

Our World is a Living System..



- Dynamic
- Interconnected
- Interdependent

.... And Humans are Part of It

Our World Is Evolving Rapidly

**What We Do and How We Do It
...Over the Next Few Years**

- Environment
- Bio-Diversity
- Natural Resources
- Energy
- Climate



...Will Set the Course for Our Planet

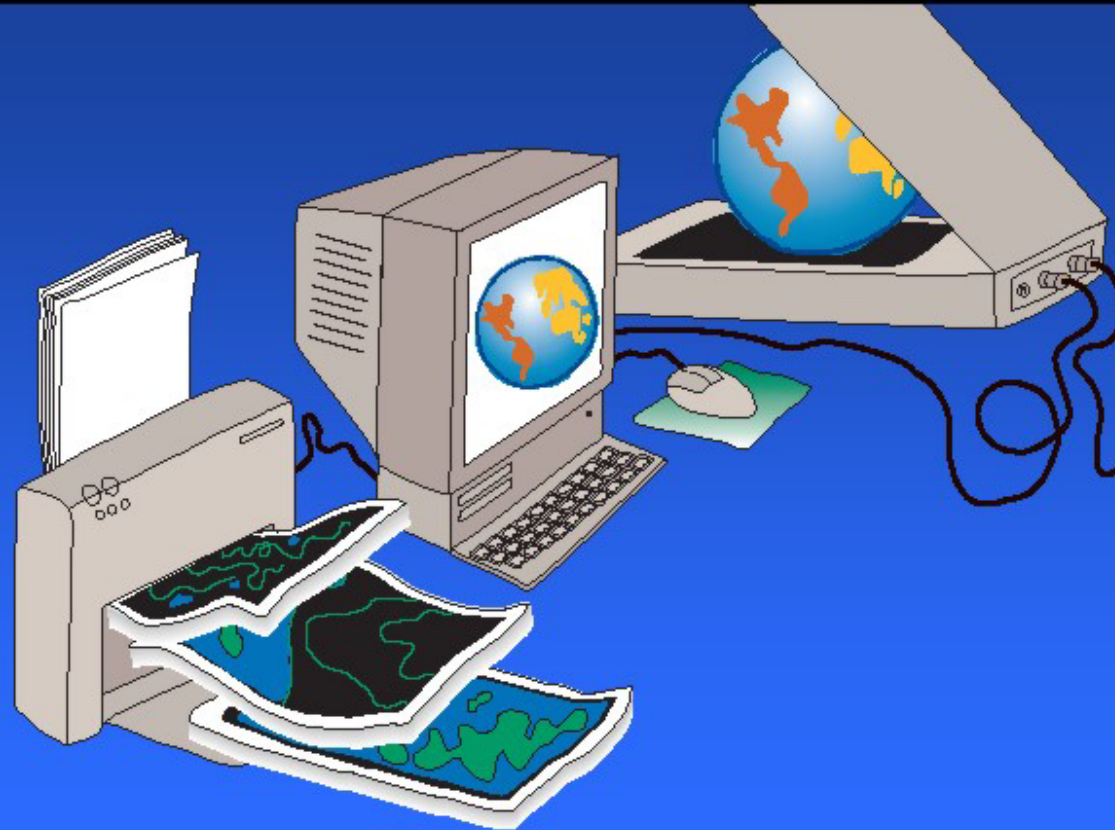


**The Role of
Geographic Information
