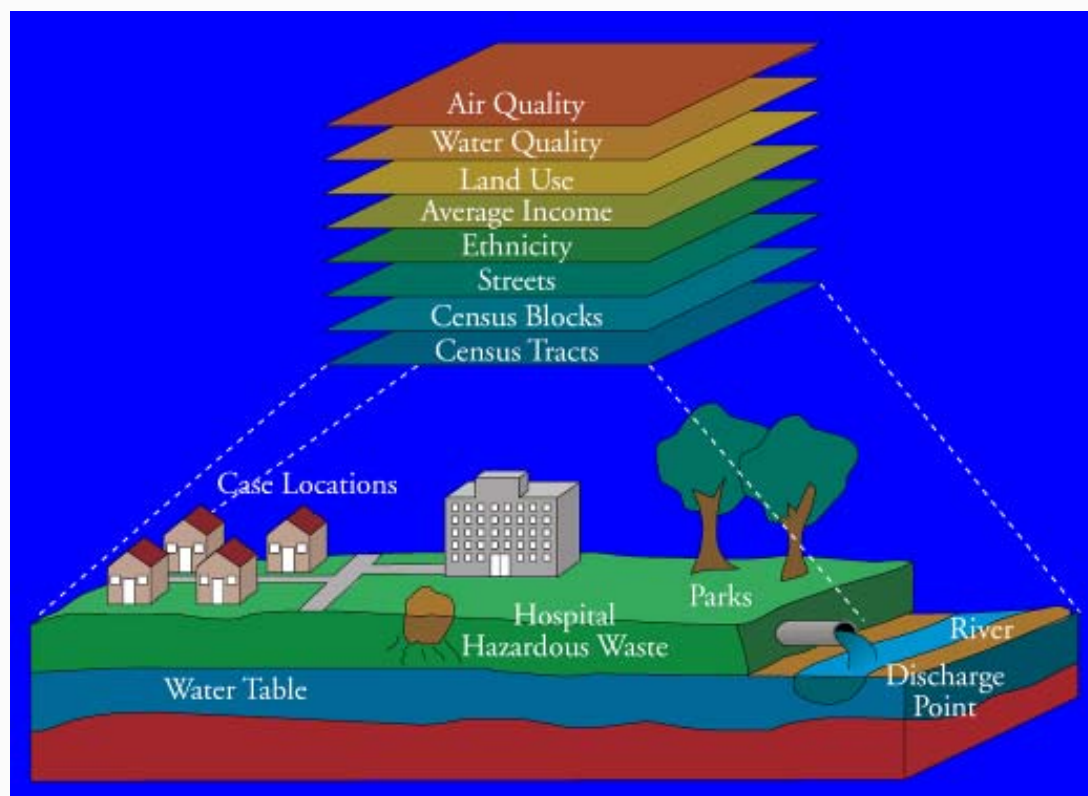


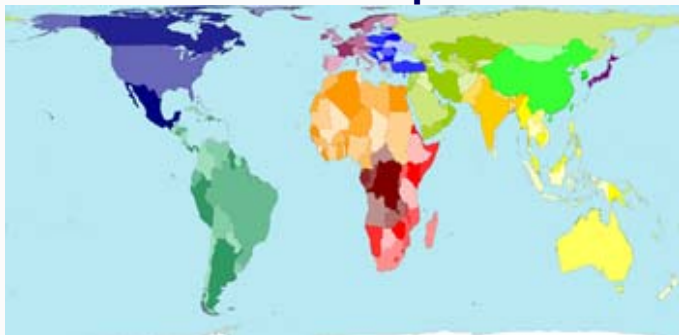
# To Map or Not To Map: A Brief Overview of GIS Tools for a Non-Technical Person



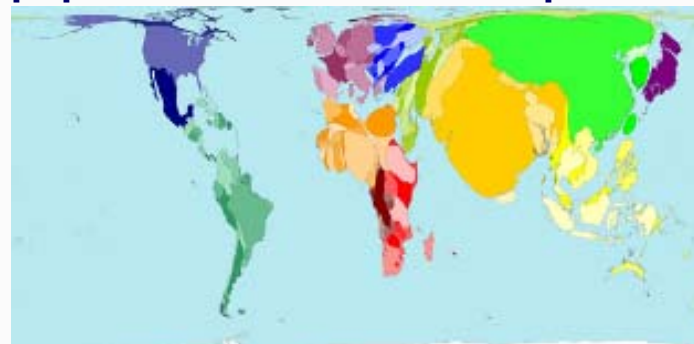
**Svetlana Smorodinsky**  
WREN Conference, Ashland, OR  
May, 2009

# Interesting maps from Worldmapper

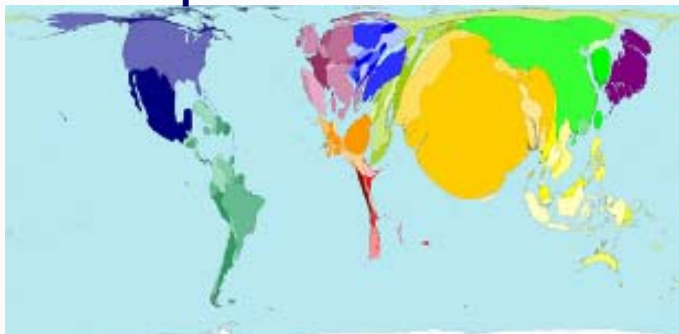
area-based world map



population-based world map 2002



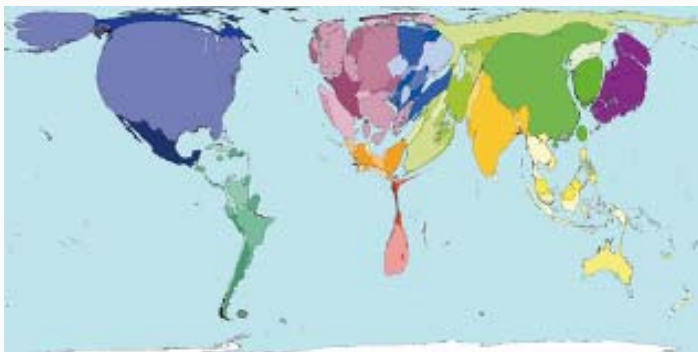
diabetes prevalence 2001



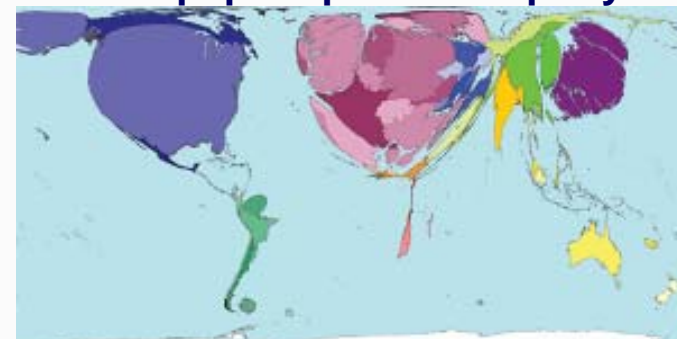
infant mortality 2002



carbon emissions 2000



science papers published per year 2001





# Acknowledgements

- CDPH
  - Craig Wolff, Matt Stone, Makinde Falade, Dan Smith, Sumi Hoshiko
- ESRI
- Google
- Everyone who posts free tools, scripts, and offers help to “GIS dummies”

## Topics

- Why GIS
- Products
- Website Resources
- Tools

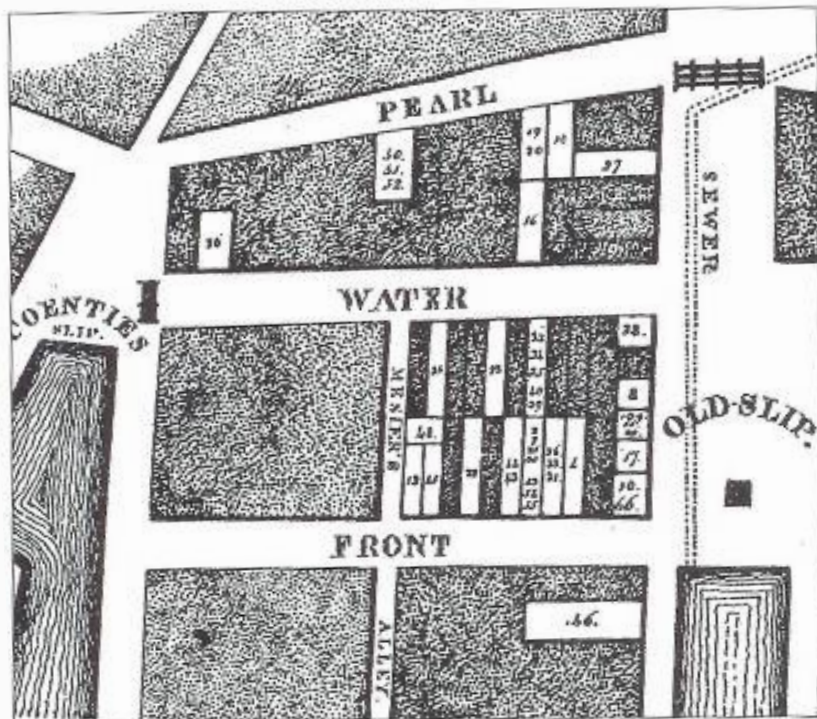


# Public Health and GIS

**1790's – Seaman** mapped a yellow fever outbreak in NYC

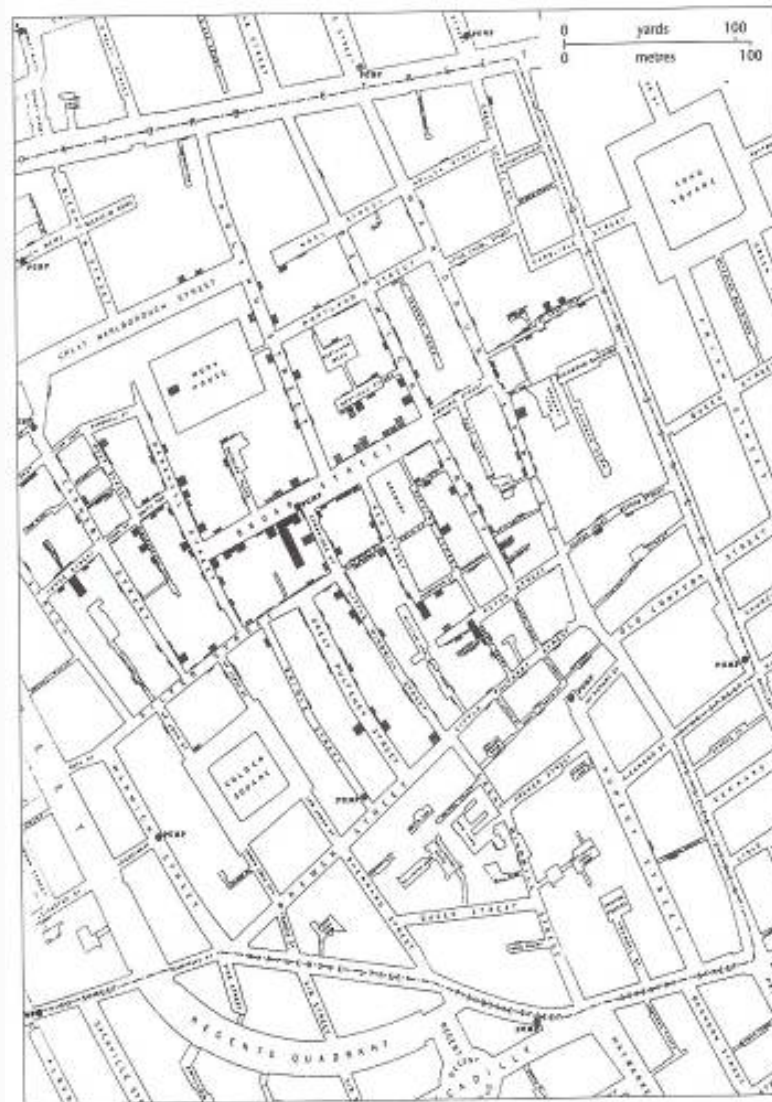
**1810's – Pascalis** mapped another outbreak in the same area

Both argued local waste materials were the causes



**Figure 2.8b** Detail in black and white of Pascalis's map of yellow fever cases near Old Slip, New York, 1819. Fatal cases are numbered sequentially by time of death.

Source: New York Academy of Medicine Library.



**Figure 4.12a** Snow's map of the Broad Street outbreak, 1854, from *On the Mode of Communication of Cholera, Second Edition*.

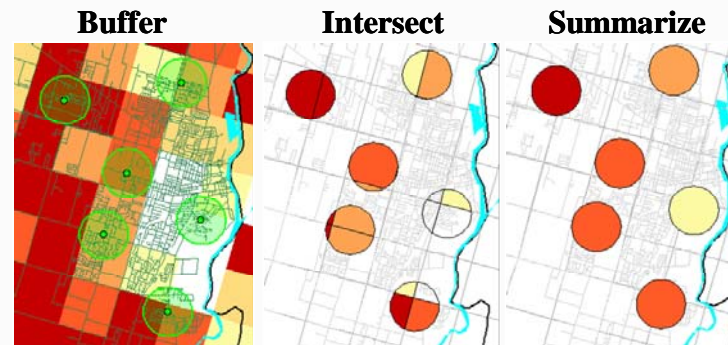
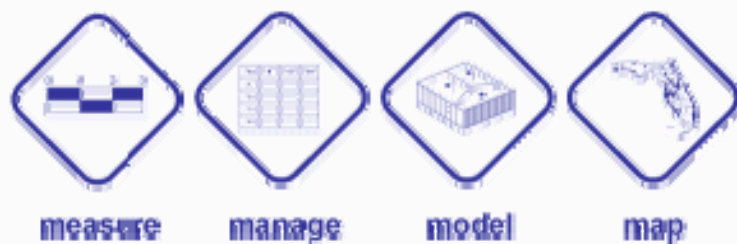
Source: Reproduced courtesy of College of Physicians of Philadelphia.

**John Snow – Broad Street Pump, 1854**



# GIS and Public Health

- GIS is a powerful tool for
  - Data management and integration
  - Data analysis, visualization, and reporting
  - Management of resources
  - Documentation
- Collaboration with other disciplines
- Collaboration within public health and health services programs
- Data standards (development and application)





# GIS products

- ESRI products
  - ArcGIS
    - ArcView → ArcEditor → ArcInfo
    - number of tools depends on licensing level
  - ArcSDE, ArcGIS Server
    - behind-the-scenes
  - ArcGIS Explorer
    - free GIS viewer
- Other GIS software companies and products
  - MapInfo, Maptitude, SAS GIS, SAS Bridge to ESRI, EpiMap
- Other mapping and visualization products (mostly web-based)
  - Google Maps, Google Earth, Microsoft Live Maps, Microsoft Virtual Earth, NASA WorldWind, Yahoo Maps, etc



# GIS web resources

- **Health**

- CDC EpiInfo – EpiMap
- CDC NCHS
- CDC GIS
- BRFSS Maps
- NCI GIS
- March of Dimes
- WHO HealthMapper
- Health Map

- **Environment**

- US EPA EnviroMapper
- NLM ToxMap

- **General**

- US Census AmericanFactFinder
- National Atlas
- GeospatialOneStop
- Google.org
- Social Explorer

- **Training and Useful Information**

- Geography.com
- GIS.com
- Color Brewer
- ESRI Virtual Campus





# CDC EPIINFO-EPIMAP



http://www.cdc.gov/epiinfo/maps.htm

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## Resources for Creating Public Health Maps

Download [free shapefiles](#) for Windows version Epi Info™  
[Submit](#) a new Website for this list

### Public Health and GIS Overviews

#### Geographic Boundaries

- [Principal Repositories](#)
- [US State Geographic Data Sources](#)
- [Global Positioning System](#)
- [Images](#)
- [Additional Sites](#)

#### Data

- [Demographic](#)
- [Health Outcomes](#)
- [Environmental and Health Risk Exposure](#)

[Geostatistics/Spatial Analysis](#)  
[Global Public Health GIS Projects](#)  
[Conferences and Symposia](#)  
[Software](#)  
[Consultants](#)

### Public Health and GIS Overviews

- [Geographic Information Systems in Public Health and Epidemiology](#), Pan American Health Organization Health Analysis and Information Systems.
- [Geographic Information Systems in Public Health](#), Agency for Toxic Substances & Disease Registry.
- [GIS and Public Health](#), CDC National Center for Health Statistics.
- [Improving Public Health](#) Through Geographical Information Systems An Instructional Guide to Major Concepts and Their Implementation, Web Version 1.0, December 1997. By Gerard Rushton at the University of Iowa.
- [Public health](#) geographic information systems (GIS) news and information: 1994-1997, by Charles Croner (January 1998). CDC National Center for Health Statistics Cognitive Methods Working Paper Series Number 23. Can be ordered online.
- [Visualizing Health Statistics](#), CDC National Center for Health Statistics and the Pennsylvania State University.

([top](#))

#### Geographic Boundaries

Use these resources to locate shapefiles for use with any ESRI-compatible GIS software, including Epi Info™.

#### Principal Repositories

#### Contents

##### Downloads

- [Epi Info™](#)
- [Maps](#)

##### User Support

- [Installation](#)
- [Tutorials](#) updated
- [Registration](#)

##### Resources

- [Translations](#)
- [Vendors](#)
- [Training](#)
- [About Epi Info™](#)
- [Bibliography](#)
- [Contact Us](#)
- [Museum](#)

[8-City Enhanced Terrorism Surveillance Project: Resource Materials](#)

[Downloads](#)

[Epi Info™](#)

[National Notifiable Disease Surveillance System](#)

[Data Systems](#)

[Public Health Surveillance](#)

Your First Click to the U.S. Government



# CDC NCHS



Address [http://www.cdc.gov/nchs/about/otheract/gis/gis\\_links.htm](http://www.cdc.gov/nchs/about/otheract/gis/gis_links.htm)

**CDC** **NCHS** National Center for Health Statistics ...Monitoring the Nation's Health

**GIS and Public Health**  
NCHS Home | [GIS Home](#) | [Selected Maps](#)  
[Public Health GIS News and Information](#)  
[GIS and Related Events](#) | [Links to Related Sites](#)  
[CDC/NCHS Privacy Policy Notice](#) | [Accessibility](#)  
[Search NCHS](#) | [Contact us](#)

**Links to Related Sites**  
\*Indicates interactive mapping site

**National Atlases:**

- [Atlas of United States Mortality](#)
- [National Atlas of the United States<sup>TM</sup>\\*](#)
- [Atlas of Cancer Mortality in the United States 1950-94\\*](#)
- [Atlas of Respiratory Disease Mortality, United States](#)
- [The Dartmouth Atlas of Health Care in the United States](#)

**Federal Mapping Tools:**

- [Cardiovascular Health Interactive Maps\\*](#)
- [The National Center for Injury Prevention and Control Maps\\*](#)
- [MapStats](#)
- [Census Bureau American FactFinder\\*](#)
- [Census Bureau State and County Demographic and Economic Profiles\\*](#)
- [Census Bureau TIGER Map Server\\*](#)
- [NIJ Mapping and Analysis for Public Safety](#)
- [EPA EnviroMapper\\*](#)
- [HUD Community Planning Software 2020](#)

**National Spatial Data Infrastructure:**

- [United States Geological Survey Formal Metadata](#)

**Other Related Web Sites:**

- [NCHS Research Data Center](#)
- [ATSDR Geographic Information Systems in Public Health](#)
- [CDC/ATSDR Geographic Analysis Tool for Health and](#)

**About NCHS** ▶  
**NCHS en Español** ■  
**FASTSTATS A to Z** ■  
**Help** ▶  
**Events** ■  
**Surveys and Data Collection Systems** ■  
NHANES ▶  
NHCS ▶  
NHIS ▶  
NIS ■  
LSOAs ■  
NSFG ■  
SLATS ■  
Vital Statistics ▶  
**Initiatives** ■  
Aging ▶  
Disease Classification ■  
Healthy People ■  
Injury ■  
**Research and Development** ■  
Research Data Center ■  
**Press Room** ■  
News Releases ■  
**Publications and Information Products** ■  
SETS ■  
**Listserves** ■  
**Other Sites** ■  
**Download:** ■  
Adobe Acrobat Reader® ■  
Microsoft PowerPoint Viewer® ■  
National Center for Health Statistics  
3311 Toledo Road  
Hyattsville, MD 20782  
Toll Free Data Inquiries  
1-800-232-4636



# CDC GIS



Address <http://www.cdc.gov/gis/>

[Home](#) | [About CDC](#) | [Press Room](#) | [A-Z Index](#) | [Contact Us](#)

Department of Health and Human Services  
Centers for Disease Control and Prevention

[CDC en Español](#)

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## GIS at CDC

### View By Topic

- > [What is GIS](#)
- > [CDC Web Applications](#)
- > [Map Gallery](#)
- > [Training](#)
- > [Data](#)
- > [Other Resources](#)
- > [GIS Home](#)

### Contact CDC

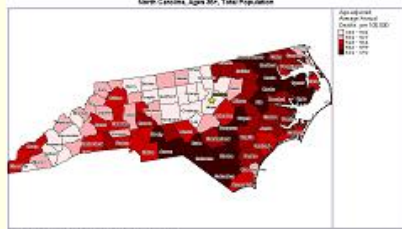
Centers for Disease Control and Prevention  
1600 Clifton Road  
Atlanta, GA 30333  
**Call:**  
1 (800) 311-3435  
TTY: 1 (888) 232-6348  
FAX: (770) 488-4760

**E-mail:**  
[Email Form](#)

## Geographic Information Systems (GIS) at CDC

**Spotlight: [Heart Disease and Stroke Maps](#)**

The National Center for Chronic Disease Prevention and Health Promotion presents data for Heart Disease and Stroke Mortality Rates. The application can create and display interactive maps of national, state, or county rates for Heart Disease and Stroke Mortality, broken out by geography, gender and ethnicity.



[Explore](#)

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Page last modified: November 14, 2006

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**SAFER • HEALTHIER • PEOPLE™**  
Centers for Disease Control and Prevention, 1600 Clifton Rd, Atlanta, GA 30333, USA  
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348, 24 Hours/Every Day - [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

**USA.gov**  
Government Made Easy

Department of Health and Human Services





# CDC BRFSS Maps



Address <http://apps.nccd.cdc.gov/gisbrfss/default.aspx>

**CDC** National Center for Chronic Disease Prevention and Health Promotion  
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**Behavioral Risk Factor Surveillance System**  
[BRFSS Home](#) | [BRFSS Maps Home](#) | [Contact Us](#)

## BRFSS Maps

Select from the following menus to map BRFSS data

**Year:** 2007

**Category:** Select a Category

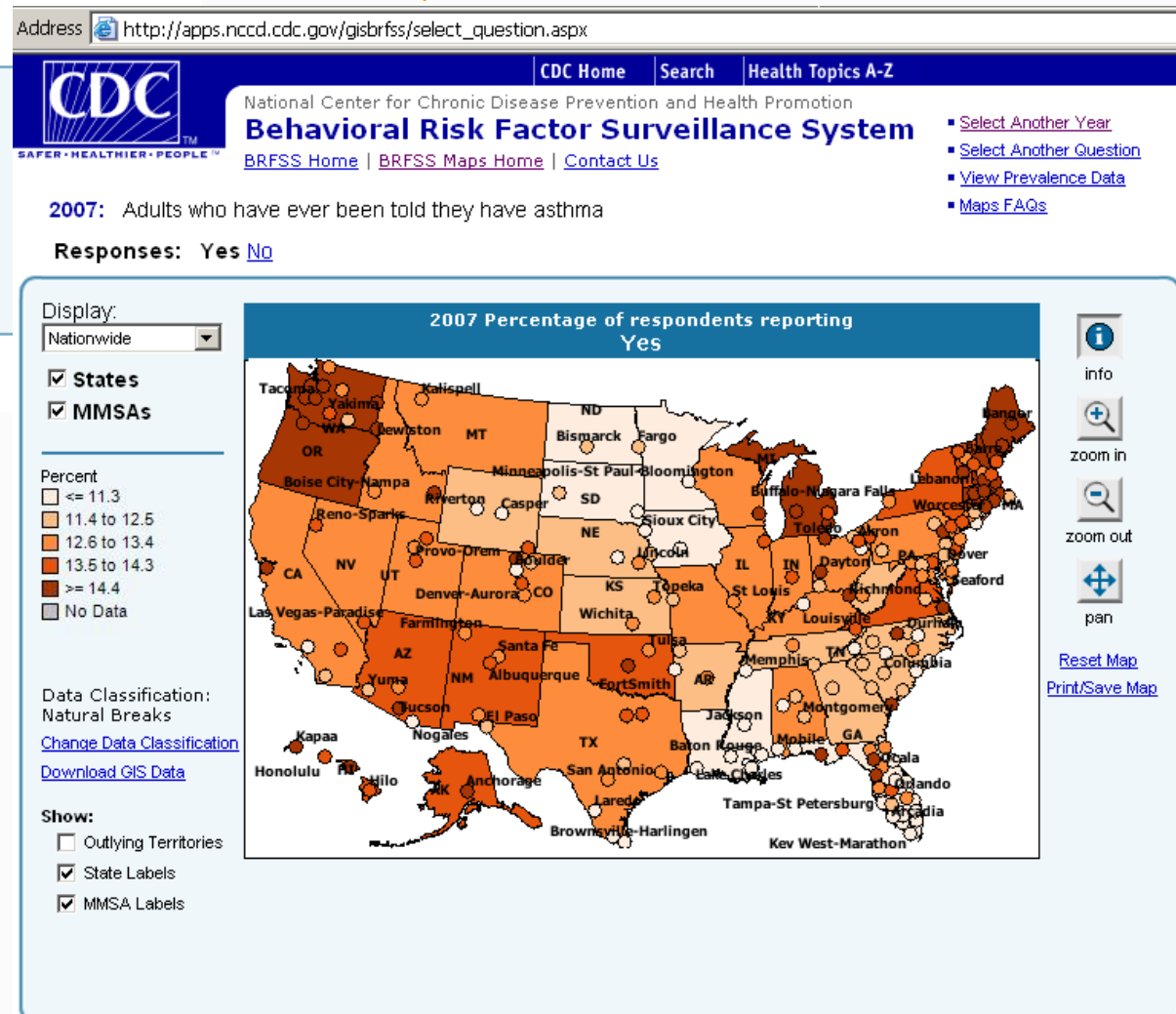
[Click here to download BRFSS GIS data](#)

**BRFSS MAPS**

- Maps Home
- Download GIS Data
- Maps Methods and FAQ
- Maps Help

**BRFSS CONTENTS**


- Prevalence Data
- SMART: City and County Data
- BRFSS Maps
- Web Enabled Analysis Tool (WEAT)
- Trends Data
- Chronic Disease Indicators (CDI)





# NCI GIS



Address  http://www.gis.cancer.gov/



National Cancer Institute

U.S. National Institutes of Health | [www.cancer.gov](http://www.cancer.gov)

NATIONAL  
CANCER  
INSTITUTE



## GIS Geographic Information Systems

Search:  

[Home](#) [Contact Us](#) [GISSIG](#)

A Web site supported by the NCI for use by the public, cancer researchers, and the GIS Special Interest Group.

### About GIS at NCI

- [About this Site](#)
- [About the GIS Special Interest Group](#)
- [Contact Information](#)

### Overview of GIS at NCI

- [Introduction to GIS at NCI](#)
- [Geographic-based Research & Applications at NCI](#)
- [GIS Database Development](#)
- [Spatial Data Analysis](#)
- [Geovisualization Tools Development](#)
- [Communication of Georeferenced Statistics](#)

### Examples of GIS Applications

- [Federal Government](#)
- [State Health Departments](#)
- [General Use of GIS in Public Health](#)

### Data Sources

- [Links to NCI & Other Government Data](#)
- [Miscellaneous Data](#)

### Key NCI Initiatives

- [State Cancer Profiles](#)
- [Cancer Mortality Maps & Graphs](#)
- [Long Island Geographic Information System](#)
- [US Predicted Cancer Incidence, 1999: Spatial Projection Models](#)

### Tools & Resources

- Please read our [Disclaimer](#)
- [General Resources](#)
- [Mapping](#)
- [Spatial Analysis](#)
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- [Health Disparities](#)
- [Tools for ArcMap](#)
- [Miscellaneous Tools](#)
- [Professional Services](#)
- [GIS Organizations](#)
- [Regulations \(HIPAA, Confidentiality, Accessibility\)](#)

### Funding

- [How to Obtain Funding](#)
- [Currently Funded GIS Grants](#)
- [National Science Foundation Grants Program](#)

### What's New

- [Linked Micromaps Graphing Program Available for Download](#)
- [ColorTool for ArcMap Available for Download](#)

### Helpful Links

- [GIS Dictionary](#)
- [Upcoming GIS Events](#)

### Publications

- [Best Practices](#)
- [Papers](#)
- [Journals](#)
- [Confidentiality Regulations in Research](#)
- [Newsletters, Listservs, URLs](#)
- [Search PubMed](#)

### Training

- [Online Courses](#)
- [Reference](#)

# March of Dimes


Address  <http://www.marchofdimes.com/peristats/>



## Welcome to PeriStats®

Developed by the March of Dimes Perinatal Data Center, the PeriStats Web site provides free access to US, state, county, and city maternal & infant health data.

**Easy Start:** Over 60,000 graphs, maps and tables available!  
Select a region to get a complete list for the US or your state.

Choose a State... 



### WHAT'S NEW

#### The Latest

- [Preterm Birth Rate Drops](#)
- [States Expand Newborn Screening for Life-Threatening Disorders](#)
- [Preterm Births Rise 36 Percent Since Early 1980s](#)
- [Babies Born Just a Few Weeks Too Soon at Greater Risk of Cerebral Palsy and Other Developmental Delays](#)

#### Newborn Screening




### DATA VIEWERS



#### Create Graphs

Graph specific maternal & infant health indicators for the United States.  
[More graphs available inside!](#)

Choose a State... 


Choose an Indicator... 

[submit](#) 



#### Quick Facts

Obtain brief facts on maternal & infant health indicators.

Choose a State... 


Choose a Topic... 


[submit](#) 



#### Create Maps

Make US and State maps for specific maternal & infant health indicators.  
[More maps available inside!](#)

Choose a State... 


Choose an Indicator... 


[submit](#) 



#### State Summaries

Get state summaries of maternal & infant health indicators.

Choose a State... 

Choose a Summary... 

[submit](#) 



# WHO HealthMapper

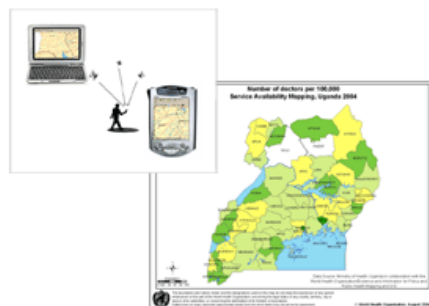
[http://www.who.int/health\\_mapping/en/](http://www.who.int/health_mapping/en/)



The screenshot shows the WHO HealthMapper website. At the top, there's a navigation bar with the WHO logo and the text 'World Health Organization'. Below this, there's a search bar and a language selector (English, Français, Русский, Español). The main content area is titled 'Public Health Mapping and GIS' and includes a sidebar with links to Home, About WHO, Countries, Health topics, Publications, Data and statistics, Programmes and projects, Public Health Mapping and GIS, About the Public Health Mapping and GIS programme, Tools, and Support to programmes. The main text describes the HealthMapper as a surveillance and mapping application developed by WHO, aimed at addressing critical surveillance information needs across infectious disease programmes at national and global levels. It also mentions that the system facilitates data standardization, collection and uploading of data on epidemiology and on interventions, and provides immediate visualization of data in the form of maps, tables and charts. There are two small inset images: one showing a map of Africa with a red dot indicating a location, and another showing a line graph with a red peak.

## GIS and public health mapping

### What is GIS?



Using GIS to map public health data

access to data on temperature, soil, elevation, patterns of land use, and phases of vegetation in addition to the precise geographic location of water bodies, population centres, buildings, roads, and other infrastructure. Their use for purposes ranging from the search for natural resources to transportation engineering, urban design, and agricultural planning was quickly recognized and exploited.

### GIS for public health

Geographic information systems and remote sensing have capabilities that are ideally suited for use in infectious disease surveillance and control, particularly for the many vector-borne neglected diseases that are often found in poor populations in remote rural areas. They are also highly relevant to meet the demands of outbreak investigation and response, where prompt location of cases, rapid

Geographic information systems (GIS) is a computer-aided database management and mapping technology that organizes and stores large amounts of multi-purpose information. GIS adds the dimension of geographic analysis to information technology by providing an interface between the data and a map. This makes it easy to present information to key decision-makers quickly, efficiently and effectively.

Geographic information systems and remote sensing from earth-observing satellites are sophisticated and powerful technologies that are finding applications far beyond those originally intended. Both are products of the Cold War developed by departments of defence for military purposes. Together, they allow near real-time

## The Global Health Atlas

WHO has launched the first global online atlas of infectious diseases, a new tool for infectious disease surveillance and control which builds on the features of the HealthMapper. Over 300 indicators for more than 20 infectious diseases of major public health concern are included in the database.

In a single electronic platform, the Atlas is bringing together for analysis and comparison standardized data and statistics for individual diseases and indicators at country, regional, and global levels. The analysis and interpretation of data are further supported through information on demography, socioeconomic conditions, and environmental factors. In so doing, the Atlas specifically acknowledges the broad range of determinants that influence patterns of infectious disease transmission.

Maps are used to display data on the prevalence of individual diseases, the location of at-risk populations and vector habitats, and patterns of antimicrobial drug resistance. Such maps offer easy visualization of conditions ranging from the number of villages infected with guinea worm disease, through the monitoring of

[View full size map \[ipq 245kb\]](#)



Latest available HIV prevalence rate, by sentinel sites, pregnant women, 2003

# HealthMap



Address <http://www.healthmap.org/en>

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**HealthMap**  
Global Disease Alert Map

Zoom to: [N. America](#) | [S. America](#) | [Europe](#) | [Africa](#) | [Mideast](#) | [Asia](#) | [Australia](#) | [World](#) [Full Screen](#)

Map | Satellite | Earth | Terrain  
☒ Hybrid

**Feeds**

Select: [all](#), [none](#)

- ☒ ProMED Mail
- ☒ ProMED MBOS
- ☒ World Health Organization
- ☒ EuroSurveillance
- ☒ Google News
- ☒ Moreover Technologies
- ☒ Wildlife Disease Node
- ☒ HealthMap Community
- ☒ ProMED Español
- ☒ Google News Español
- ☒ ProMED Español

**Category**

- ☒ International Significance
- ☒ New & Ongoing Outbreaks
- ☒ Warnings

**Diseases, last 30 days**

Select: [all](#), [none](#) [Info](#)

- ☒ Hand, Foot and Mouth Disease (144)
- ☒ Dengue Fever (129)
- ☒ Avian Influenza (123)
- ☒ Not Yet Classified (112)
- ☒ Salmonella (67)
- ☒ Tuberculosis (61)
- ☒ Meningitis (60)
- ☒ Cholera (49)
- ☒ Measles (43)
- ☒ Other Animal Disease (40)
- ☒ Polio (36)

**Alerts by country**

[Zoom to country:](#)  
[United States \(210\)](#)

2000 mi  
2000 km

Google

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Date range: 22 Mar - 20 Apr

Outbreak missing from the map? Help us by adding it:



# EPA EnviroMapper



Address <http://www.epa.gov/enviro/html/em/>

Google



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Frequently Asked Questions

## EnviroMapper StoreFront

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## EnviroMapper StoreFront

ZIP Code:

What to Map:



[Advanced Options](#)



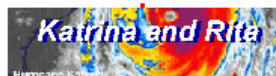
Display facility and chemical-based information from the Envirofacts Warehouse.  
[Go to EnviroMapper...](#)



View federal, state, and local information about environmental conditions and features in an area of your choice.  
[Go to EnviroMapper...](#)



Display National Priorities List (NPL) sites using the EnviroMapper for Superfund application.  
[Go to EnviroMapper...](#)



Provides test results of flood water, sediment from flood water, surface water, soil, and time-delayed air sampling from the areas affected by Hurricanes Katrina and Rita.  
[Go to EnviroMapper...](#)



The tool combines interactive maps and aerial photography to help you get accurate latitude and longitude coordinates of your facility. To use the tool, [go to FRS login...](#)



View information of demographic characteristics using the [Environmental Justice](#) Geographic



Locate, display and query brownfields grant types and properties addressed by the areas/jurisdictions of city, county, state, and tribe.  
[Go to EnviroMapper...](#)



Provides assistance in siting waste management facilities based on proximity to sensitive locations and potential hazards such as fault lines, flood plains, wetlands, and karst topography.  
[Go to EnviroMapper...](#)




Find locations where pollution is being, or has been, cleaned up throughout the United States.



# NLM ToxMap

<http://toxmap.nlm.nih.gov/toxmap/main/index.jsp>


United States  
National Library  
of Medicine

**TOXMAP**  
Environmental Health e-Maps

[Home](#) [TRI Facilities](#) [TRI Releases](#) [TRI Trends](#) [Superfund](#) [Combo](#) [Search](#) [Help](#) [Contact Us](#)

[Search](#) [Define Map](#) [Display Map](#) [Set Region](#) [Other Data](#) [Download](#)

[Start over](#)

**Search Results** [\[Edit Search\]](#) [\[Save Results\]](#) [TRI](#) [Superfund](#)

**All TRI Reporting Facilities: All Chemicals**

**TRI State Fact Sheets** [TRI](#) - 21,677 TRI facilities reporting nationwide in 2007

**All Superfund NPL Sites: All Chemicals**

**Superfund** - 1,619 NPL sites nationwide

[Print this map](#)

**Map Other Data**

- [US Census Data](#)
- [Income Data](#)
- [Health Data](#)
- [Reference Data](#)

**Chemical Information**

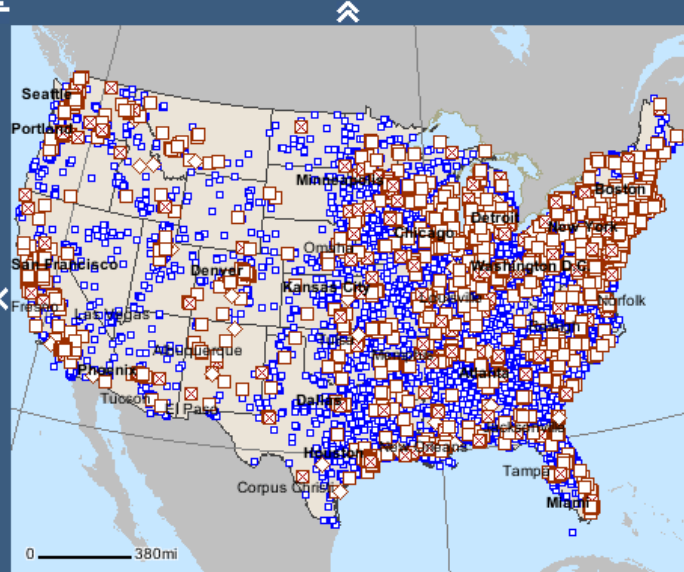
- [Search NLM](#)
- [CDC](#)

**Health Risk Information**

- [CDC ToxFAQs](#)
- [NJ Hazardous](#)
- [Substance Fact Sheets](#)
- [California Proposition](#)
- [65 Chemicals](#)

**Toxicology References for this Map**
[Search TOXLINE](#)

[What is the Toxics Release Inventory \(TRI\)?](#)  
[What is the "Superfund" Program?](#)  
[Does TOXMAP show all sources of toxic chemicals released into or present in the environment?](#)  
[What data](#)



**MAP DETAILS**
[TRI facility details](#)  
[Superfund site details](#)  
Click on the links above to see details for this map.

**MAP CONTROLS**

**TRI** [\[Save results\]](#)

- ☐ None
- ☒ Facilities : 2007
- ☐ Releases : 2007
- ☐ Trends

**Superfund** [\[Save results\]](#)

- ☐ None
- ☒ All NPL
- ☐ NPL Final
- ☐ NPL Deleted
- ☐ NPL Proposed

**Demographic** [\[Save results\]](#)

- ☒ None
- ☐ Population Density - 2000

[Apply other demographics](#)

[Search chemical](#) | [Define a combo map](#) | [Start over](#)

**Legend**

- TRI Facility
- NPL Final
- NPL Deleted
- NPL Proposed

# US Census American FactFinder

<http://www.factfinder.census.gov>



**U.S. Census Bureau**  
American FactFinder

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**FACT SHEET**  
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**TOOLS AND REFERENCES**

**Reference Maps**

Reference Maps show selected geographic boundaries for an area along with existing features, such as roads. Boundary selections are available for geographic areas for which statistical data have been tabulated. For quick access to Reference Maps, choose from the selections below.

Select a country grouping:

- ☐ 2005 Cities and Towns
- ☐ 2000 Census Tracts and Blocks
- ☐ 110th Congressional Districts
- ☐ 2000 Metropolitan Areas
- ☐ 2002 Economic Places
- ☐ 2000 American Indian Areas

Select a state or enter a ZIP code. Click GO:

State:  ZIP code:  **GO**

**Working with Reference Maps**

You can change the view of the Reference Map by:

- selecting a different geographic area by using the link at the top of the page
- changing the boundaries displayed on the map by clicking the boundaries link
- clicking on the zoom and pan buttons, then clicking or dragging the map

For help with using Reference Maps, see the [Creating and Using Maps Tutorial](#).