Will Grow**

- 
- **Measurement**
 - **Data**
 - **Systems**
 - **Applications**

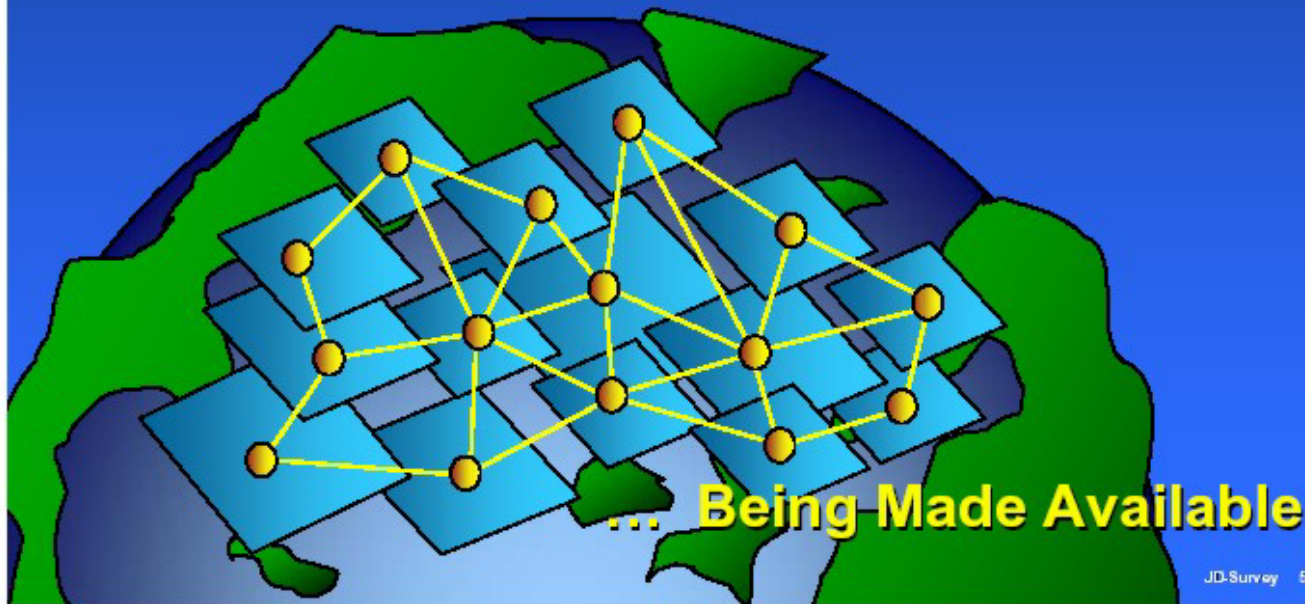
And YOU will be involved

Our Earth Is Becoming Digital



Geographic Change is Being Measured...

.....Flow into Networks



Vision

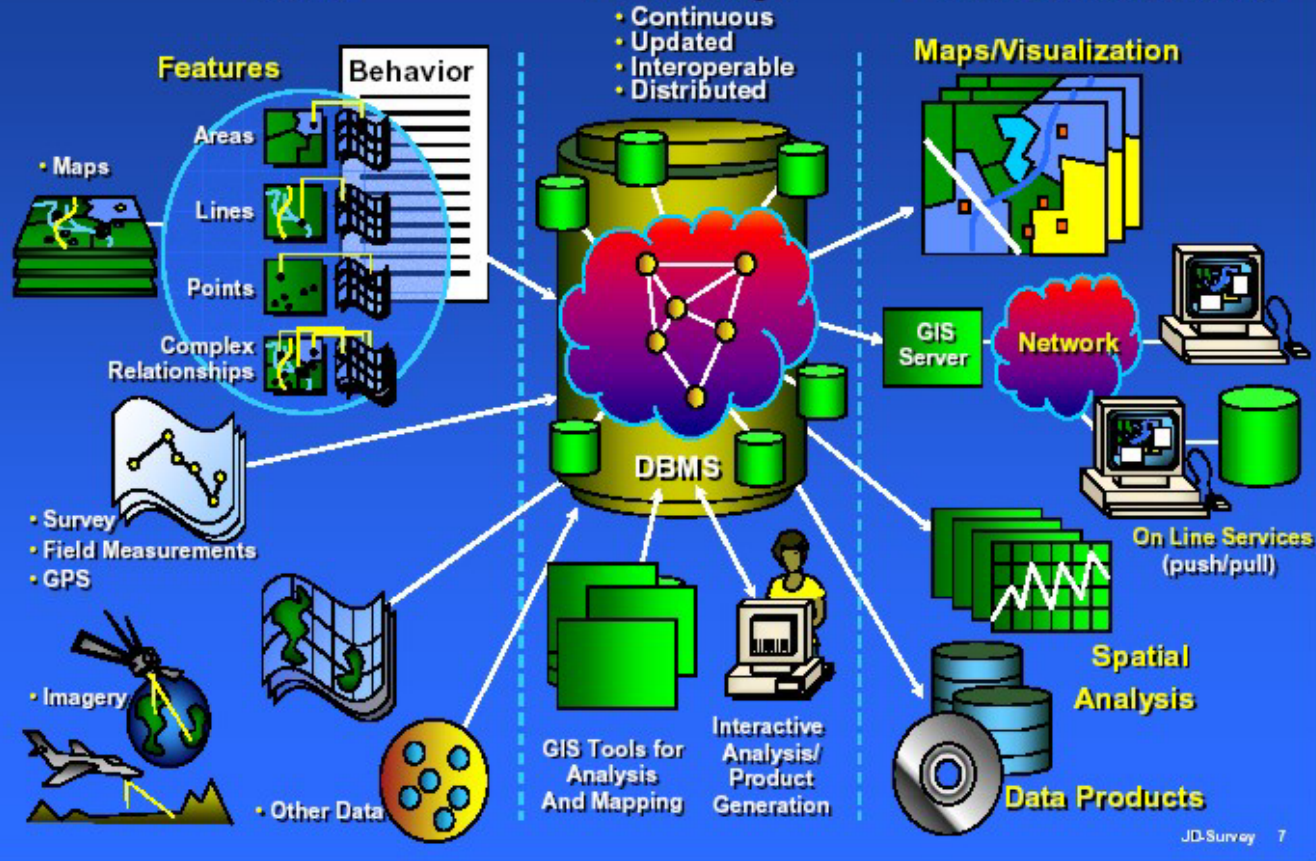
**GIS On The Internet Will Evolve
Into A Kind Of Nervous System For Our Planet**