Source: U.S. Census Bureau. Last Revised May 22, 2007.



**U.S. Census Bureau**  
American FactFinder

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**POPULATION FINDER**  
**FACT SHEET**  
**PEOPLE**  
**HOUSING**  
**BUSINESS AND GOVERNMENT**  
**ABOUT THE DATA**  
**DATA SETS**  
**DOWNLOAD CENTER**  
**MAPS**  
• Thematic Maps (data)  
• Reference Maps (boundaries)  
**TOOLS AND REFERENCES**

**Thematic Maps**

Thematic maps show geographic patterns in statistical data, such as population or median income, displayed as color-coded areas on a map.

Popular maps showing data for the United States by state are listed below. More thematic maps can be found under the **People**, **Housing**, and **Business and Government** links on the left.

For all Thematic Maps available in American FactFinder, including maps displaying data for smaller geographic areas (counties, census tracts, etc.), see the list of [Data Sets with Thematic Maps](#).

**People:**

- [Total Persons: 2006](#)
- [Persons per Square Mile: 2006](#)
- [Percent of People who are Foreign Born: 2006](#)
- [Median Age: 2006](#)
- [Population 65 Years and Over: 2006](#)
- [Percent of Population who have Completed High School: 2006](#)
- [Commuting Time to Work: 2006](#)
- [Median Household Income: 2006](#)
- [Percent of People below Poverty Level: 2006](#)

**Business and Government:**

**Average Payroll per Employee**

- Health Care and Social Assistance
  - [2006](#) | [2002](#)
- Manufacturing
  - [2006](#) | [2002](#)
- Professional, Scientific, and Technical Services
  - [2006](#) | [2002](#)
- Retail Trade
  - [2006](#) | [2002](#)

**Sales/Receipts/Shipments per Establishment**

- Health Care and Social Assistance
  - [2002](#)
- Manufacturing
  - [2002](#)
- Professional, Scientific, and Technical Services
  - [2002](#)
- Retail Trade
  - [2002](#)

**View more Thematic Maps:**

- [2006 County Business Patterns](#)
- [2002 Economic Census](#)

**Working with Thematic Maps**

You can change the view of the Thematic Map by:

- selecting a different theme, geographic area, or data set by using the links at the top of the page

**Thematic Maps**

You are here: [Main](#) > [All Data Sets](#) > [Data Sets with Thematic Maps](#) > [Geography](#) > [Themes](#) > [People](#)

**Change...**

- [Data Classes](#)
- [Boundaries](#)
- [Features](#)

**United States by State**  
M0504. Percent of People Born in Latin America: Foreign-born population  
Data Set: 2004 American Community Survey


NOTE: Data are limited to the household population and exclude the non-

# National Atlas



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## Home

- [What's New](#) -

### Online North American Environmental Atlas Launched

An atlas that gathers and presents information designed to help us understand continental-scale environmental issues has been released by the [Commission for Environmental Cooperation](#) (CEC). The [North American Environmental Atlas](#) is intended for use by both environmental scientists and the citizens of the United States, Canada, and Mexico. Its maps and services are designed to help the public visualize environmental topics at a continental scale. An example of this is the [pollutant mapping tool](#) in Google Earth that allows you to explore information about more than 30,000 facilities across our Nation, Mexico, and Canada. For professional users of geographic information, this Atlas offers basic cartographic and environmental data for the continent at no cost.

The CEC is an organization created by Canada, Mexico and the United States under the [North American Agreement on Environmental Cooperation](#). The Commission was established to address regional environmental concerns, to help prevent potential trade and environmental conflicts, and to promote the effective enforcement of environmental law.

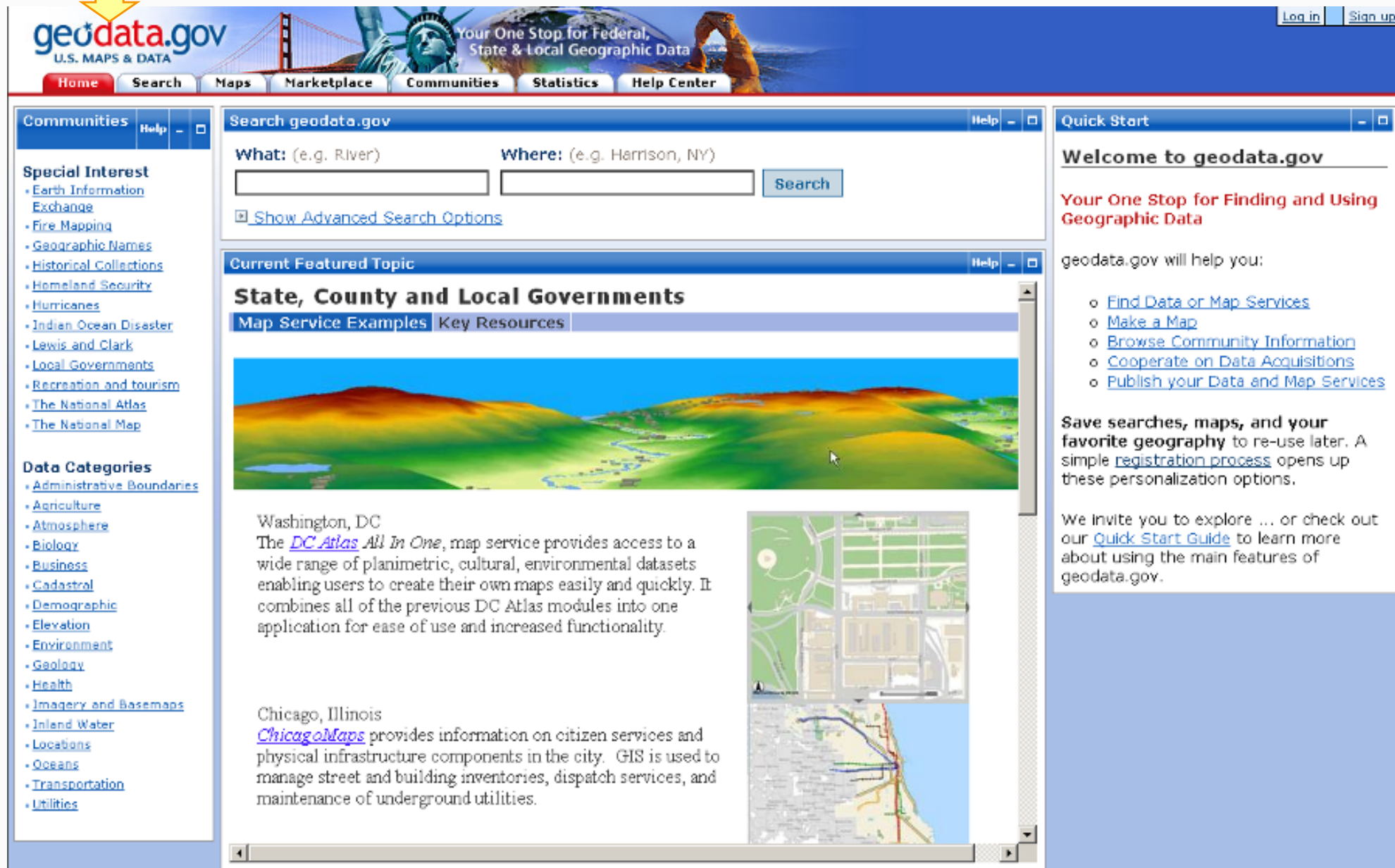


### What you can do in the National Atlas of the United States®

Customize your own map for printing or viewing.	<a href="#">Map Maker</a>
Investigate the layers that you can mix and match when making your own map.	<a href="#">Map Layers</a>
Print pre-formatted maps on a variety of topics.	<a href="#">Printable Maps</a>
Order larger maps suitable for the wall of your office, home, or classroom.	<a href="#">Wall Maps</a>
Play with interactive maps.	<a href="#">Dynamic Maps</a>
Learn about topics that interest you.	<a href="#">Articles</a>
Download documented, accurate, reliable, and integrated data to use in your GIS application.	<a href="#">Mapping Professionals</a>

able to map and include more information about the United States than we've offered in the past. For those interested in our nation's streams, lakes, and ponds, we are pleased to announce that our new surface waters map layer is a generalization of the 1:100,000-scale [National Hydrography Dataset](#) (NHD). We intend to offer a fully networked version of this map layer that includes flow direction and all other advantages of the NHD. A third benefit of mapping at 1:1,000,000-scale is that the National Atlas of the United States® can fully support the creation of the [Global Map](#). This is an effort by national mapping organizations around the world to produce standard maps that cover the globe. Another potential advantage of mapping at

# Geospatial OneStop

The screenshot shows the geodata.gov website. At the top is a blue header with the site logo, navigation tabs (Home, Search, Maps, Marketplace, Communities, Statistics, Help Center), and login/signup links. A yellow arrow points from the title to the site. The main content area is divided into three columns. The left column contains 'Special Interest' and 'Data Categories' links. The middle column features a search bar, a 'Current Featured Topic' section for 'State, County and Local Governments' with map examples, and a description of the 'DC Atlas All In One' map service. The right column has a 'Quick Start' section with a list of links for finding data, making maps, and publishing services. The bottom of the page shows a map of Chicago and a map of Washington, DC.

**geodata.gov**  
U.S. MAPS & DATA

Your One Stop for Federal, State & Local Geographic Data

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Communities Help

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- [Fire Mapping](#)
- [Geographic Names](#)
- [Historical Collections](#)
- [Homeland Security](#)
- [Hurricanes](#)
- [Indian Ocean Disaster](#)
- [Lewis and Clark](#)
- [Local Governments](#)
- [Recreation and tourism](#)
- [The National Atlas](#)
- [The National Map](#)

**Data Categories**

- [Administrative Boundaries](#)
- [Agriculture](#)
- [Atmosphere](#)
- [Biology](#)
- [Business](#)
- [Cadastral](#)
- [Demographic](#)
- [Elevation](#)
- [Environment](#)
- [Geology](#)
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- [Locations](#)
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Search geodata.gov


What: (e.g. River) Where: (e.g. Harrison, NY)

☐ [Show Advanced Search Options](#)

**Current Featured Topic**

**State, County and Local Governments**

[Map Service Examples](#) [Key Resources](#)




Washington, DC

The [DC Atlas All In One](#) map service provides access to a wide range of planimetric, cultural, environmental datasets enabling users to create their own maps easily and quickly. It combines all of the previous DC Atlas modules into one application for ease of use and increased functionality.

Chicago, Illinois

[ChicagoAtlas](#) provides information on citizen services and physical infrastructure components in the city. GIS is used to manage street and building inventories, dispatch services, and maintenance of underground utilities.



**Quick Start**

**Welcome to geodata.gov**

Your One Stop for Finding and Using Geographic Data

geodata.gov will help you:

- [Find Data or Map Services](#)
- [Make a Map](#)
- [Browse Community Information](#)
- [Cooperate on Data Acquisitions](#)
- [Publish your Data and Map Services](#)

**Save searches, maps, and your favorite geography** to re-use later. A simple [registration process](#) opens up these personalization options.

We invite you to explore ... or check out our [Quick Start Guide](#) to learn more about using the main features of geodata.gov.





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Google.org aspires to use the power of information and technology to address the global challenges of our age.

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#### [The Final Inch on YouTube](#)

Posted 2009-04-07

#### [A Green Light for Green Energy](#)

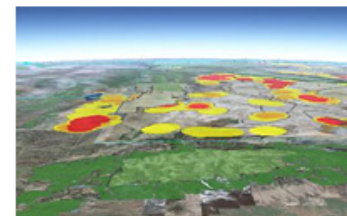
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### Featured Video





# Social Explorer



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### Social Explorer Census Reference 1790 to 2000

Median household income map

### Solutions and Products

#### About Social Explorer

Social Explorer provides easy access to demographic information about the United States, from 1790 to 2000. To get started, select "Maps" or "Reports". [read more](#)

Maps  
social explorer

Reports  
social explorer

#### Versions

##### Public Edition

We provide a free version of Social Explorer to general public. You may access it simply by going to our maps or reports section. There you will find thousands of maps and hundreds of reports with thousands of variables.

##### Subscription Edition

The subscription edition features thousands of interactive demographic maps and reports from 1790 to 2000, as well as a full-featured reporting engine that makes historical demographic research fast and easy.

### News & Announcements

#### Website upgrade!

Tuesday, July 22, 2008

We have improved the look and feel, navigation and added a new 'Help' section which contains documents and examples on how to use Social Explorer. [more...](#)

#### NY Observer Interviews Beveridge About NYC Future

Wednesday, July 2, 2008

Andrew Beveridge was recently interviewed by the New York Observer's real estate editor. [more...](#)

#### Beveridge Gotham Gazette Article on Kindergartners

Sunday, June 15, 2008

The School Divide Starts at Kindergarten (June 2008)  
Students who attend private elementary schools or the public and gifted talented programs are far more likely to be affluent, white and living in Manhattan than most city school kids. [more...](#)

### Subscription Info.

Social Explorer offers a census reference solution that has never been possible before. [read more](#)

- Prices
- Free trial
- Subscribe Now!**

### Newsletter!

Subscribe to our Quarterly Newsletter to receive latest updates! [more info](#)

Name:

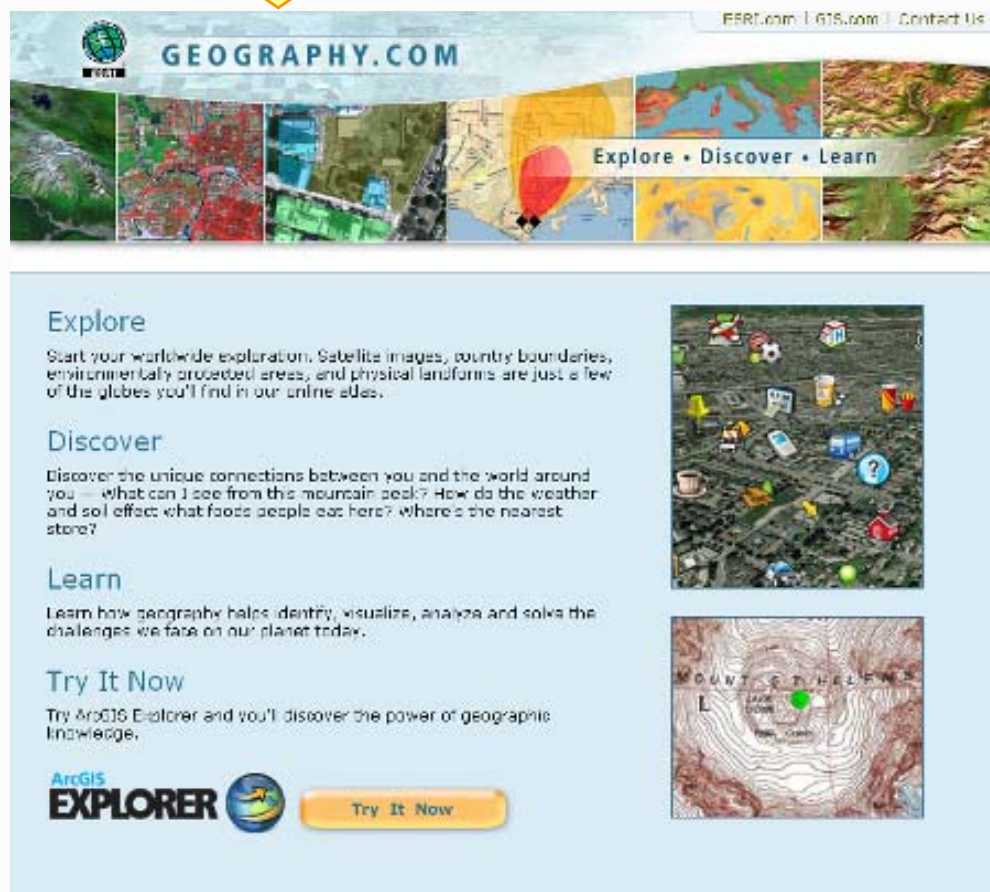
Email:

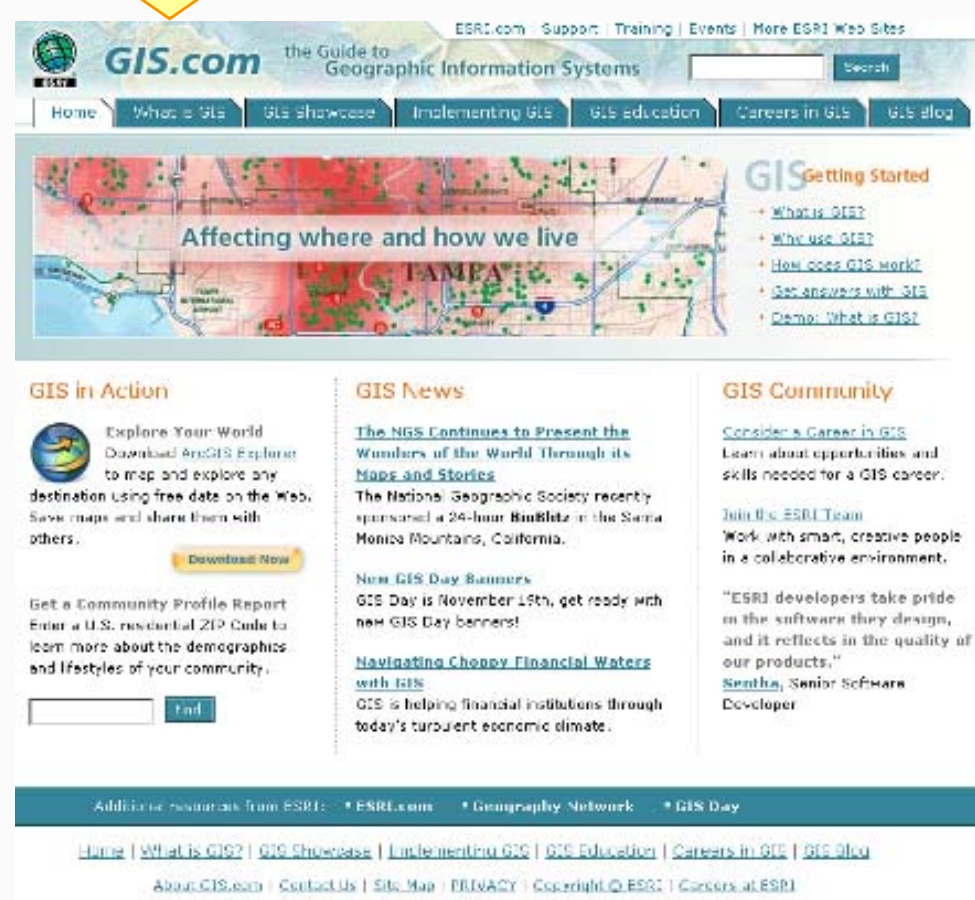
### News Feed (RSS)

Receive regular news updates through our RSS feed!

[News feed](#)

# ESRI's Geography.com and GIS.com

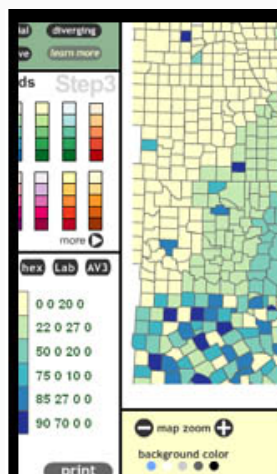







# ColorBrewer

<http://www.colorbrewer.org>



concept and  
color schemes  
**Cindy Brewer**

interface design  
and programming  
**Mark Harrower**

funding provided by  
**dg QG**  
Digital Government  
Quality Graphics

[go to ColorBrewer](#) | [Update Info](#)

## Overview

### Welcome to ColorBrewer!

[ColorBrewer](#) is an online tool designed to help people select good color schemes for maps and other graphics. It is free to use, although we'd appreciate it if you could cite us if you decide to use one of our color schemes.

Click any [ColorBrewer](#) link on this intro page to use it.

### How to Use It

ColorBrewer is easy to use. Just follow the "Step1", "Step2" etc. boxes and you'll be creating attractive color schemes appropriate to the nature of your data in seconds.

When they appear, don't forget to click on the Step 3 mini legends (they load the different color schemes).

NOTE: ColorBrewer is a color diagnostic tool - not an online GIS. You cannot load your own data into ColorBrewer. Instead, use our maps to "test drive" a given color scheme to see if it suits your mapping needs.

### What Software do you Need?

You'll need the free Flash plug-in for your browser (Flash 5 or later). If you get a big empty box when you try to load ColorBrewer, [go here and download the plug-in](#).