... A Web For The Web of Life

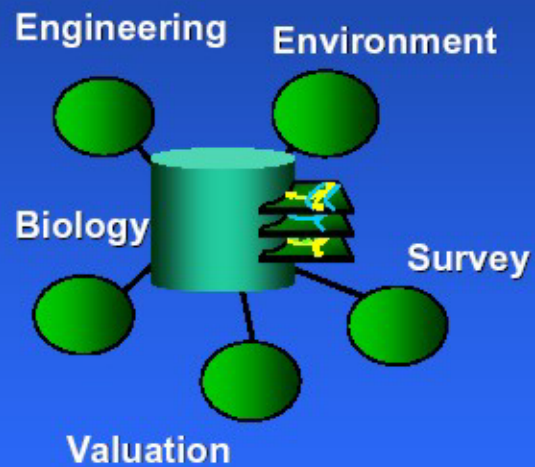
GIS Is an Information System

Data → Data Mgt. → Products/Services

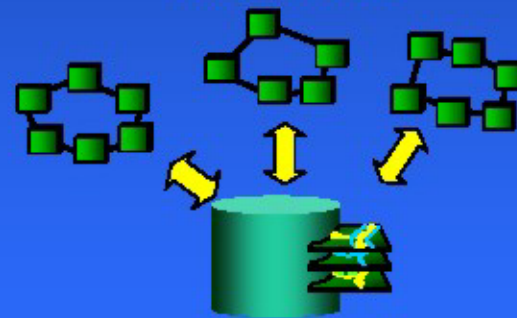


GIS is Providing A System for Integrating Information and Activities

Information



Activities



...GIS Is Being Used

Forestry & Natural Resources

National Defense

Transportation

Urbanization

Population

Land Use

Taxing

Mapping

Planning

Facility Management



Coastal Zone

Logistics

Crime

Health

Energy

Business

Education

Engineering

Public Safety

Security / Intelligence

Environmental Conservation

Local Government

The screenshot displays a GIS interface with several components:

- Top Left:** A large map showing land use patterns with colored overlays (yellow, red, purple).
- Top Center:** A summary table for development statistics:

Year	Persons / Acre	Population	Devel. Acres
1970 Development	8.36	290,272	34,733
1990 Development	5.84	367,065	62,875
1995 Development	-	-	-
- Top Right:** A detailed parcel map with various colored zones and labels like 'MICHIGAN SPUR' and 'STREET'.
- Center:** A detailed parcel map with a cyan-colored road or path overlaid. A data table is open over it:

Parcel ID	Parcel Type	Value
07088800010280	VALUABLE	945
07088800010281	MARSHLAND	0
07088800010282	STREET	0
07088800010283	SURFACE	0
07088800010284	STREET DR	120
07088800010285	STREET SHAD	0
07088800010286	ROADWAY	0
07088800010287	STREET	0
07088800010288	STREET	0
07088800010289	STREET	0
07088800010290	STREET	0
07088800010291	STREET	0
07088800010292	STREET	0
07088800010293	STREET	0
07088800010294	STREET	0
07088800010295	STREET	0
07088800010296	STREET	0
07088800010297	STREET	0
07088800010298	STREET	0
07088800010299	STREET	0
07088800010300	STREET	0
07088800010301	STREET	0
07088800010302	STREET	0
07088800010303	STREET	0
07088800010304	STREET	0
07088800010305	STREET	0
07088800010306	STREET	0
07088800010307	STREET	0
07088800010308	STREET	0
07088800010309	STREET	0
07088800010310	STREET	0
07088800010311	STREET	0
07088800010312	STREET	0
07088800010313	STREET	0
07088800010314	STREET	0
07088800010315	STREET	0
07088800010316	STREET	0
07088800010317	STREET	0
07088800010318	STREET	0
07088800010319	STREET	0
07088800010320	STREET	0
07088800010321	STREET	0
07088800010322	STREET	0
07088800010323	STREET	0
07088800010324	STREET	0
07088800010325	STREET	0
07088800010326	STREET	0
07088800010327	STREET	0
07088800010328	STREET	0
07088800010329	STREET	0
07088800010330	STREET	0
07088800010331	STREET	0
07088800010332	STREET	0
07088800010333	STREET	0
07088800010334	STREET	0
07088800010335	STREET	0
07088800010336	STREET	0
07088800010337	STREET	0
07088800010338	STREET	0
07088800010339	STREET	0
07088800010340	STREET	0
07088800010341	STREET	0
07088800010342	STREET	0
07088800010343	STREET	0
07088800010344	STREET	0
07088800010345	STREET	0
07088800010346	STREET	0
07088800010347	STREET	0
07088800010348	STREET	0
07088800010349	STREET	0
07088800010350	STREET	0
07088800010351	STREET	0
07088800010352	STREET	0
07088800010353	STREET	0
07088800010354	STREET	0
07088800010355	STREET	0
07088800010356	STREET	0
07088800010357	STREET	0
07088800010358	STREET	0
07088800010359	STREET	0
07088800010360	STREET	0
07088800010361	STREET	0
07088800010362	STREET	0
07088800010363	STREET	0
07088800010364	STREET	0
07088800010365	STREET	0
07088800010366	STREET	0
07088800010367	STREET	0
07088800010368	STREET	0
07088800010369	STREET	0
07088800010370	STREET	0
07088800010371	STREET	0
07088800010372	STREET	0
07088800010373	STREET	0
07088800010374	STREET	0
07088800010375	STREET	0
07088800010376	STREET	0
07088800010377	STREET	0
07088800010378	STREET	0
07088800010379	STREET	0
07088800010380	STREET	0
07088800010381	STREET	0
07088800010382	STREET	0
07088800010383	STREET	0
07088800010384	STREET	0
07088800010385	STREET	0
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07088800010392	STREET	0
07088800010393	STREET	0
07088800010394	STREET	0
07088800010395	STREET	0
07088800010396	STREET	0
07088800010397	STREET	0
07088800010398	STREET	0
07088800010399	STREET	0
07088800010400	STREET	0
- Bottom Left:** A map showing circular service areas around locations like Vista, Carlsbad, and San Marcos. An 'Income Report' table is overlaid:

Area ID	Area	Total Revenue	Total Population
0204	14,02	0.9	
0207	14,02	4.1	
0205	11,36	4.8	
0206	4,29	10.8	
0208	98	2.1	
0207	11,88	16.1	
0204	14,97	1.4	
- Bottom Center:** A network map showing a dense web of blue lines representing roads or infrastructure.
- Bottom Right:** A routing tool interface with fields for 'Time', 'Sub', 'Distance', 'Cancel Segment', 'Time Required', 'Sub Required', 'Pieces Left', and 'Segment Details'.

Land Information Systems

The screenshot displays a web-based Land Information System interface. The top right features a blue header with the text "Land Information Systems". The main interface is divided into several sections:

- Search Results (Top Left):** A table listing property owners and their values. The table has two columns: "Owner Name" and "Property Value".
- Map (Top Center):** A street map showing parcel boundaries and a search area highlighted in red.
- Browser Window (Middle):** A Microsoft Internet Explorer window titled "OnPoint Enterprise - Microsoft Internet Explorer" with the address "http://rkumar/onpoint/".
- Map View (Bottom Center):** A detailed map view of a specific parcel, showing street names "KING ST W", "HALLS LAKE W", and "ST JAMES ST S". The parcel is highlighted in green.
- Active Layer (Bottom Right):** A panel titled "Active Layer: LAND PARCEL" showing search criteria and a list of parcel IDs and addresses.

Owner Name	Property Value
PLANTE DANIEL LEO	108900
KONAS MARY F	108600
RIBETT ANDREA M	107800
ARVELL SANDRA L	107800
LOCKEBACK NANCY A	107800
EDCOCK ANNE M LW	149300
JONES DAVID J & BETH	151400
JONES PAUL J &	150200
ARSON ROBERT P & M	155600

Search Criteria:
Active Layer = LAND_PARCEL
Sheet = KING ST W
Info. Category = REVERSE
Info. Type = TAXATION
Info. Element = C - ASSMT

3012026001036900000	228 KING ST W
3012016001089900000	864 KING ST W
3012056001060900000	617 KING ST W
3012056001059010000	609 KING ST W
3012056001050900000	291 KING ST W
3012056001006900000	155 KING ST W
3012056001002900000	1 KING ST W
3012056001079900000	749 KING ST W

Click refresh button to reflect changes on map.

>> New Search <<

SELECT ALL	Deselect ALL	TOGGLE
SAVE ALL	SAVE SELECTED	DELETE
DETAILS	DOCUMENTS	REPORTS

Select an object. Hold CONTROL key to add to current selection.