Need more detailed instructions? [Go here](#)

### [Take me to ColorBrewer](#)

PENNSTATE



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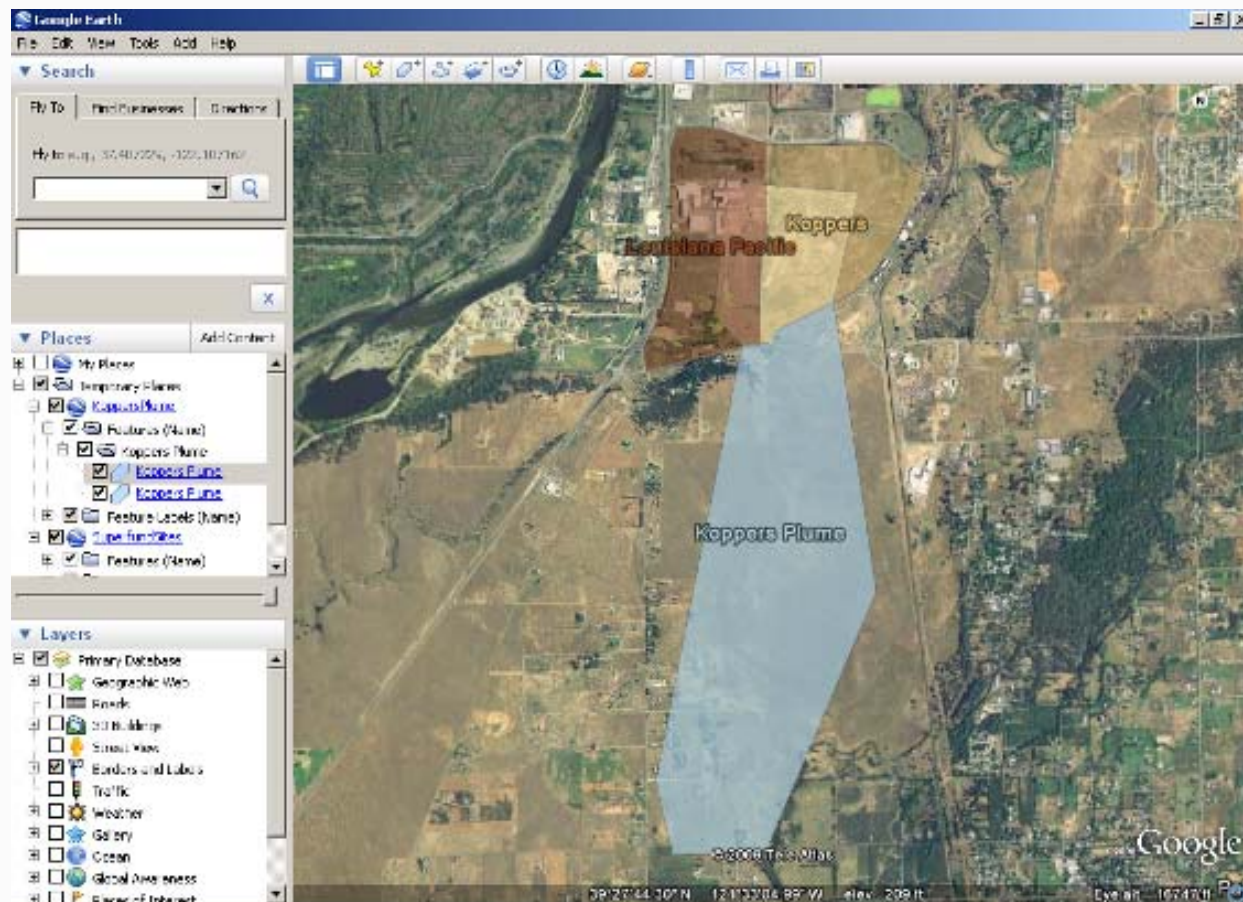
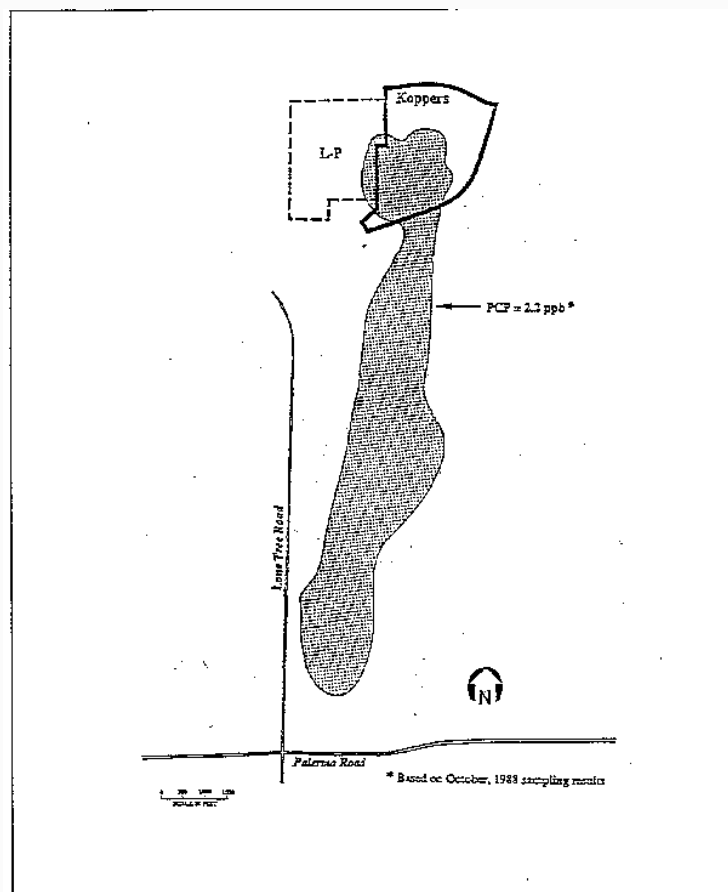
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# Let's get practical

- You're not a GIS tech
- You have no (\$\$\$) (time) (time and \$\$\$) to hire one
- You (have to) (need to) (want to) make a map
- How do you go from a (paper map) (image) (idea) to an electronic and (meaningful) (useful) (share-able) map







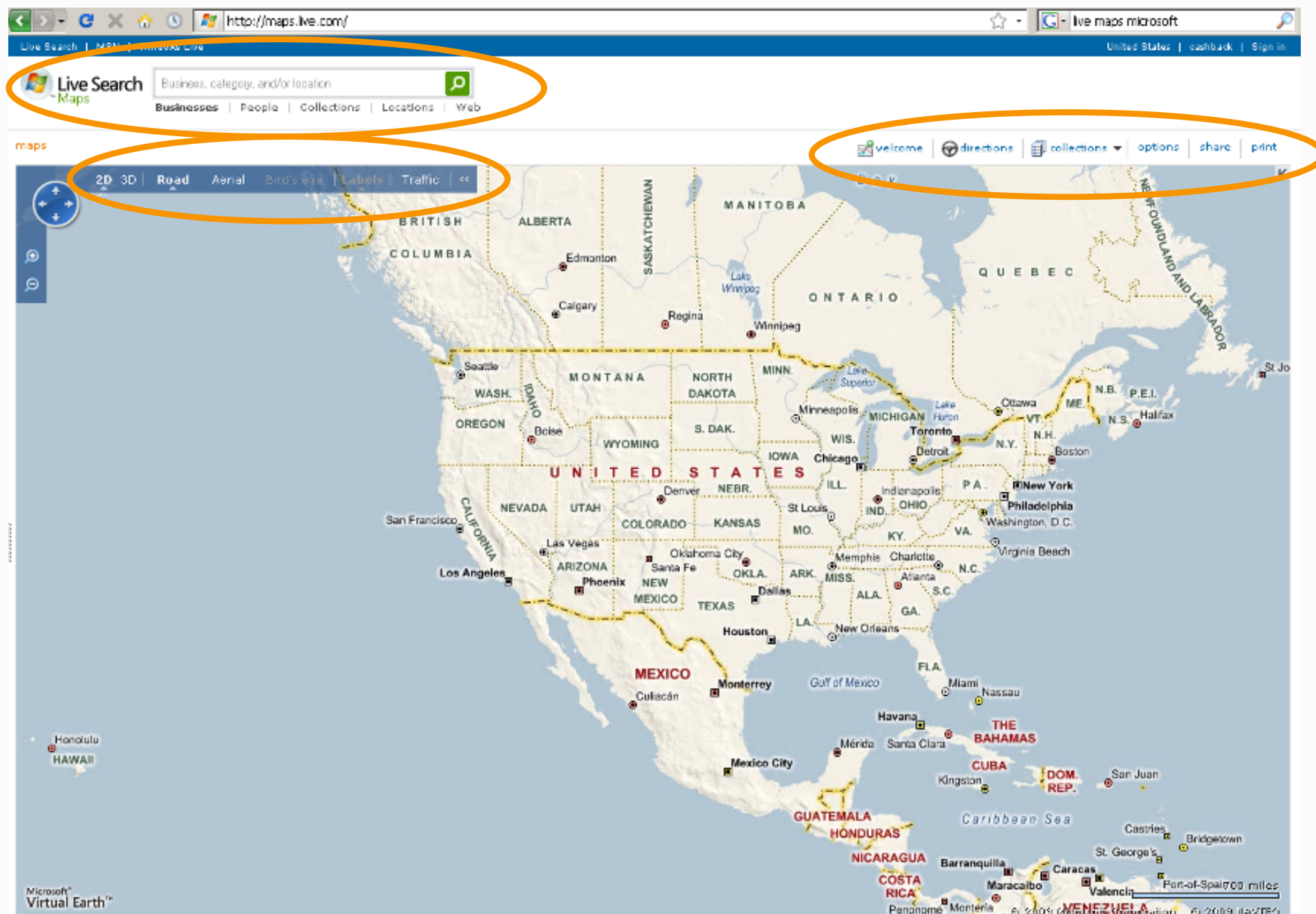
# Tools

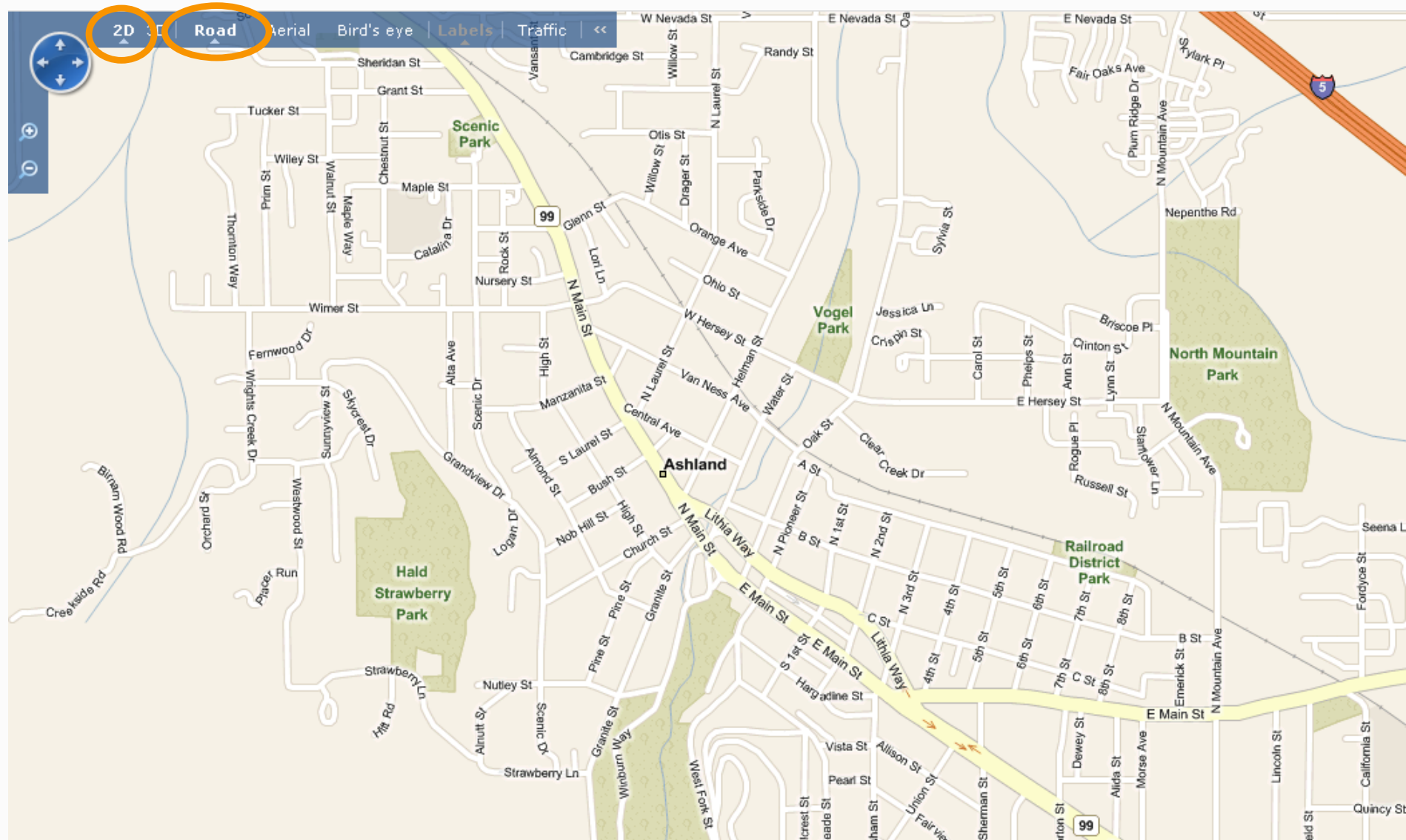
- **What Tools?**
  - Google
    - Maps and Earth
  - Microsoft
    - Live and Virtual Earth
  - ESRI
    - ArcGIS Explorer
  - Geocoding sites
    - iTouchMap and BatchGeocode
  - Others (Yahoo, etc – not covered)
- **What do we do with them?**
  - “Flat” maps
  - 3D (i.e. globes)
  - Geocode
  - Sketch (lines and polygons)
  - Save, export, share

## Why?

- Emergency preparedness (plumes, laboratories, incidents)
- Inspection sites
- Health facilities
- You name it!

# Microsoft maps.live.com











Live Search Maps - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites

Address <http://maps.live.com/> Google

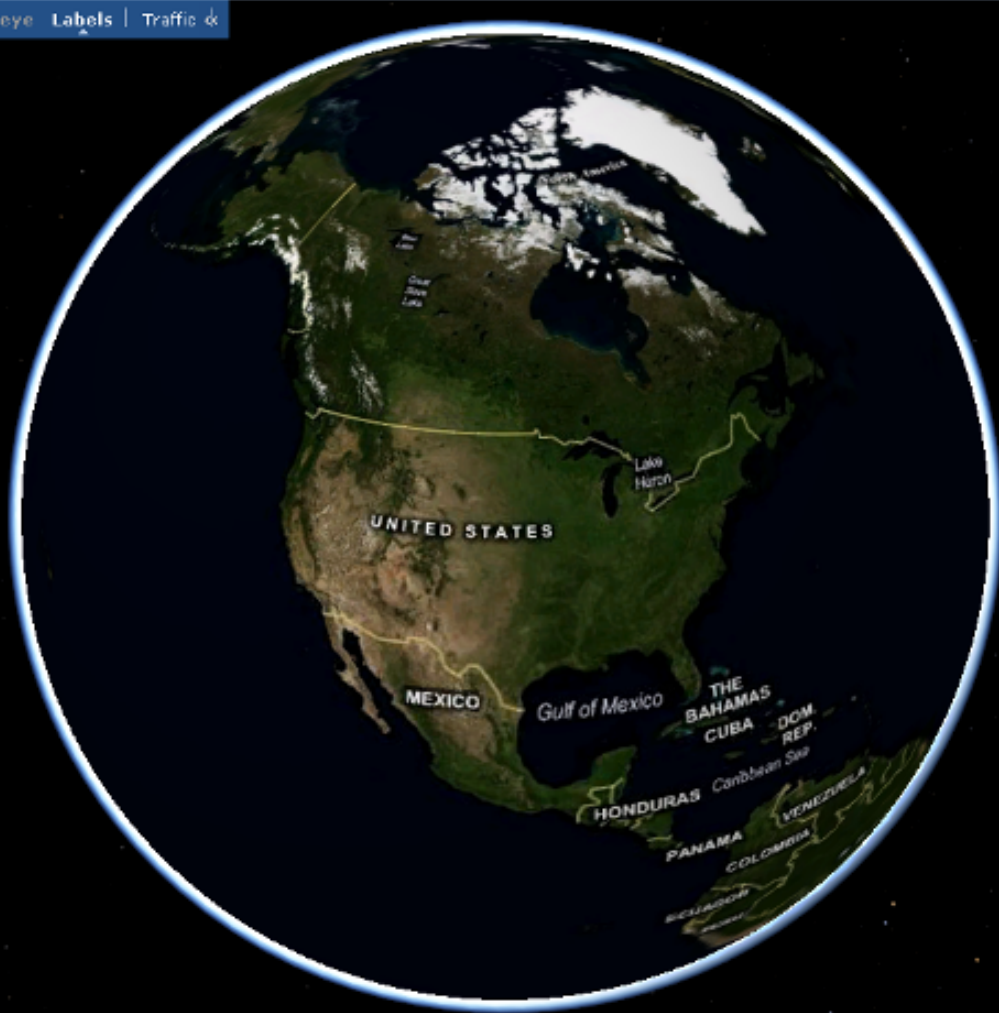
Live Search | MSN | Windows Live United States | cashback | Sign in

Live Search Maps Business, category, and/or location

Businesses | People | Collections | Locations | Web

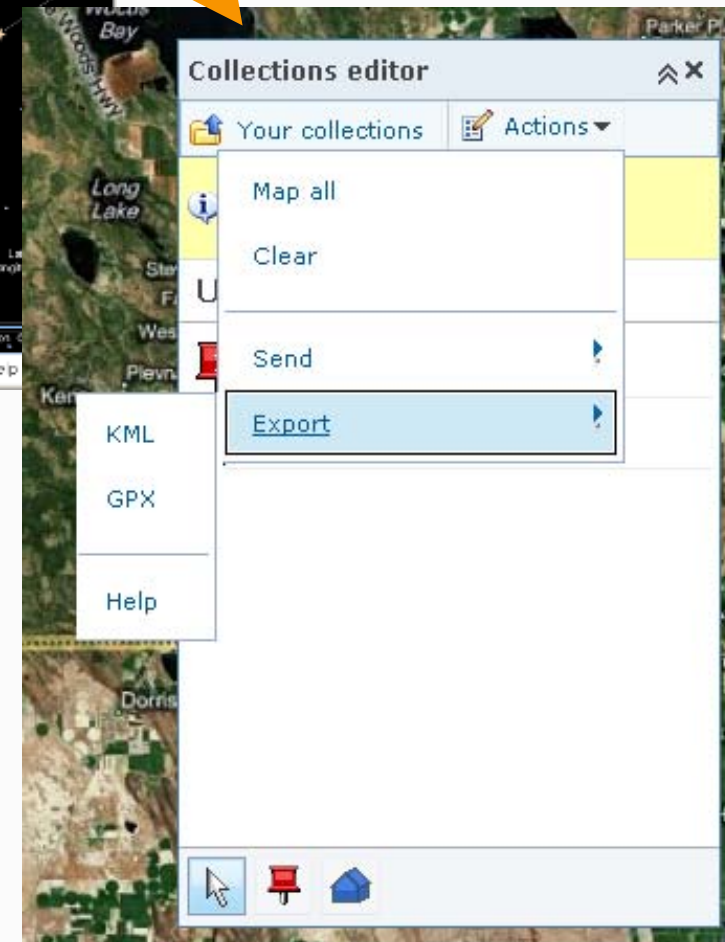
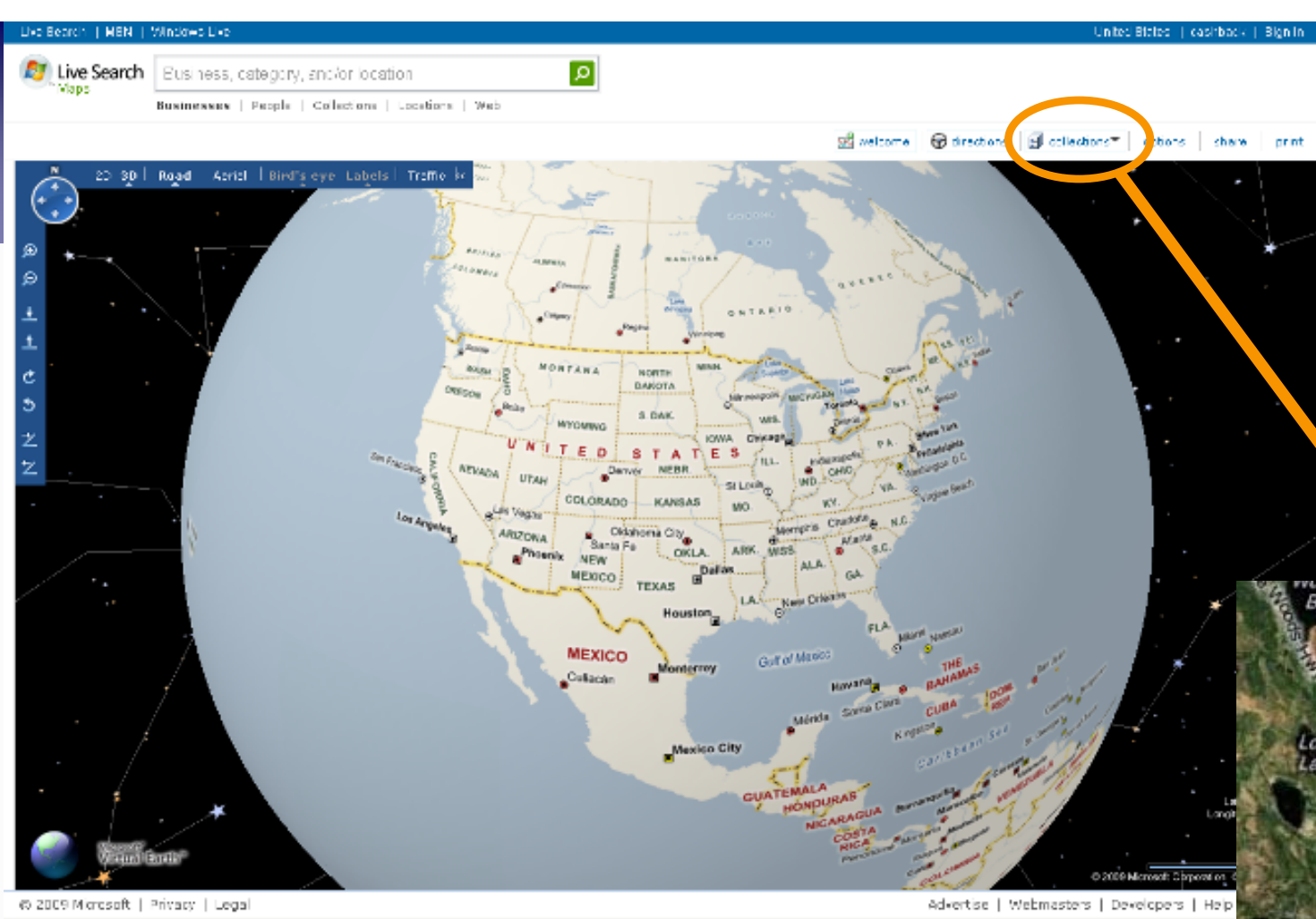
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# Google Maps

maps.google.com

Google Maps - Microsoft Internet Explorer

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Map Traffic Satellite Terrain