Utilities – Asset Management

The screenshot displays a GIS application interface for utility asset management. The main map area shows a network of utility lines (blue and red) overlaid on a street grid. Key streets labeled include WASHINGTON AVE, HILL ST, DECATUR ST, and ADAMS AVE. A 'Layers' panel on the left lists 'Valves' and 'Hydrants'. A 'Data' panel on the bottom left shows a tree view of asset categories. A '3D' view window is open, showing a detailed view of a pipe with a table of data.

MT_ID	HYDR	AREA	P
11324	208100	511	
8959	208020	511	
3038	208020	511	
3727	208730	511	
8020	208730	511	
9714	208730	511	
18449	210830	511	
11811	208020	511	
11843	210830	511	
3147	208730	511	
1898	208020	511	
1481	210830	511	
1482	208020	511	
1807	210830	511	
1895	210830	511	
1896	210830	511	
1897	210830	511	
1898	210830	511	
1899	210830	511	
1900	210830	511	
1901	210830	511	
1902	210830	511	
1903	210830	511	
1904	210830	511	
1905	210830	511	

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Forestry

The screenshot displays a forestry management software interface. The main window is titled "FRMS" and features a toolbar with various icons for navigation and editing. A large map window shows a satellite-style aerial view of a forested area with a red boundary line. To the right of the map is a legend or block selection area with a "BLOCK" dropdown menu. Below the map, a status bar indicates "Selected Road: Broughton - Hay Lake FSR".

On the left side, there is a sidebar with a "Class" table and a "Road" list. The "Class" table has columns for "Class" and "Status":

Class	Status
Permanent	Active
Permanent	Active

Below this, there are buttons for "Link", "Replace", and "Disconnect". Further down, there is a "Class" dropdown set to "Semi-Per" and a label "Inspection Freque (Months)".

The "Road" list includes:

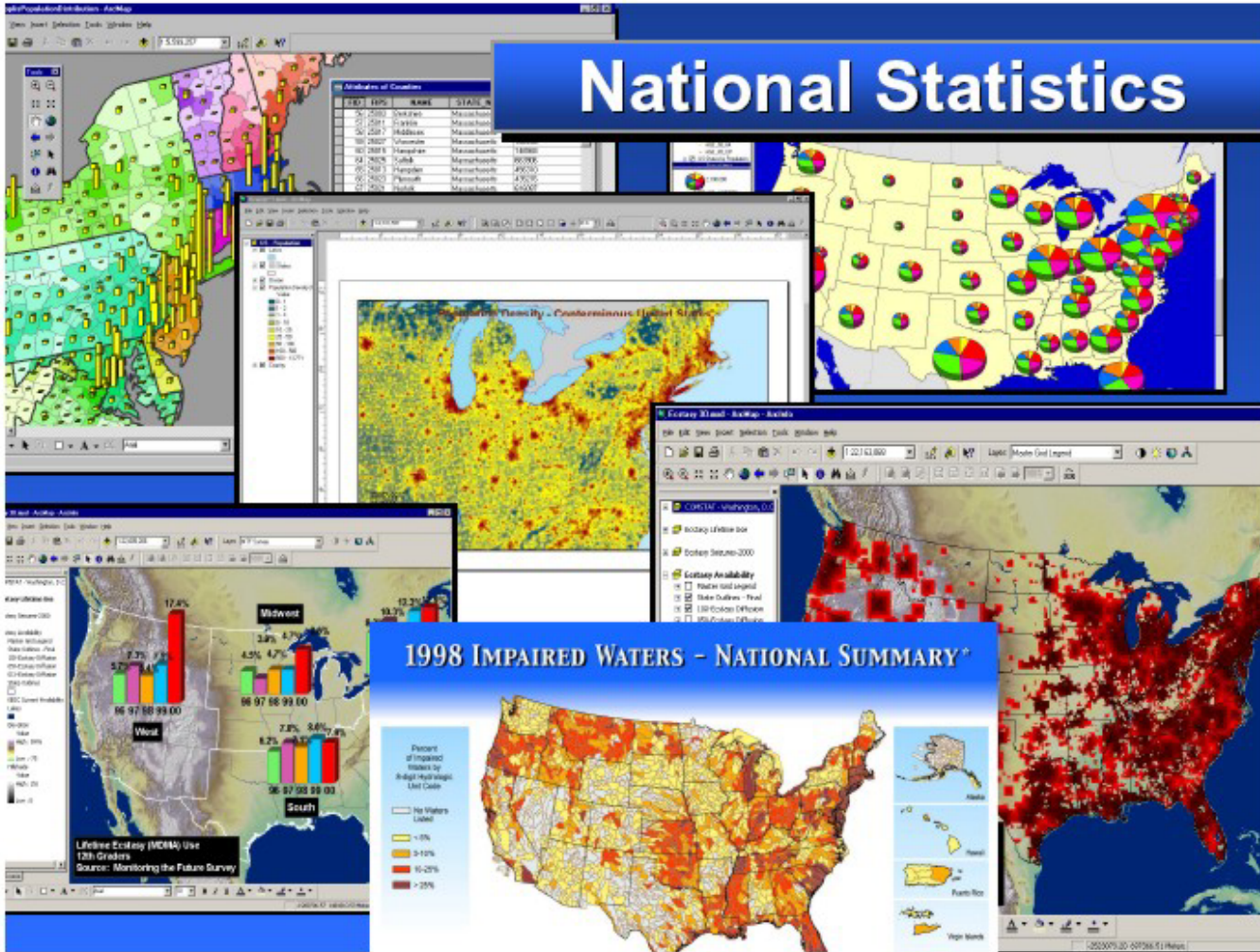
- Road
- Creek Main
- Ice Road
- act
- rd