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BC AB SK MB ON QC NL

WA MT ND MN WI MI NY VT ME NB NS PE  
OR ID WY SD NE IA IL IN OH PA CT MA RI  
CA NV UT CO KS MO KY WV VA NC MD DE NJ  
AZ NM OK AR TN MS AL GA SC MD FL

México Gulf of Mexico North Atlantic Ocean

Guatemala Nicaragua Venezuela Colombia Guyana Suriname RR AP

1000 mi 1000 km

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☒ [Yreka to Ashland](#) Unlisted

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[Collaborate](#) [Import](#) [Done](#) [Save](#)

Title  
**Yreka to Ashland**  
Description  
How to get from [Yreka](#) to [Ashland](#)  
for WREN

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☒ Unlisted - Shared only with selected people who have this map's URL.

[Yreka WREN](#)  
Location of Posters

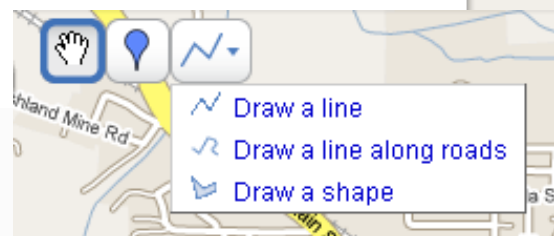


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Title

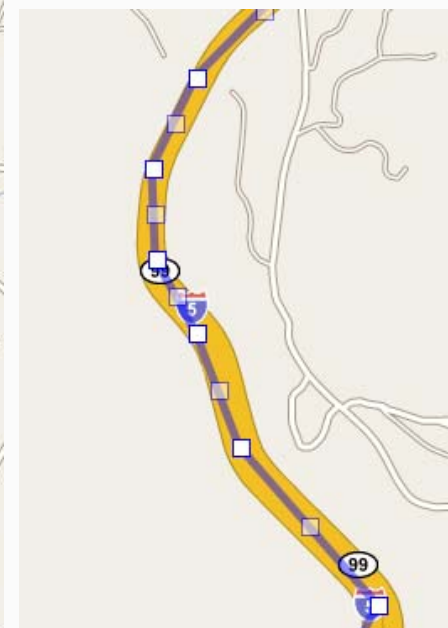
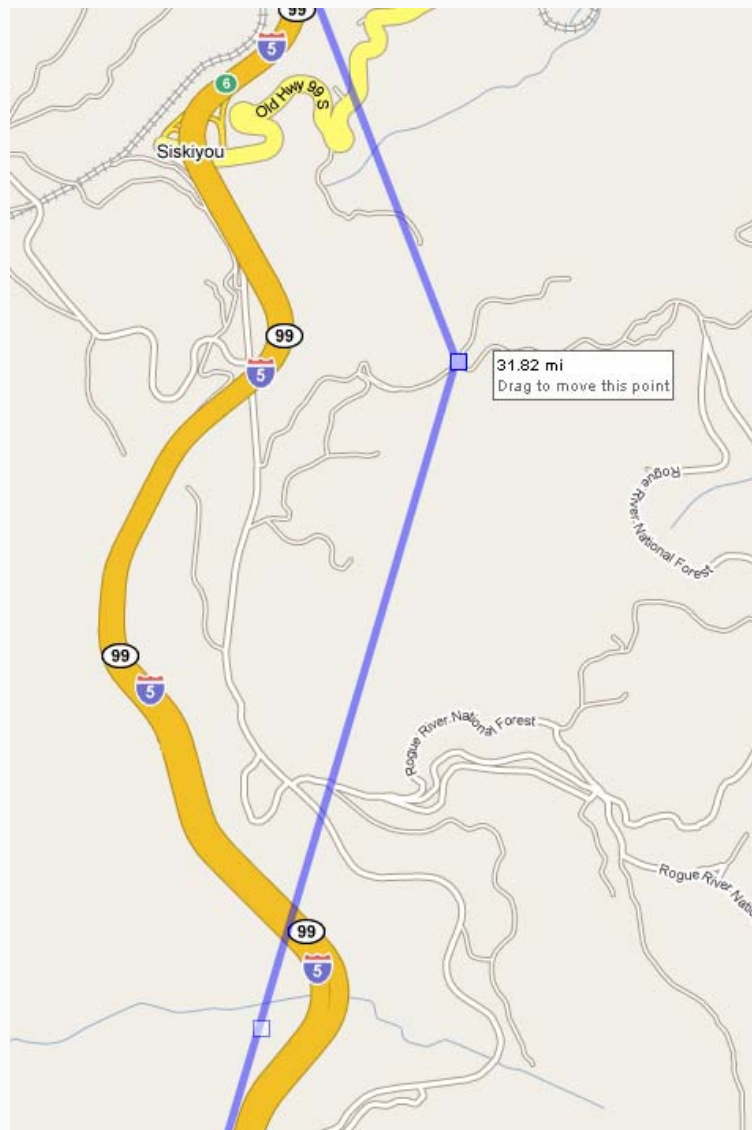
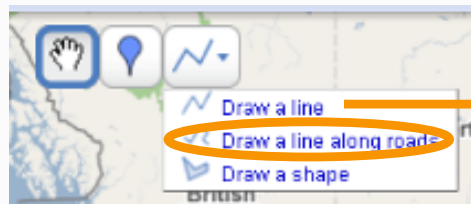
Description [Plain text](#) [Rich text](#) [Edit HTML](#)

[Delete](#) [Cancel](#) [OK](#)



## Correct path

## Sketch Path







Create new map - [Browse the directory](#)

Created by me

- ☒ **Untitled** Public
- ☒ **Plume** Unlisted
- ☐ **Yreka to Ashland** Unlisted

Created by others

- ☐ **Hoopla drive to the cross** Unlisted
- ☒ **Collaborat**
- ☒ **Import**

Title

**Untitled**

Description

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- ☒ **Public** - Shared with everyone. This map will be published in search results and user profiles.
- ☐ **Unlisted** - Shared only with selected people who have this map's URL.

### Import KML

Add map data from a KML, KMZ, or GeoRSS file to this map. This may take a few minutes depending on the speed of your internet connection.  
Maximum size: 10MB

Browse your computer to select map data to upload

Or enter the url of map data on the web

### Invite collaborators

Invite people as collaborators

Separate email addresses with commas

Message:

I've shared a map with you called Untitled:  
<http://maps.google.com/maps/ms?ie=UTF&msa=0&msid=111691547822454843180.000468e326faeea929dd3>

Add your message (optional)

☐ Send me a copy of this invitation

### Manage collaborators

Advanced Permissions

Only the owner may change these settings

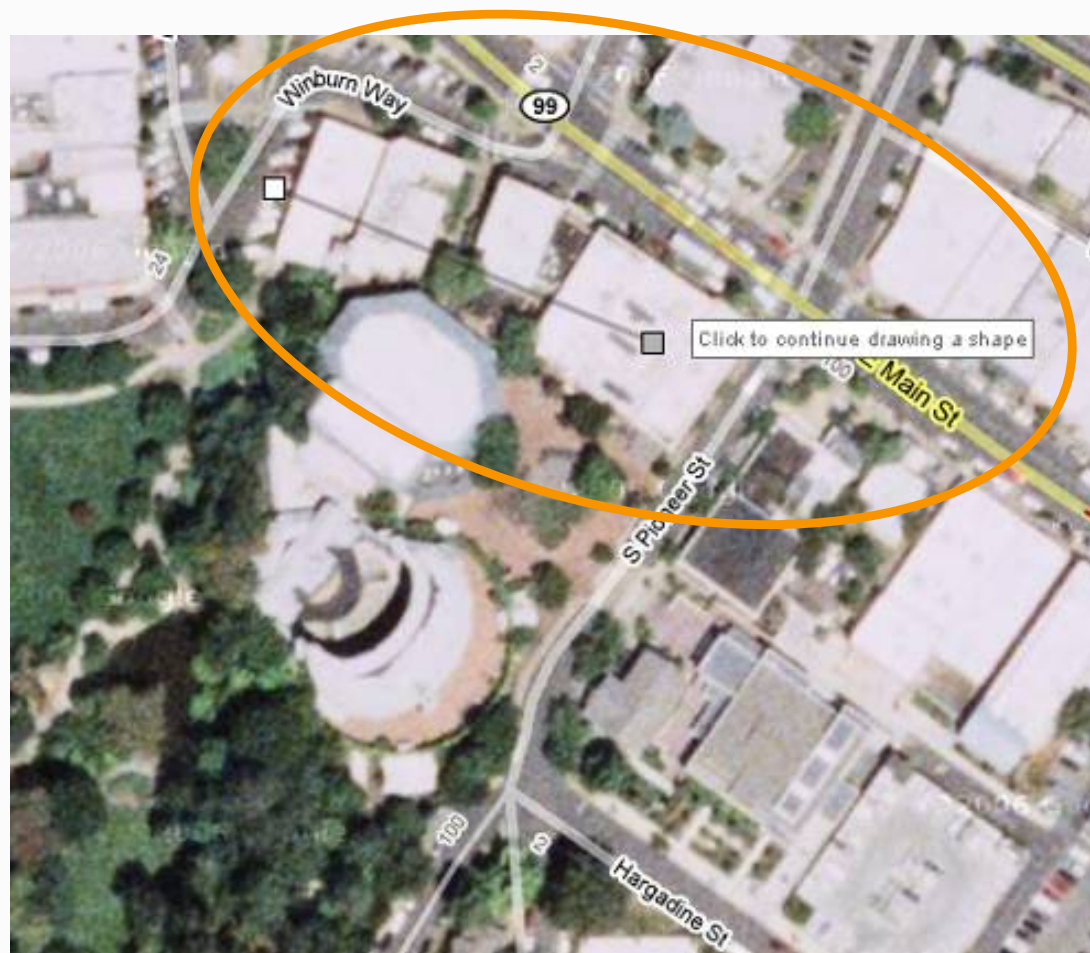
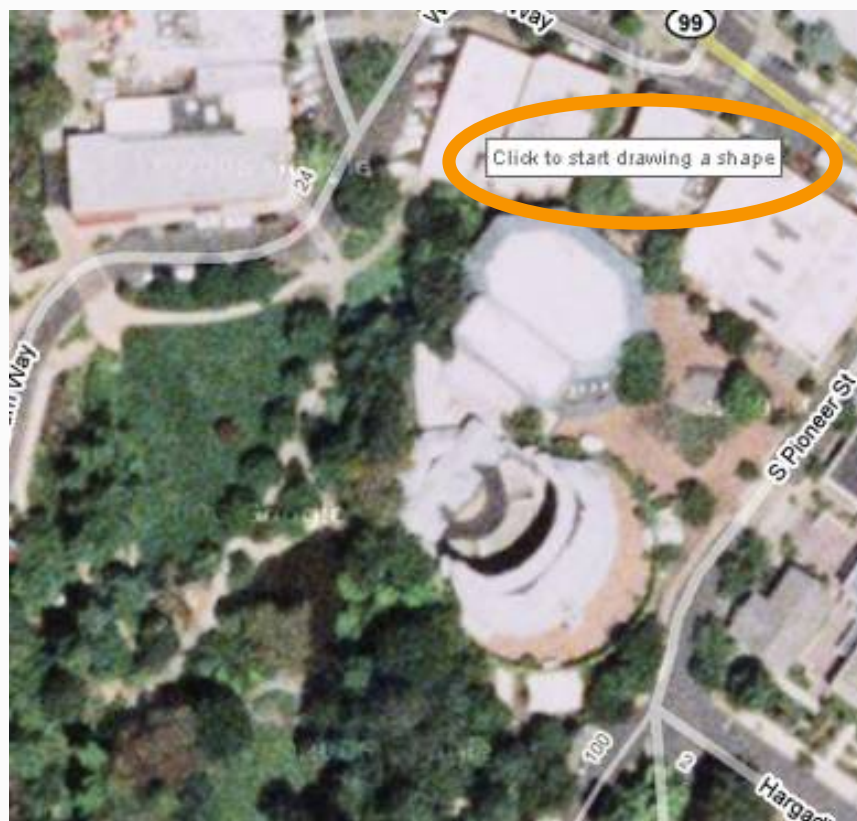
- ☐ Collaborators may invite others
- ☐ Allow anyone to edit this map

Collaborators (1) - [remove all](#)

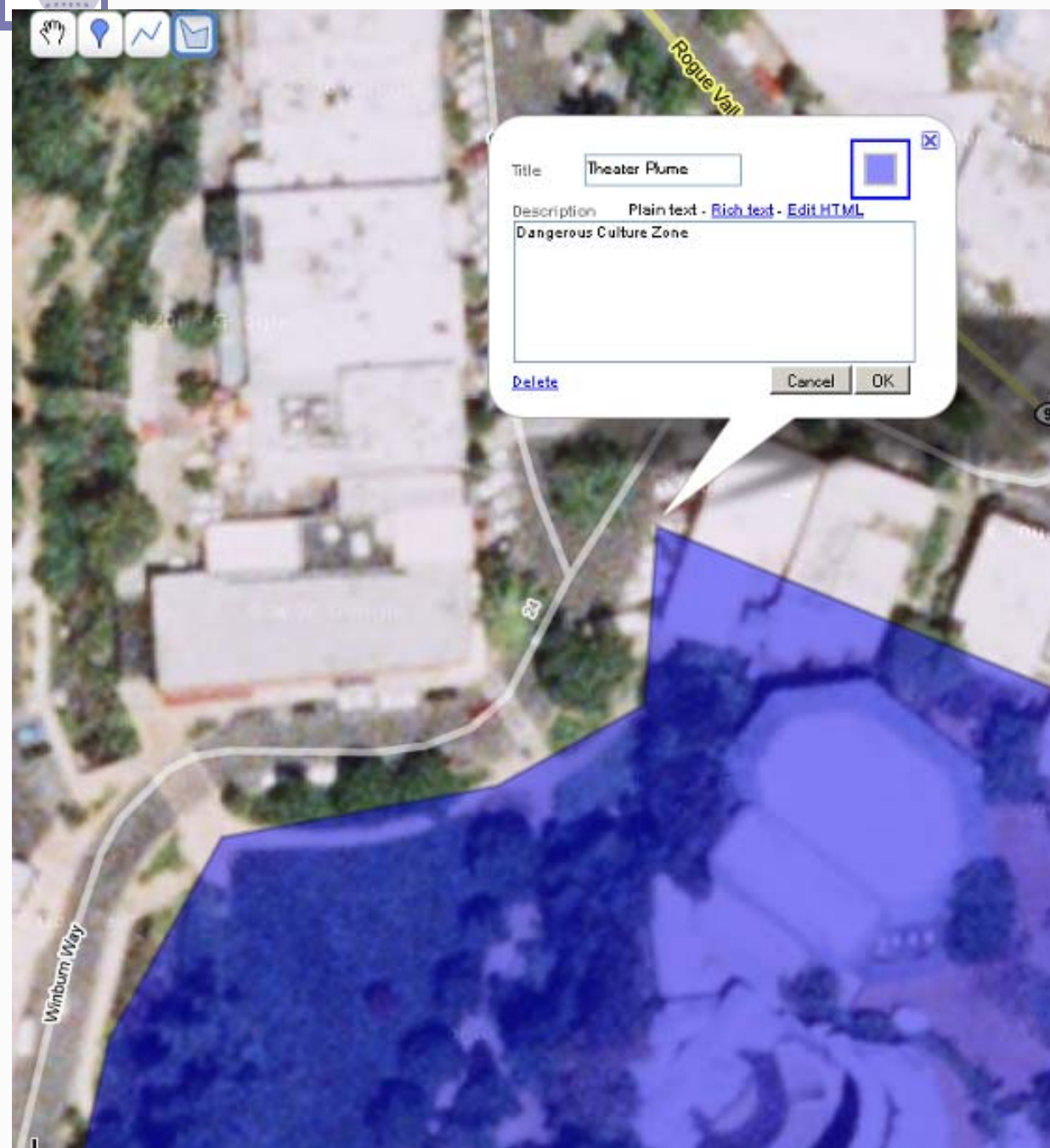
Collaborators may edit the map.

Me - owner











[Collaborate](#)

Edit

## Plume

0 views - Unlisted

Created on Apr 20 - Updated < 1 minute ago

By [Svetlana S](#)

[Rate this map](#) - [Write a comment](#)



[Theater Plume](#)

Dangerous Culture Zone

## Invite collaborators

Invite people as collaborators

daniel.smith@cdph.ca.gov,  
michael.heumann@cdph.ca.gov

Separate email addresses with commas

Message:

I've shared a map with you called Plume:  
<http://maps.google.com/maps/ms?ie=UTF&msa=0&msid=111691547822454843180.00046805956fe03904b05>

Add your message (optional)

You may have been exposed to a serious  
theater bug.

Send invitations

☐ Send me a copy of this invitation

OK

## Manage collaborators

Advanced Permissions

Only the owner may  
change these settings

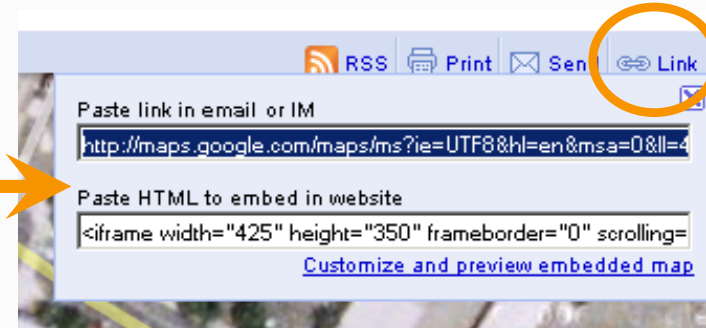
☐ Collaborators may  
invite others

☐ Allow anyone to edit  
this map


Collaborators (1) - [remove all](#)

Collaborators may edit th  
map.

Me - owner








Search Maps

Show search options

Find businesses, addresses and places of interest. [Learn more.](#)


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**Plume**  
1 views - Unlisted  
Created on Apr 20 - Updated 8 minutes ago  
By [SvetlanaS](#)  
[Rate this map](#) - [Write a comment](#)





**Theater Plume**  
Dangerous Culture Zone


[Report a problem](#)































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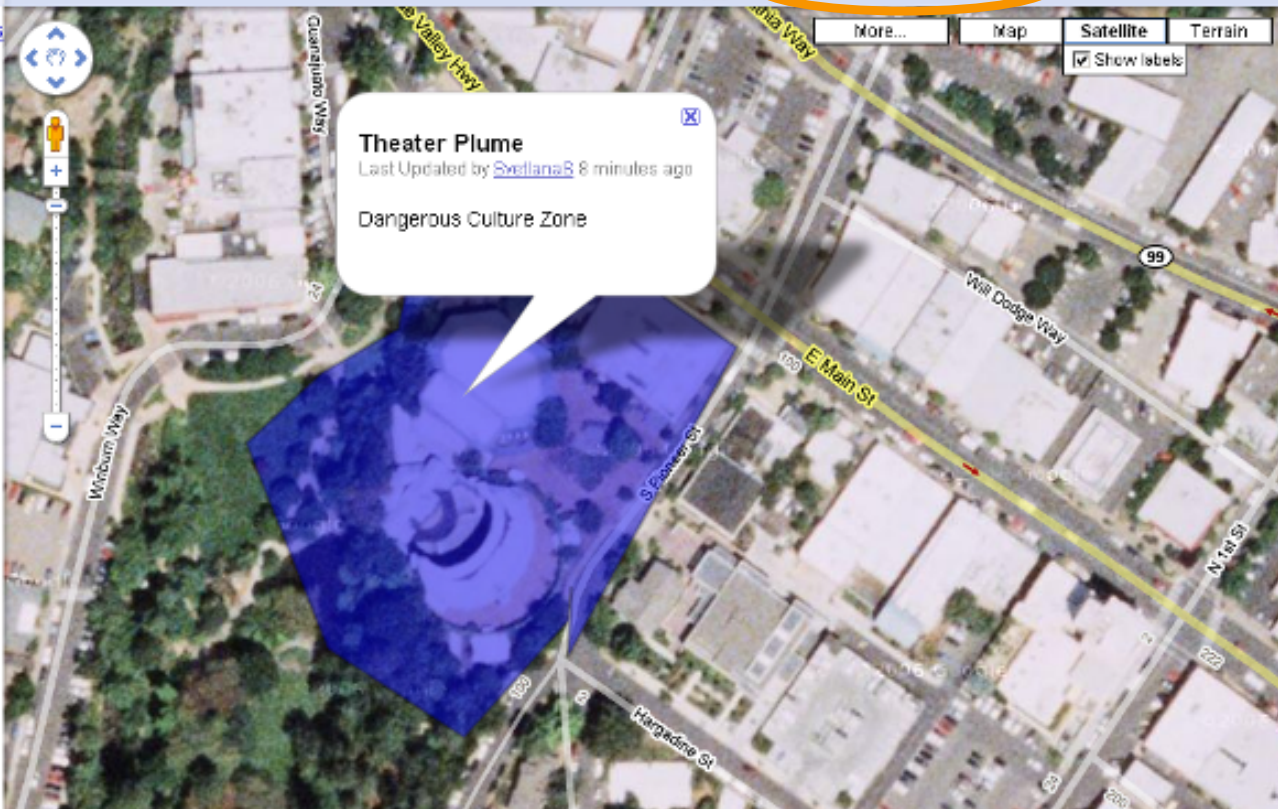
More...

Map


Satellite


Terrain


☒ Show labels





**Theater Plume**  
Last Updated by [SvetlanaS](#) 8 minutes ago  
Dangerous Culture Zone

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Map

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**File Download**



Do you want to open or save this file?



Name: Plume.kml  
Type: Google Earth KML, 283 bytes  
From: maps.google.com

Open

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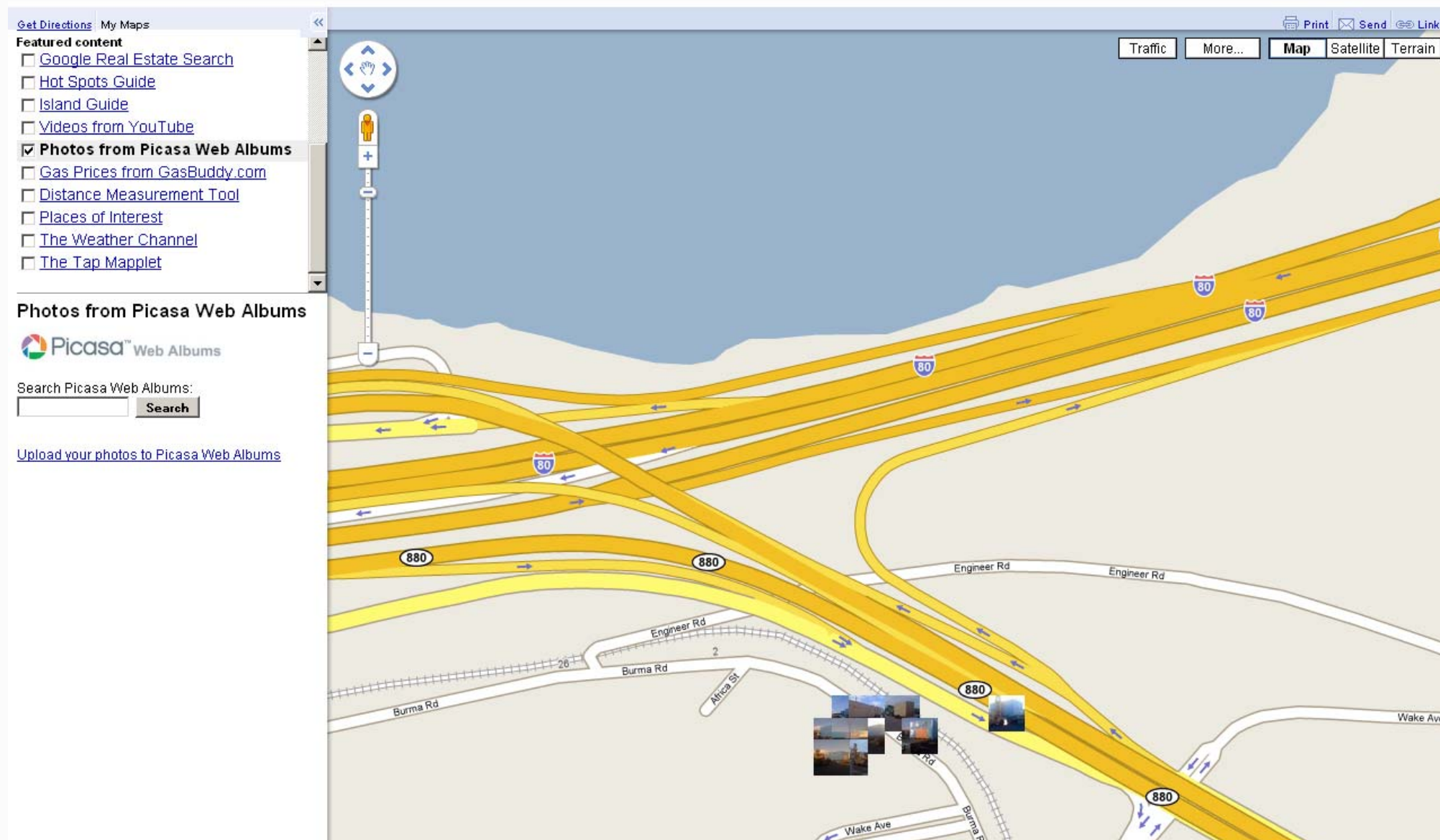


While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. [What's the risk?](#)





## Use Picasa to share photos



The screenshot shows a Google Maps interface with a traffic overlay on a highway interchange. The map displays Interstate 80 (I-80) and State Route 880 (SR-880) in yellow, indicating traffic. A cluster of small photo thumbnails is overlaid on the map near the intersection of SR-880 and Wake Ave. The left sidebar contains a 'Featured content' section with various links, including 'Photos from Picasa Web Albums' which is checked. Below this is a search bar for Picasa Web Albums and a link to upload photos. The top right of the map shows navigation controls and map style options (Map, Satellite, Terrain).

**Featured content**

- ☐ Google Real Estate Search
- ☐ Hot Spots Guide
- ☐ Island Guide
- ☐ Videos from YouTube
- ☒ Photos from Picasa Web Albums
- ☐ Gas Prices from GasBuddy.com
- ☐ Distance Measurement Tool
- ☐ Places of Interest
- ☐ The Weather Channel
- ☐ The Tap Mapplet

**Photos from Picasa Web Albums**

Picasa™ Web Albums

Search Picasa Web Albums:


[Upload your photos to Picasa Web Albums](#)

[Get Directions](#) | [My Maps](#)

**Featured content**

- ☐ [Google Real Estate Search](#)
- ☐ [Hot Spots Guide](#)
- ☐ [Island Guide](#)
- ☐ [Videos from YouTube](#)
- ☒ **Photos from Picasa Web Albums**
- ☐ [Gas Prices from GasBuddy.com](#)
- ☐ [Distance Measurement Tool](#)
- ☐ [Places of Interest](#)
- ☐ [The Weather Channel](#)
- ☐ [The Tap Mapplet](#)

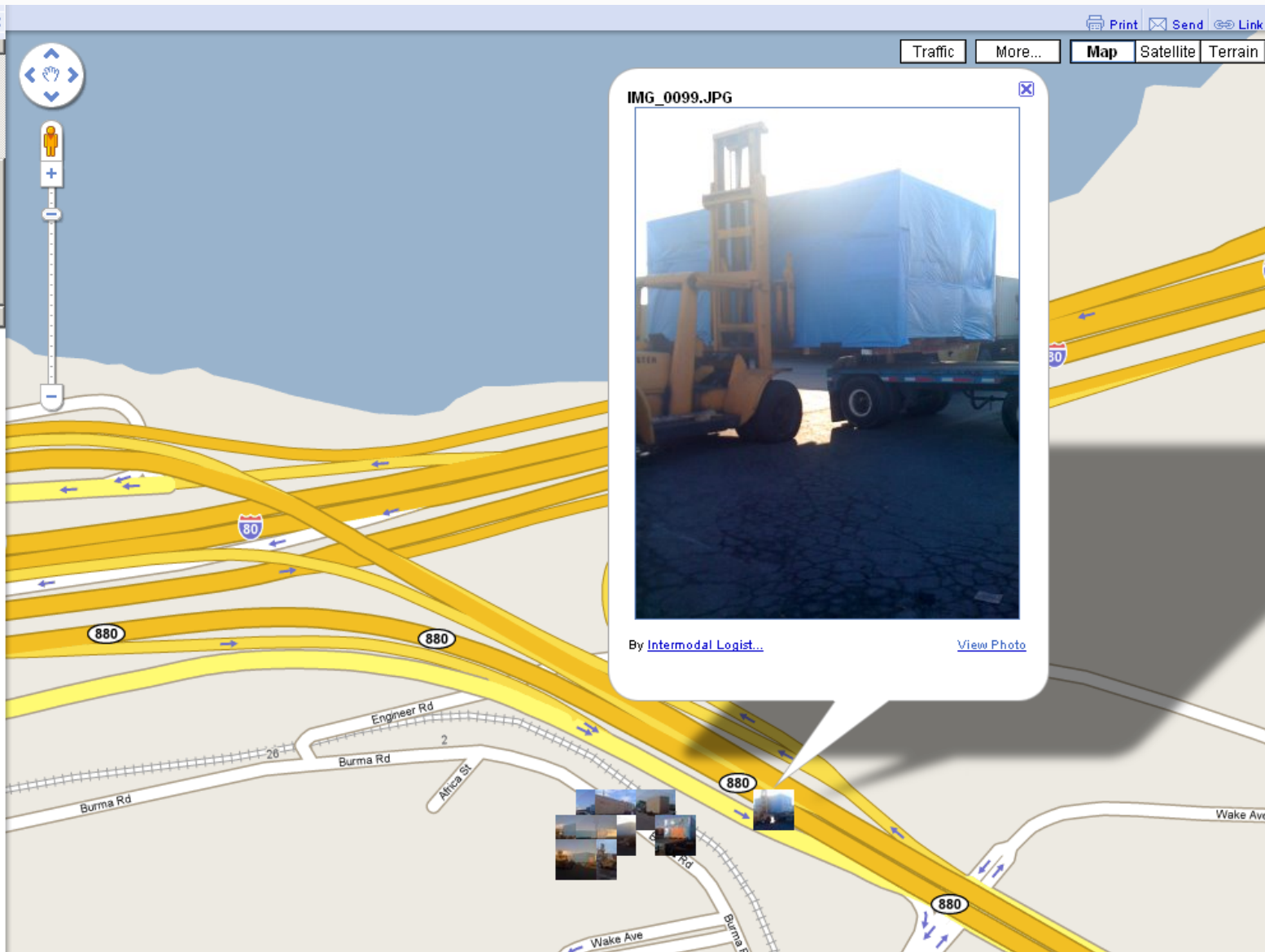
**Photos from Picasa Web Albums**




Search Picasa Web Albums:

[Upload your photos to Picasa Web Albums](#)

[Print](#) [Send](#) [Link](#)



**IMG\_0099.JPG**



By [Intermodal Logist...](#) [View Photo](#)



# Google Earth

earth.google.com

Google Earth - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://earth.google.com/ Go

Google

Change language: English (US)


## Google Earth

Explore, Search, and Discover

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### Google Earth | Free



Google Earth lets you fly anywhere on Earth to view satellite imagery, maps, terrain, 3D buildings, from galaxies in outer space to the canyons of the ocean. You can explore rich geographical content, save your toured places, and share with others.

[View tutorial](#)

**Download Google Earth 5.0**


The world's geographic information at your fingertips.

**New!** Explore special [Earth Day](#) KML collection.

**Google Earth 5.0 features:**

- Historical imagery from around the globe
- Ocean floor and surface data from marine experts
- Simplified touring with audio and voice recording

### Google Earth | Advanced



**Google Earth Pro | \$400**

Ideal for an organization, upgrade to Pro to access the ultimate research, presentation, and collaboration tool for location-specific information.

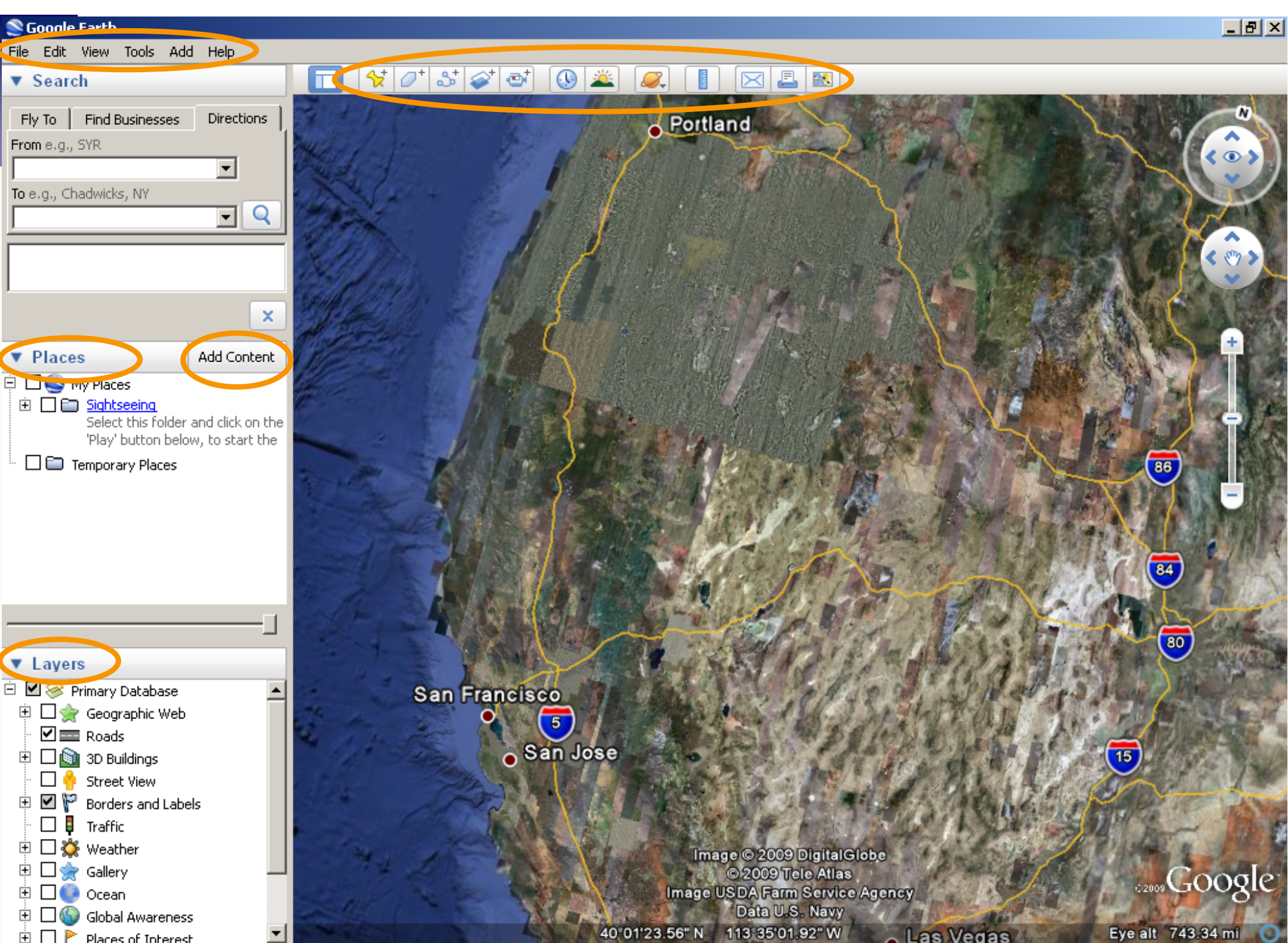
[Learn More](#) | [Case Studies](#) | [Buy](#) | [7-day free trial](#) | [Compare Products](#)

### Google Earth | Enterprise Solutions

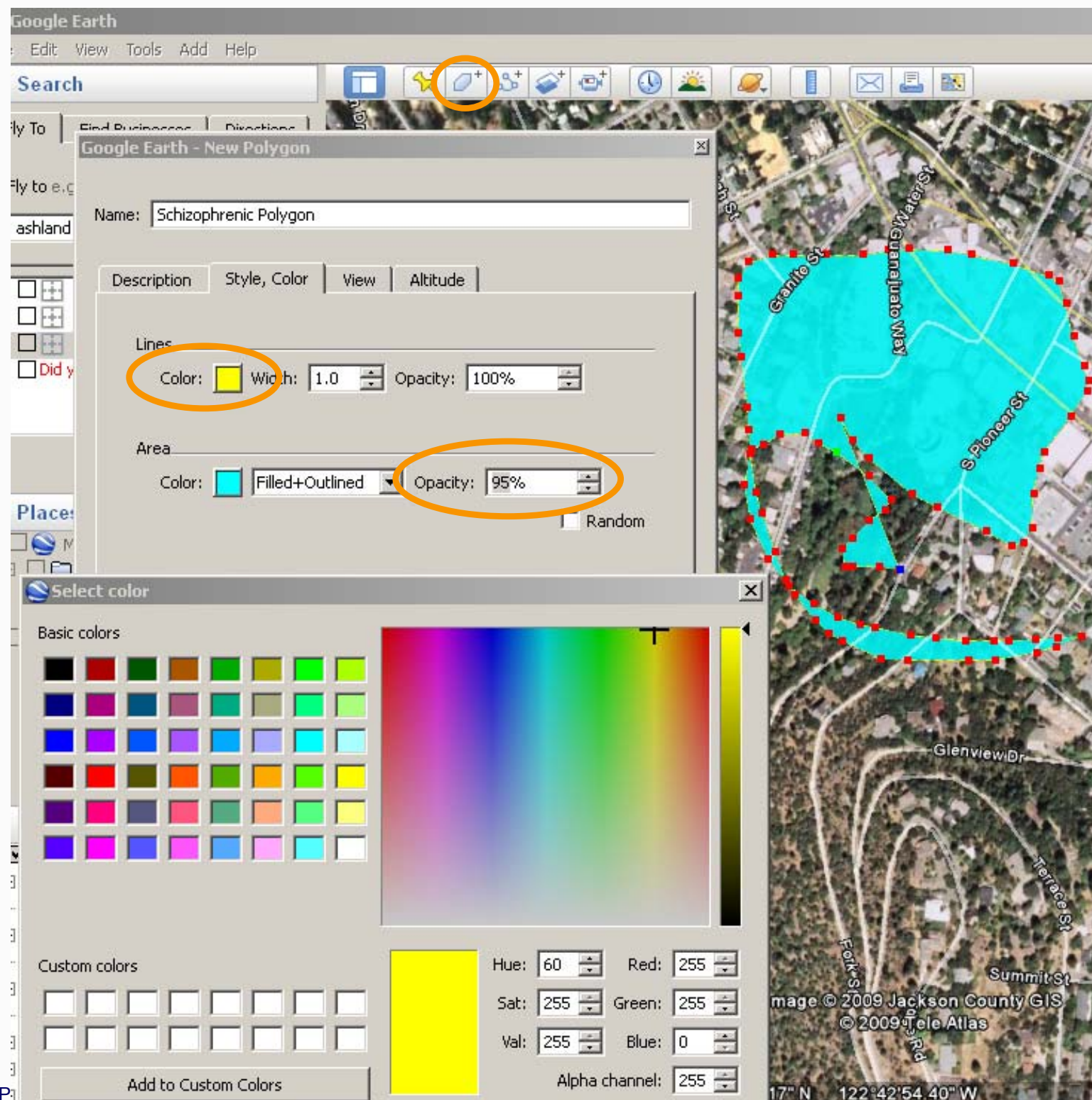
Enterprise solutions are available for on-site deployment of custom Google Earth databases within your business, public agency, or organization.