At the bottom of the interface, there is a taskbar with open applications: "Microsoft Outlook", "Image - Message", and "Microsoft Word". A tree view on the right shows a hierarchy of folders and files:

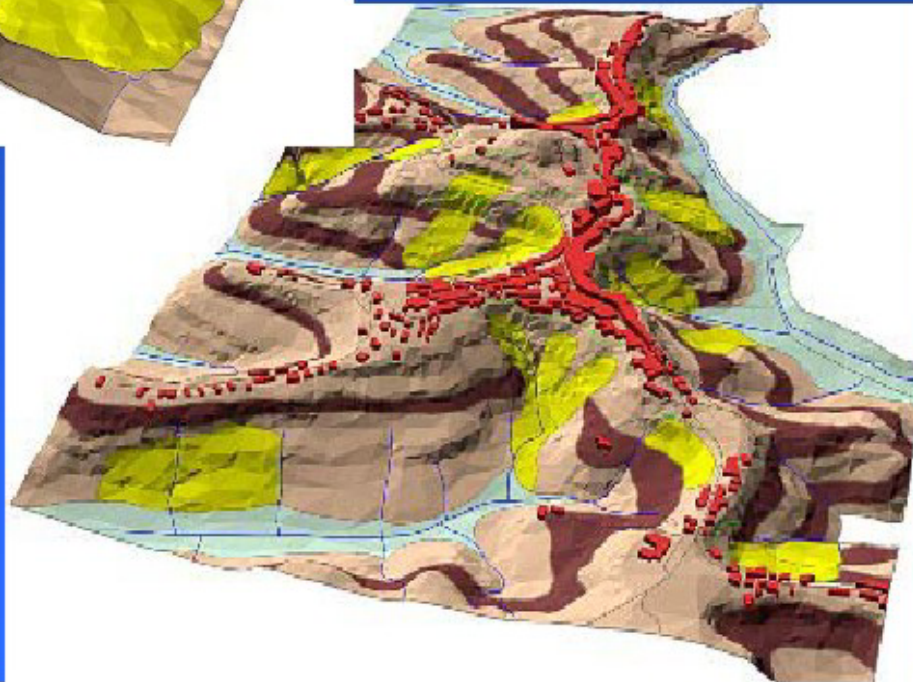
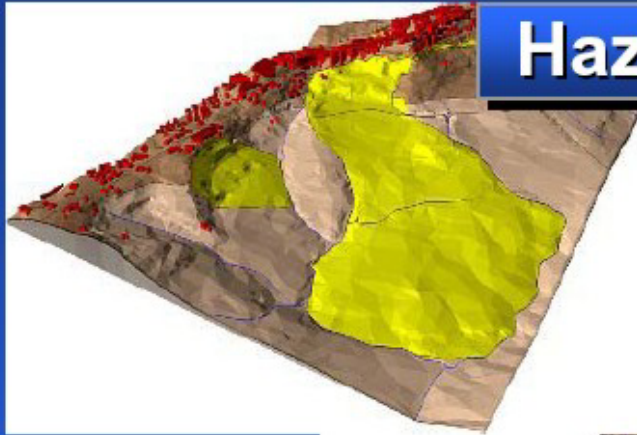
- 793
- 794
 - FJ3754
 - 794/201
 - 794/202
 - 794/203
- 796
- 797

The system clock in the bottom right corner shows "4:05 PM".