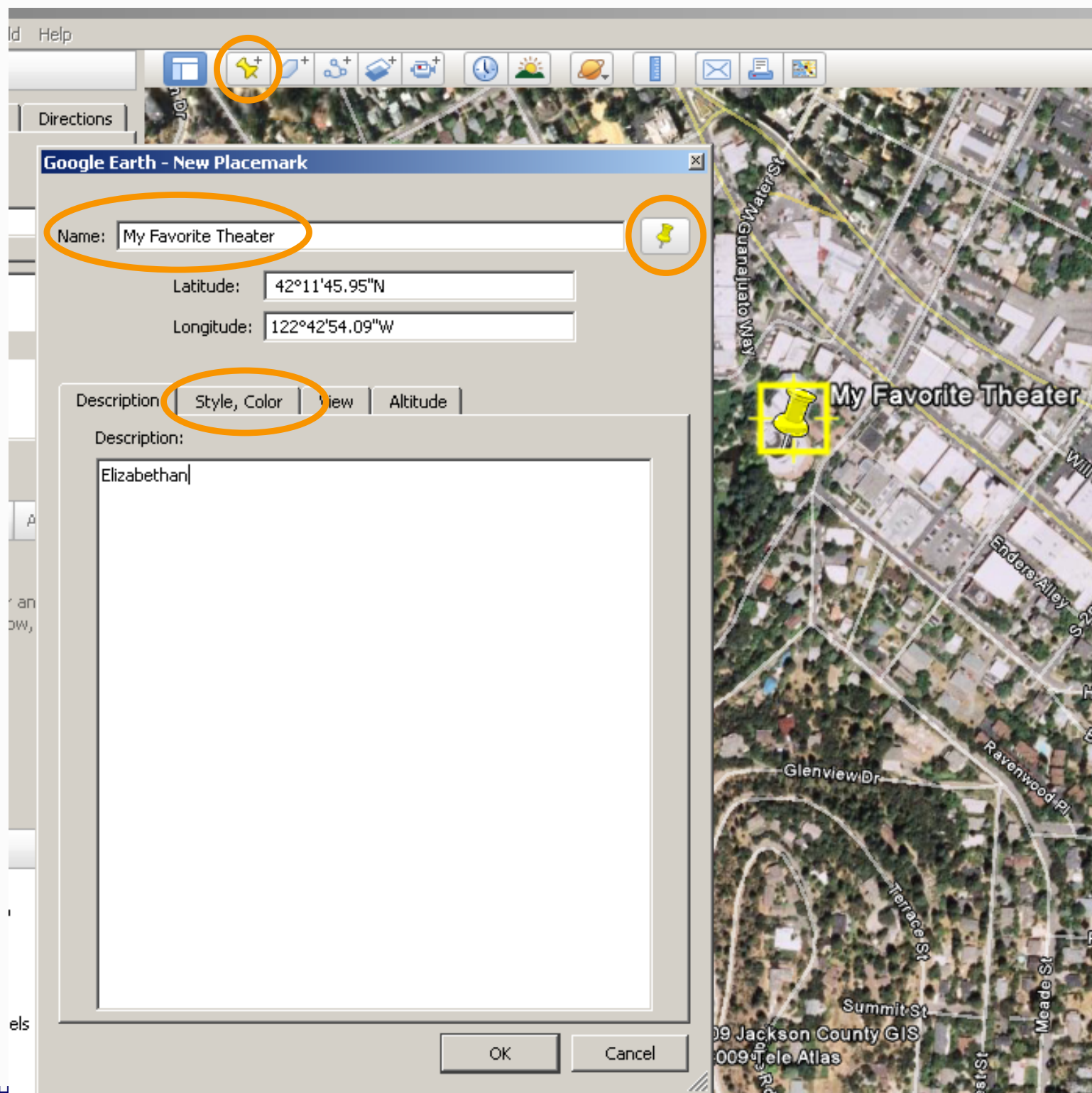
[Learn more](#) - [Have a salesperson contact me](#)



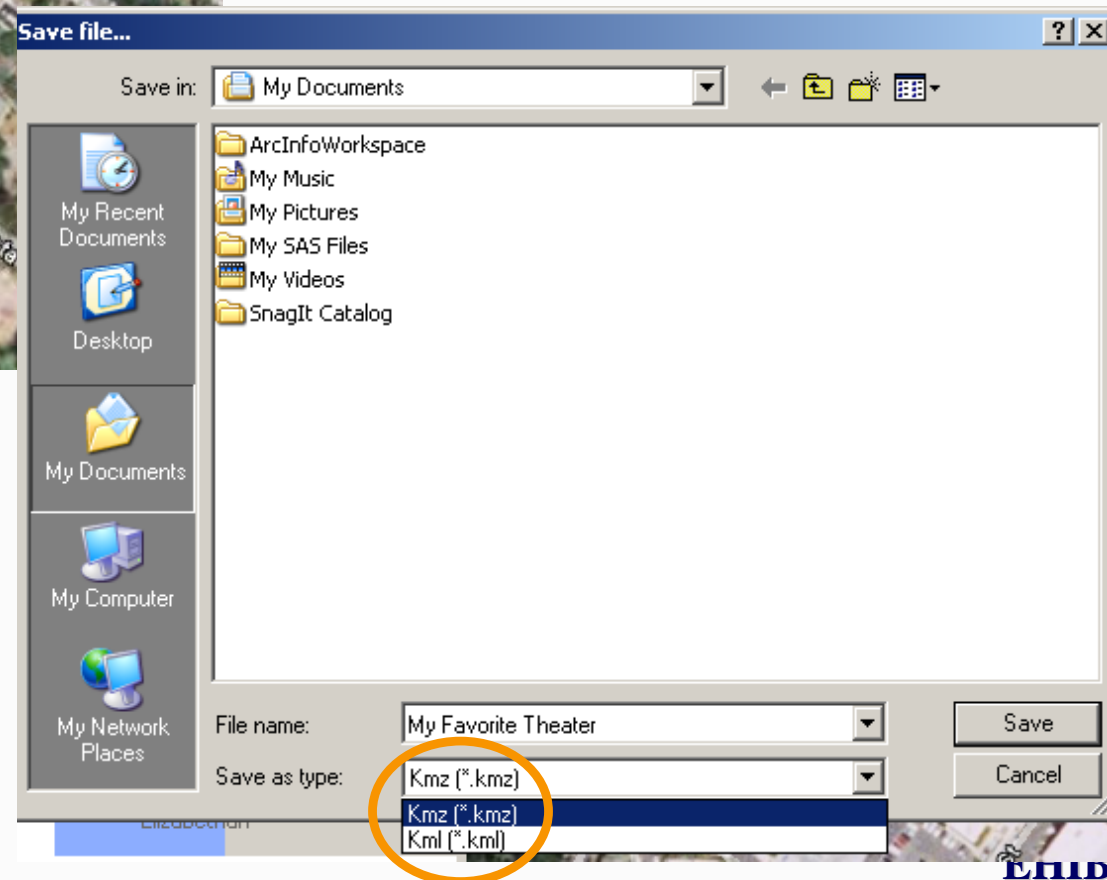
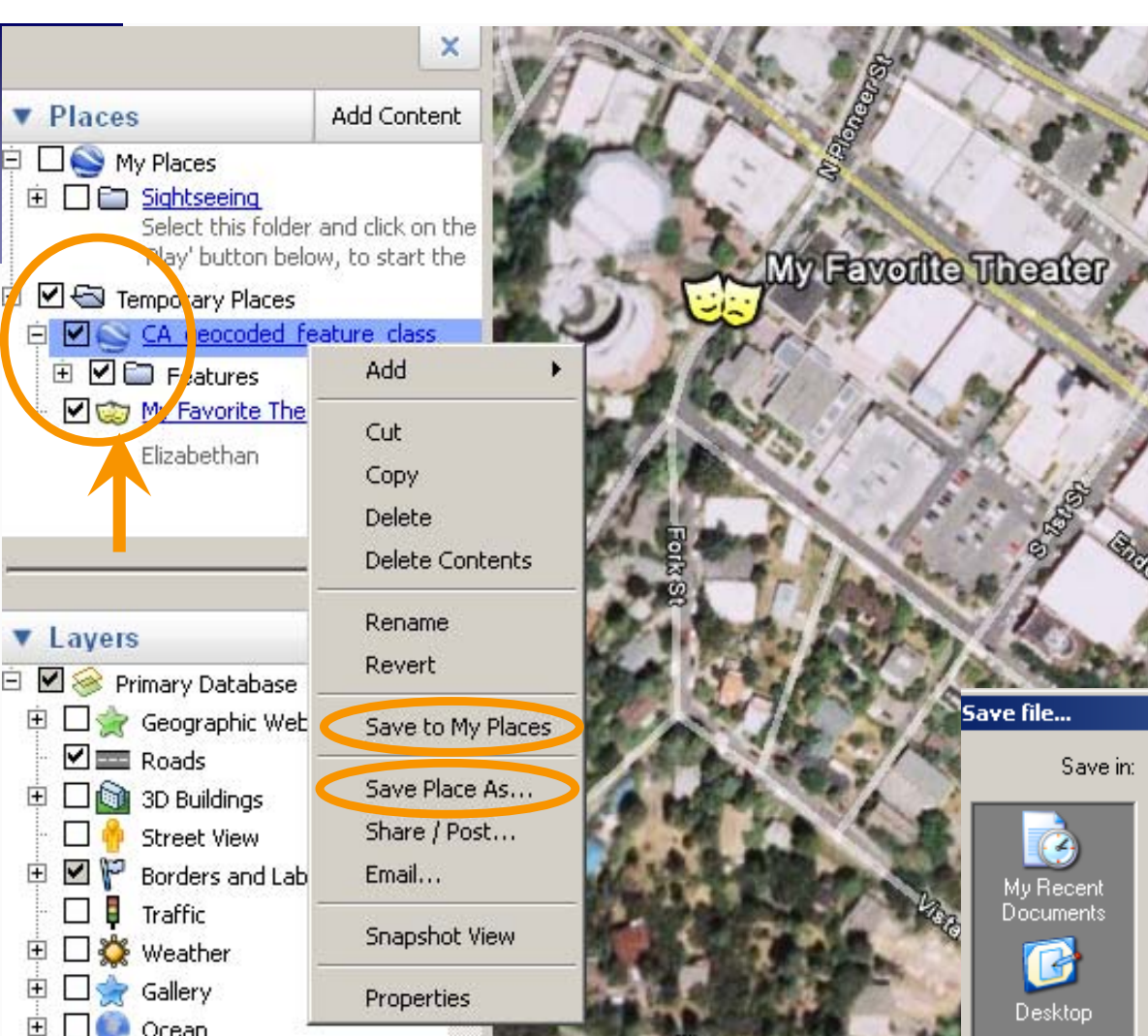








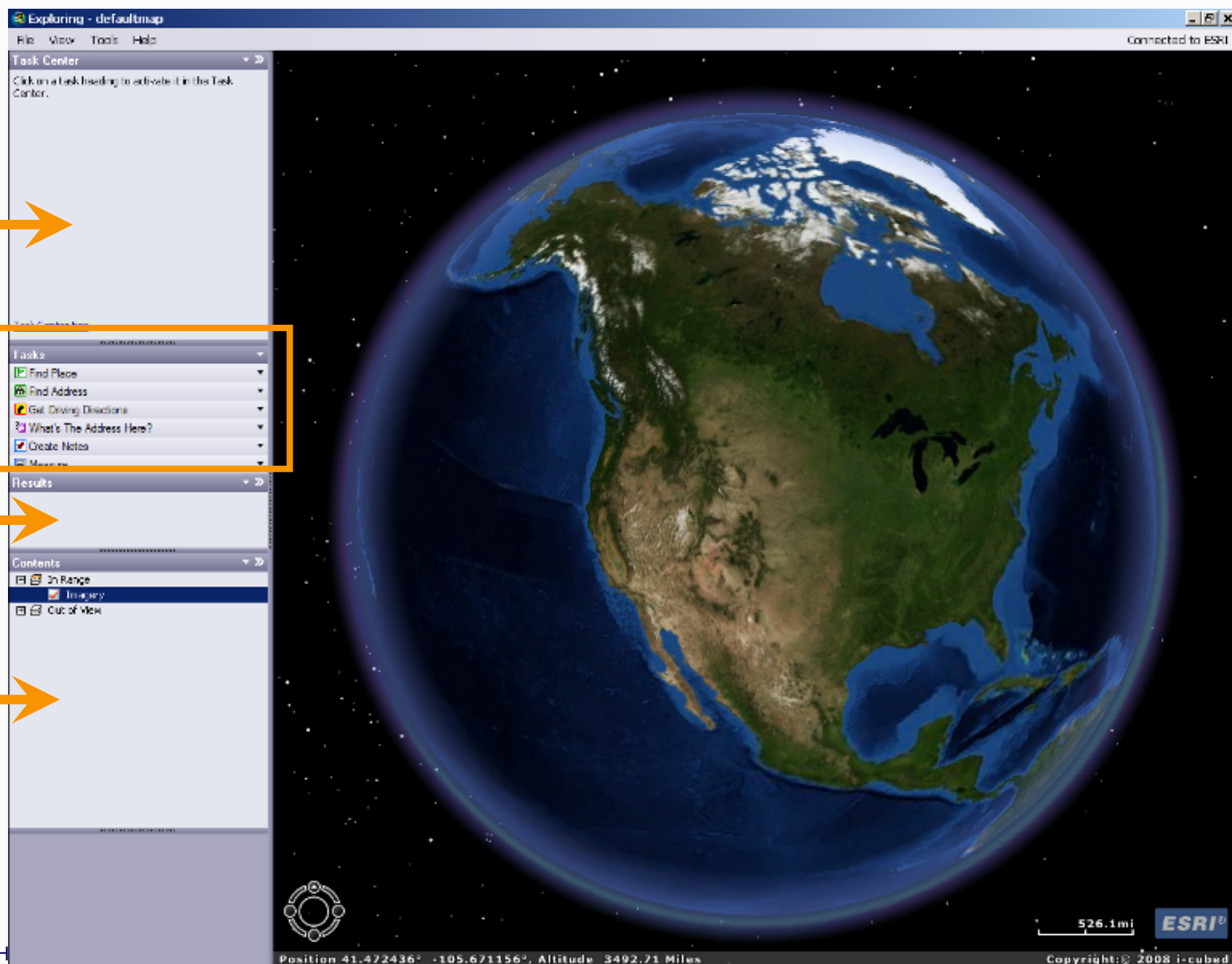




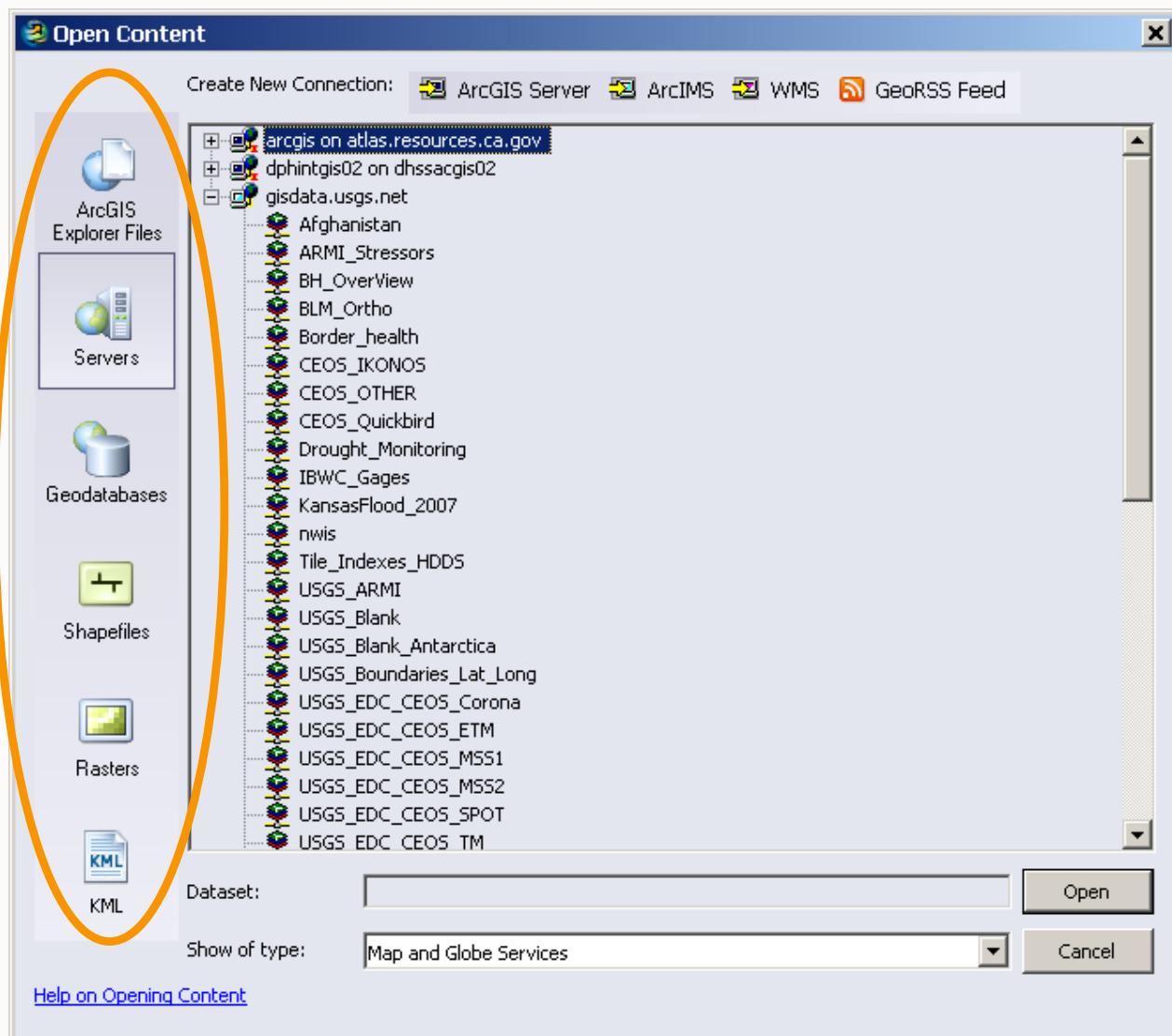
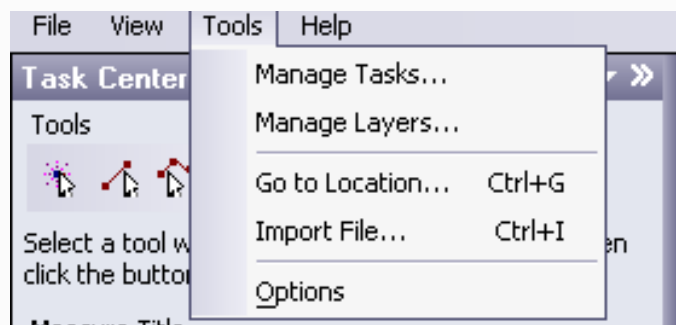