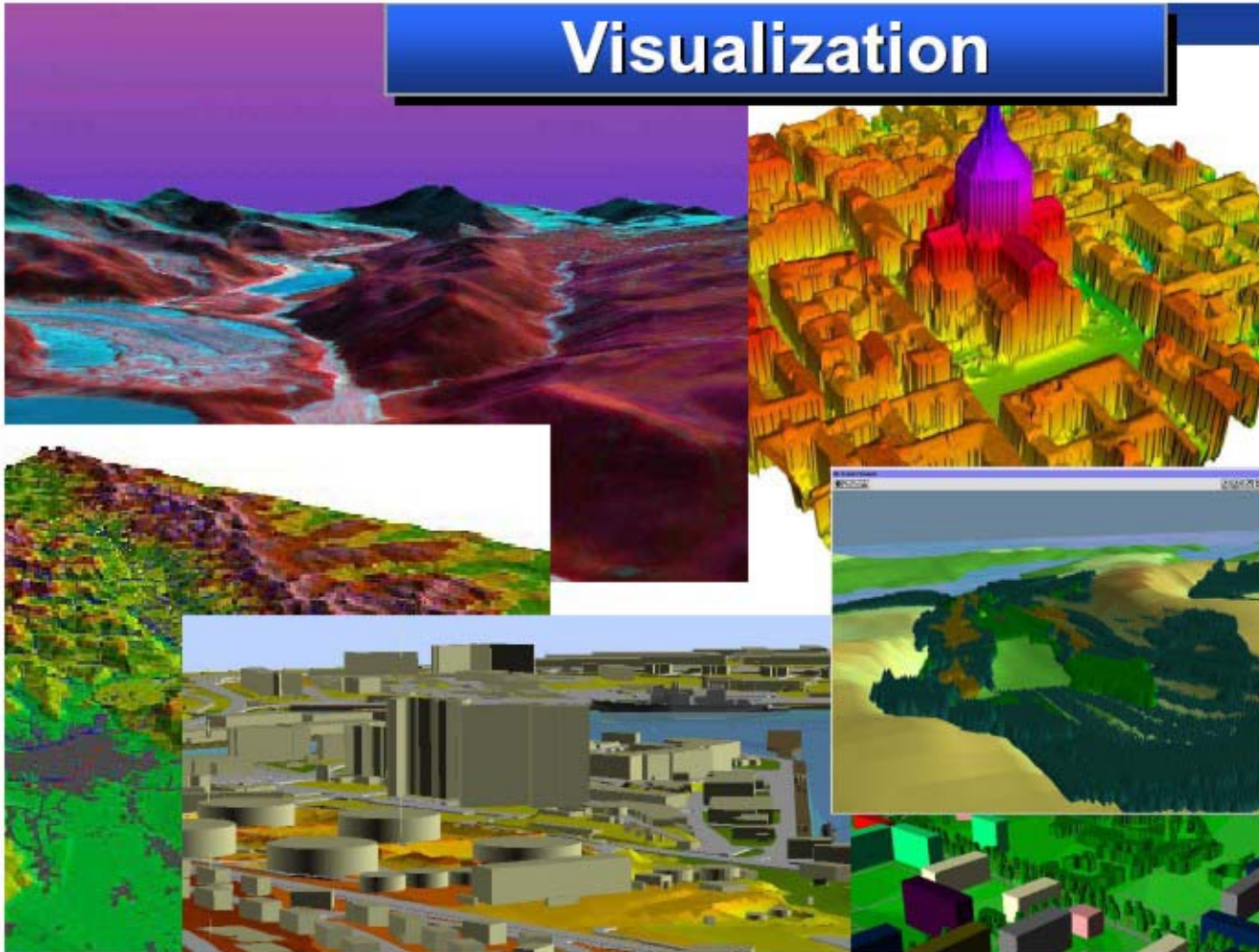
National Statistics



Hazards Assessment

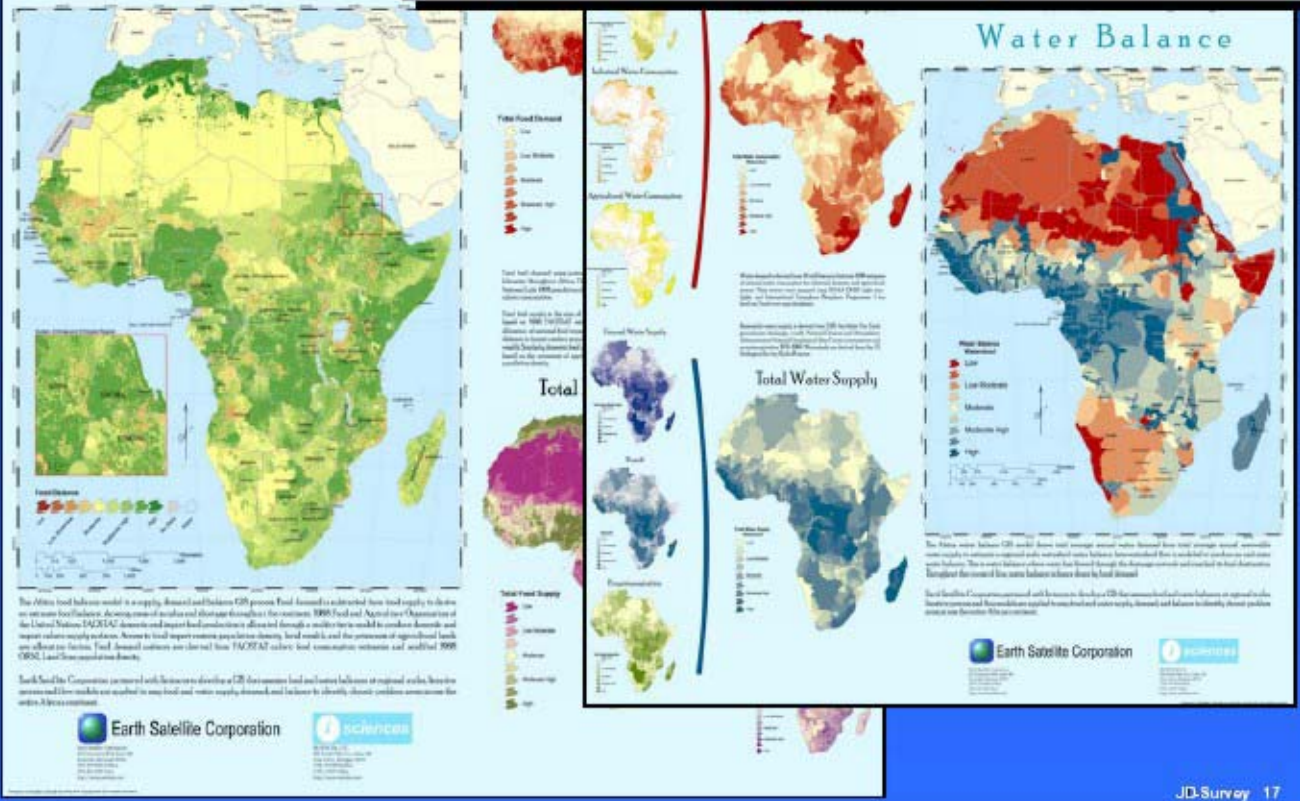