# ArcGIS Explorer

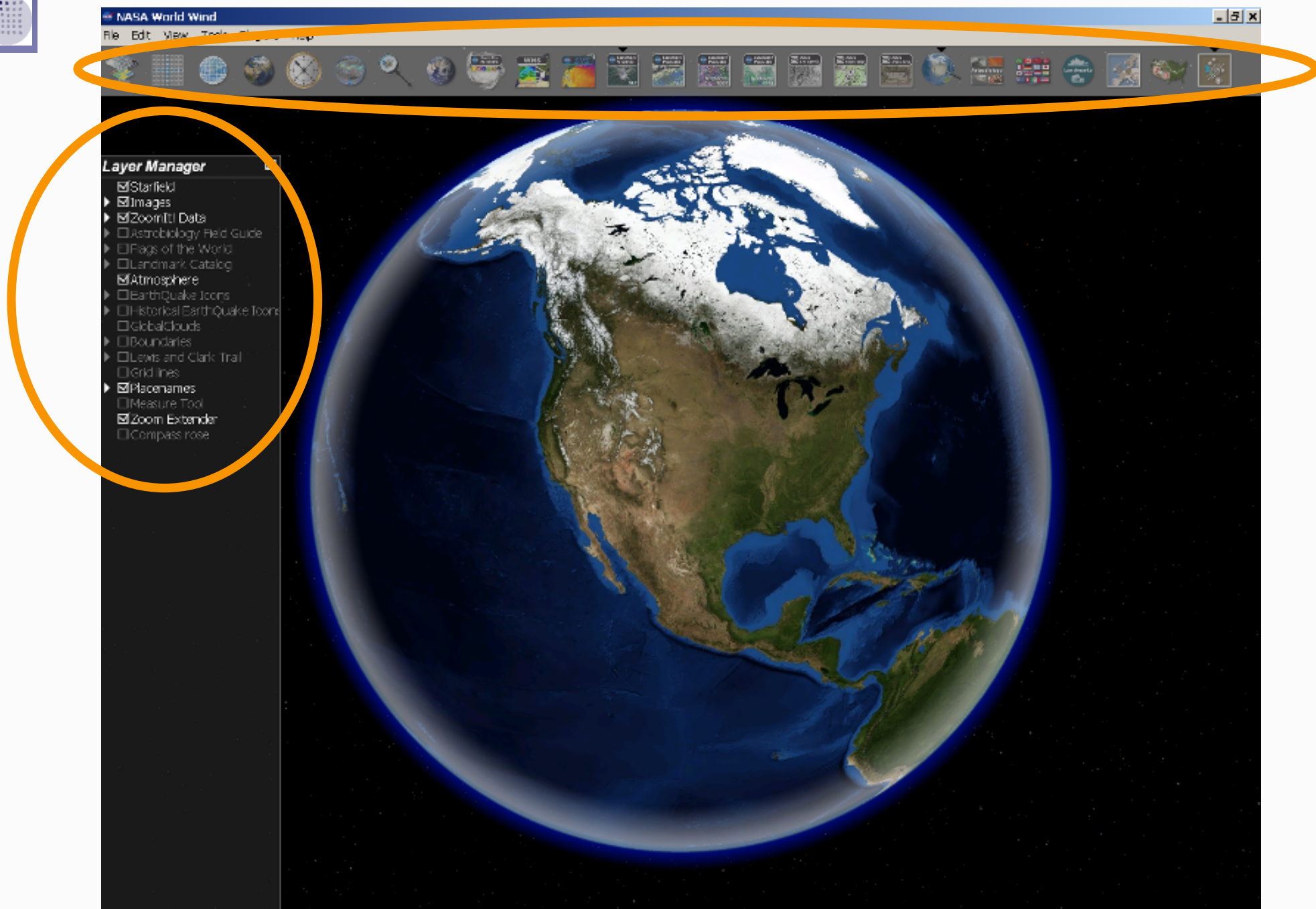
<http://www.esri.com/software/arcgis/explorer/index.html>



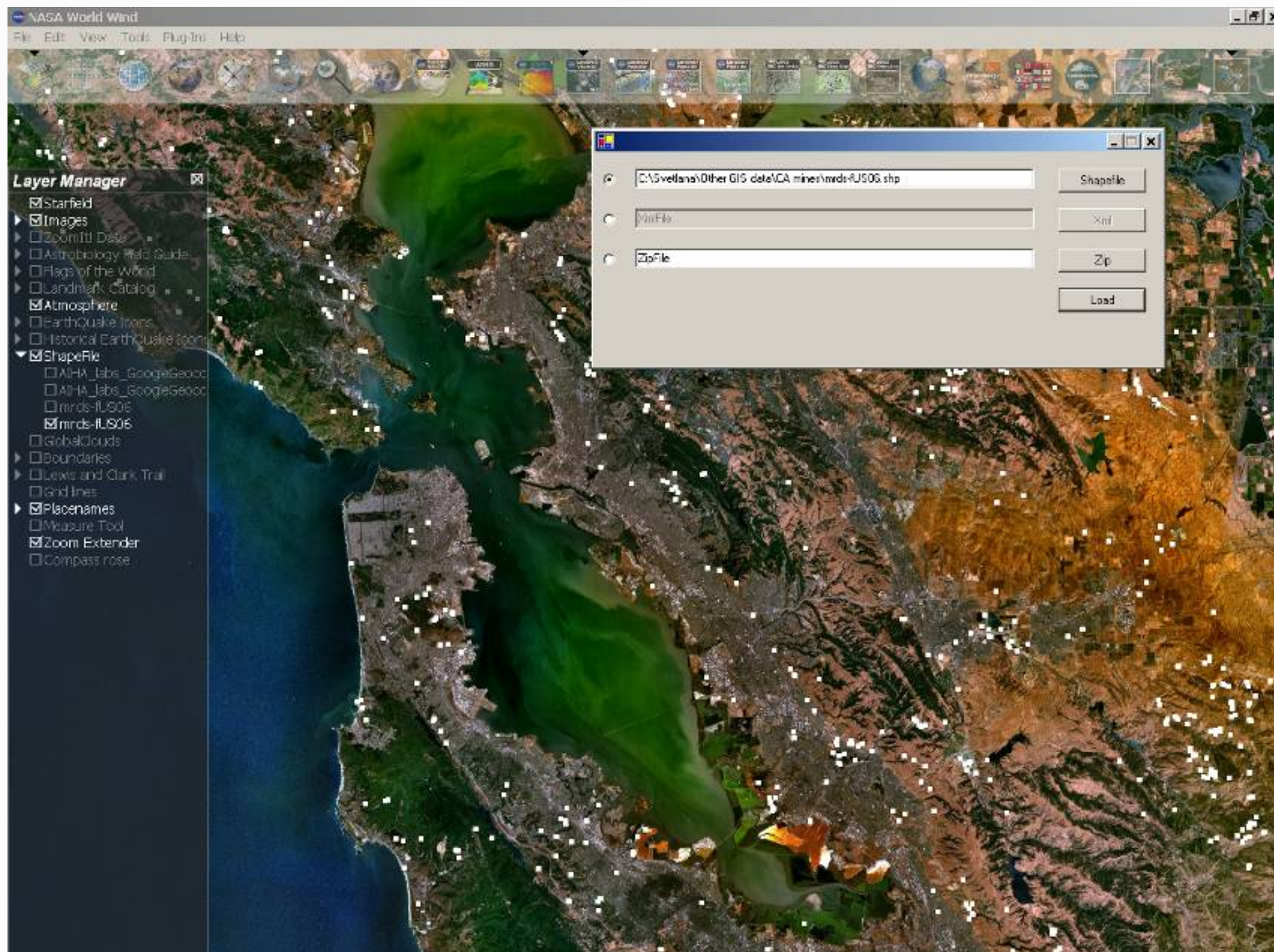




# NASA WorldWind <http://worldwind.arc.nasa.gov/>











# iTouchMap.com

[Home](#) > [Latitude and Longitude of a Point](#)



To find the latitude and longitude of a point Click on the map, Drag the marker, or enter the...

Address:    
 Map Center: [Land](#) [Flat](#) [Sat](#) [Street View](#) [Google Earth 3D](#) [Area](#) [Photos](#) [Satellite](#)

Try out the [Google Earth Plug-In](#). Google Earth gives you a 3D look of the area around the center of the map, which is usually your last click point, and includes latitude, longitude and elevation information.

## Latitude and Longitude of a Point



Note: Right click on a [blue marker](#) to remove it.

### Get the Latitude and Longitude of a Point

When you click on the map, move the marker or enter an address the latitude and longitude coordinates of the point are inserted in the boxes below.

Latitude:   
 Longitude:

	Degrees	Minutes	Seconds
Latitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Longitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Show Point from Latitude and Longitude

Use this if you know the latitude and longitude coordinates of a point and want to see where on the map the point is.

Use:  for N Lat or E Long  for S Lat or W Long

Example: +40.689060 -74.044636

Note: Your entry should not have any embedded spaces.

Decimal Deg. Latitude:   
 Decimal Deg. Longitude:

Example: +34 40 50.12 for 34° 40' 50.12"

	Degrees	Minutes	Seconds
Latitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Longitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>

## Latitude and Longitude of a Point



Notes: Right click on a [blue marker](#) to remove it.

[Clear/Reset All Markers](#) [Center Red Marker](#)

### Get the Latitude and Longitude of a Point

When you click on the map, move the marker or enter an address the latitude and longitude coordinates of the point are inserted in the boxes below.

Latitude:   
Longitude:

	Degrees	Minutes	Seconds
Latitude:	42	12	24.3395
Longitude:	-122	50	47.100

### Show Point from Latitude and Longitude

Use this if you know the latitude and longitude coordinates of a point and want to see where on the map the point is.

Use: [+](#) for N Lat or E Long [-](#) for S Lat or W Long.  
Example: +40.589050 -74.044636

Notes: Your entry should not have any embedded spaces.


Decimal Deg. Latitude:   
Decimal Deg. Longitude:

[Show Point](#)

Example: +34 40 50.12 for 34°40'50.12"

	Degrees	Minutes	Seconds
Latitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Longitude:	<input type="text"/>	<input type="text"/>	<input type="text"/>

[Show Point](#)



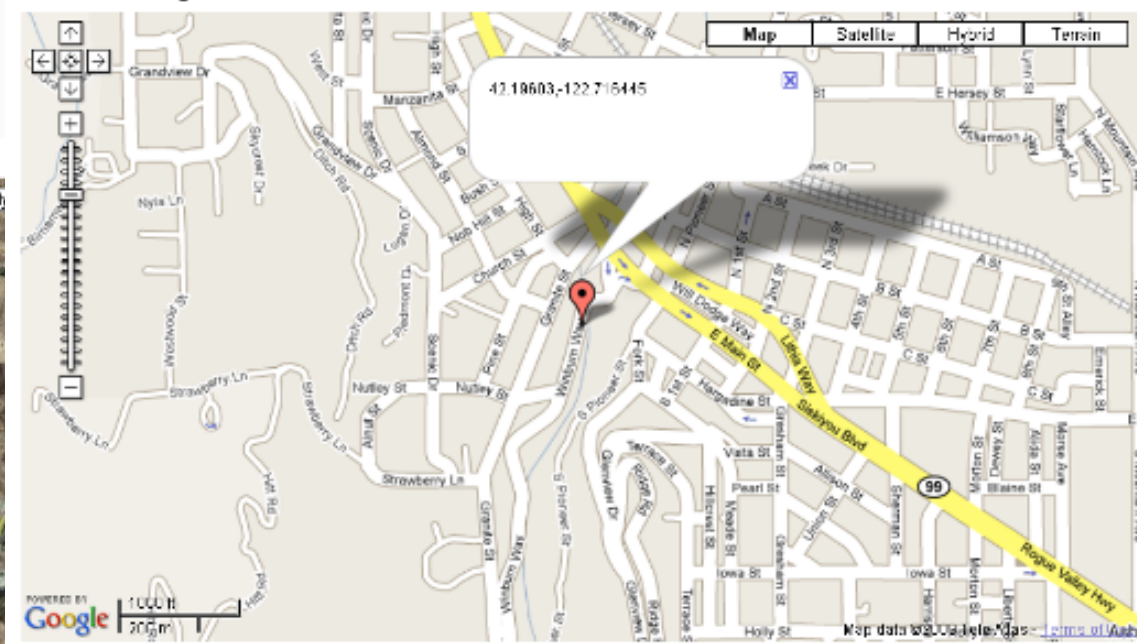
To find the latitude and longitude of a point Click on the map, Drag the marker, or enter the...

Address:  [Go](#)

[Back](#) [Link](#) [Full Size](#) [Street View](#) [Google Earth 3D](#) [Area Photograph](#)

Try out the [Google Earth Plug-in](#). Google Earth gives you a 3D look of the area around the center of the map, which is usually your last click point, and includes latitude, longitude and elevation information.

## Latitude and Longitude of a Point





**Step #1**

Start by putting your data in a compatible delimited format.  
 (tab-delimited is easier for copying from an external source, but-delimited should be used for hand entry):  
☒ Tab-Delimited ([Download Excel Map Template](#)) ☐ Bar (%) Delimited

**Step #2**

Copy/paste addresses into the table below, or try it out with the example data provided.  
 (If you only have an address, you can use our [Single Address Lookup Tool](#))

City	State	Zip
Bakersfield	CA	93306
GreenValley	CA	95942
Redlands	CA	97804
Oakland	CA	94612
Oakland	CA	94612
Oakland	CA	94612
Olympia	WA	98504
Portland	OR	97203
Portland	OR	97203
Portland	OR	97203
Richmond	CA	94604
San Francisco	CA	94612
San Francisco	CA	94609
Salmon	OR	97001

(example file will load automatically upon selecting a format, click here to [run our example batch](#))

**Step #3**

Click "Validate Source" to ensure data format is readable and populate column data.

[Validate Source](#) Done: 3 columns, 16 rows

**Step #4**

Select appropriate columns from the drop-downs below. Use address/city/state for exact map, or city/state or zip can be used for regional map.

**Location Fields**

Address

City

State / Province / Country (Europe)

Zip / Postal Code

**Map Fields (not required)**

Title

Description

Group By

URL

Image URL

photo URLs and image URLs should start with "http://" or they will not work properly.

**Map Options**

☐ Calculate (straight line) distance from first address in

☐ Show field names in map description (when using "All Remaining Fields" option)

Select a default map view to share

**Step #5**

Click "Run Geocoder" and wait for geocoding to finish:

[Run Geocode](#) Geocoded: 14/16 records.

**Step #6**

Geocoding results are below, you can copy/paste this back into a spreadsheet or import into a database. Right click on the form below and click "Select All", then right click again and click "Copy". Formatting is maintained but 2 columns containing coordinates are added: lat, lng (latitude, longitude).

City	State	Zip	lat	lng
Bakersfield	CA	93306	35.5545	-119.50549
GreenValley	CA	95942	39.228207	-121.061883
Redlands	CA	97804	41.29761	-122.829799
Oakland	CA	94612	37.065865	-122.270024
Oakland	CA	94612	37.808865	-122.270024
Oakland	CA	94612	37.808865	-122.270024
Olympia	WA	98504	47.039225	-122.891429
Portland	OR	97203	45.523555	-122.675221
Portland	OR	97203	45.523555	-122.675221
Portland	OR	97203	45.523555	-122.675221
Richmond	CA	94604	37.575761	-122.342789
San Francisco	CA	94612	38.577865	-121.496827
San Francisco	CA	94609	38.577865	-121.496827
Salmon	OR	97001	44.246812	-123.900059

You're done! Now that you have coordinates for your data, want to see your results on a map? Below is a map of the geocoded results. Click on each point to get the information from that record.

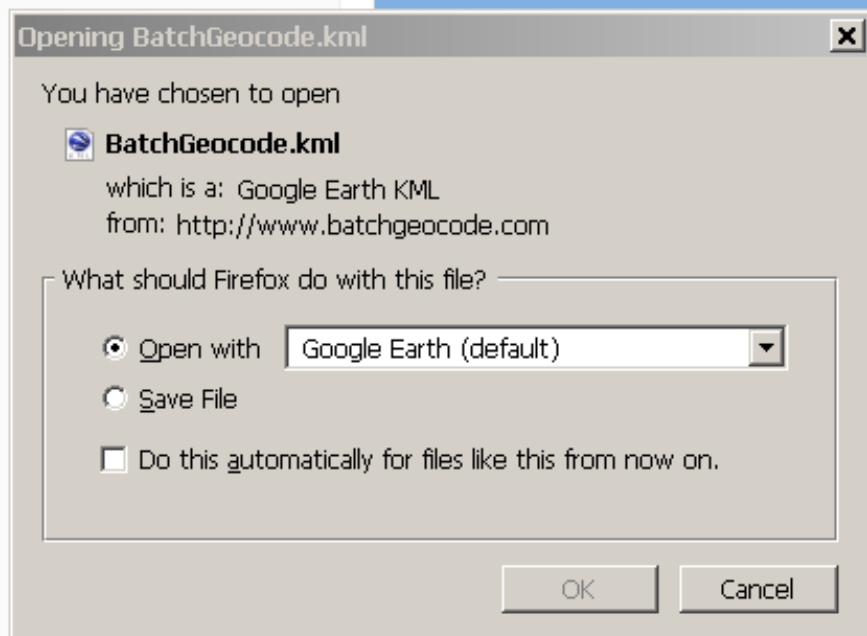
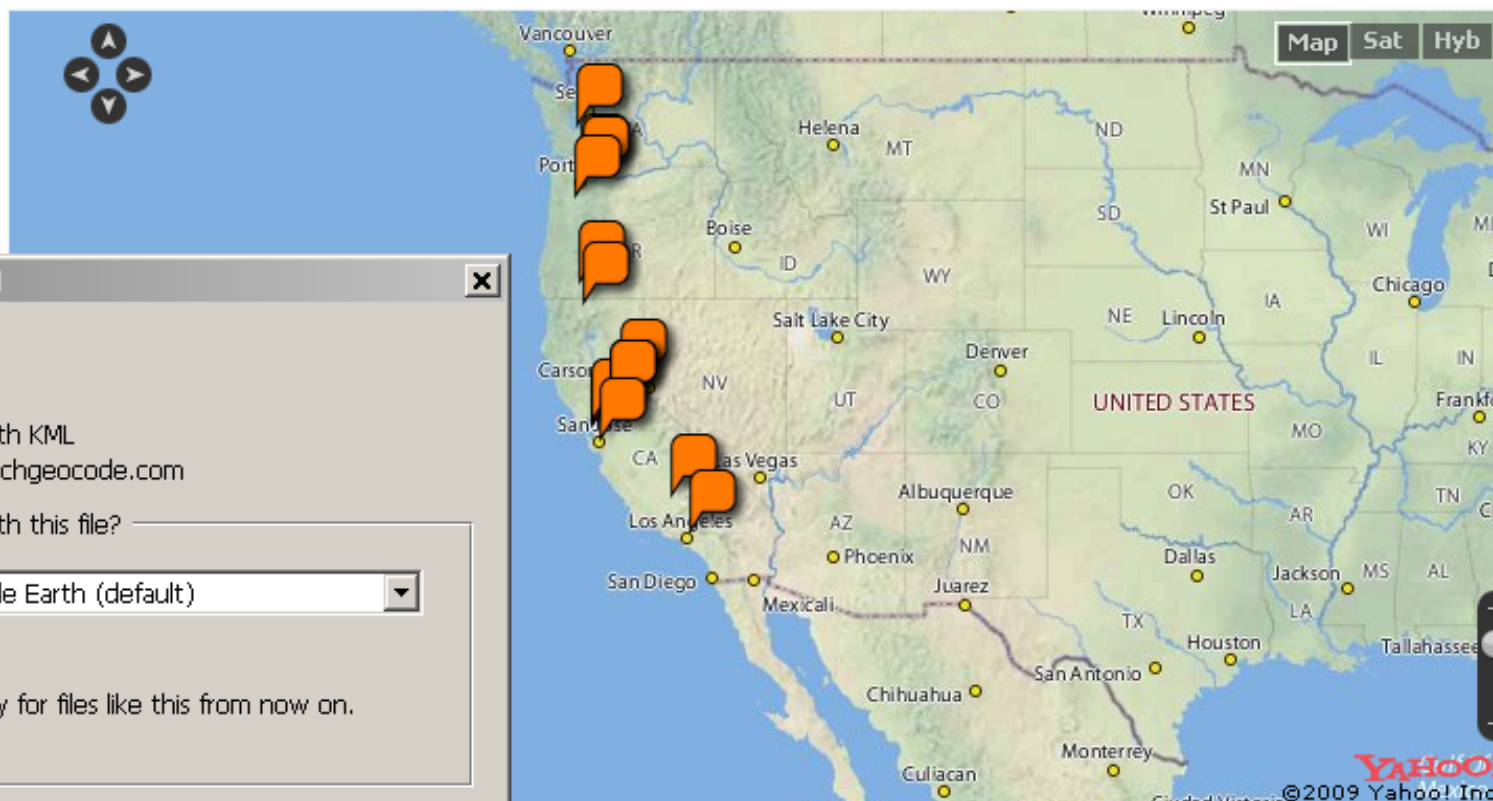
**More Mapping Options**

Want to view the map you've geocoded your custom address data on? You can display it on your own web page or download it into Google Earth.

[Save Map as a Web Page](#) [Download to Google Earth \(KML File\)](#)



You're done! Now that you have coordinates for your data, want to see your results on a map? Below is a map of the geocoded results. Click on each point to get the information from that record.



Now that you've geocoded your custom address data, want to display it on your own web page? or download it into Google Earth?:

Save Map to a Web Page

Download to Google Earth (KML) File



# Comments

- Don't use iTouchMap and BatchGeocode for confidential data
- Document, document, document!
  - Keep metadata (a simple text file with your name, date, project name, and map purpose will do)
- When sharing, let the other person know where the file was created
  - Particularly important for GIS techs
- Geocoding is an art as well as science
  - understand pitfalls

# Where are you?



Clue: The Happiest Place on Earth