Visualization

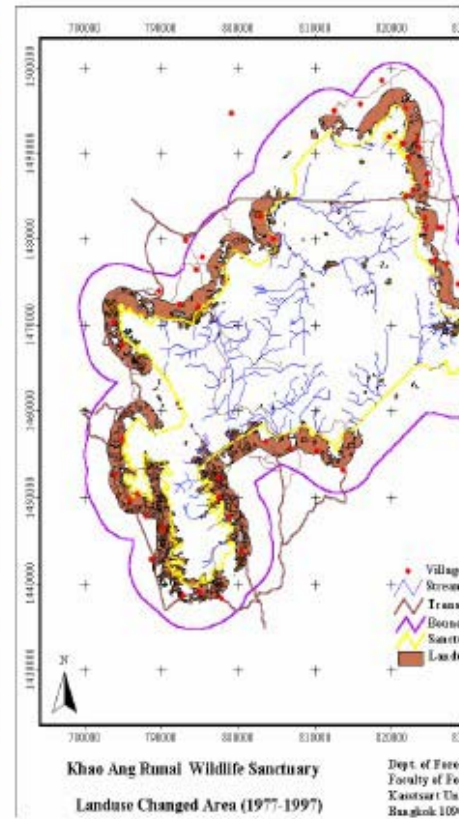
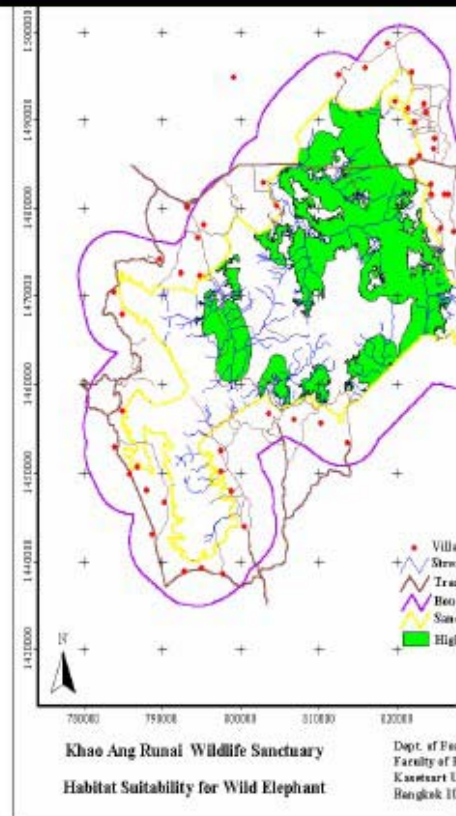
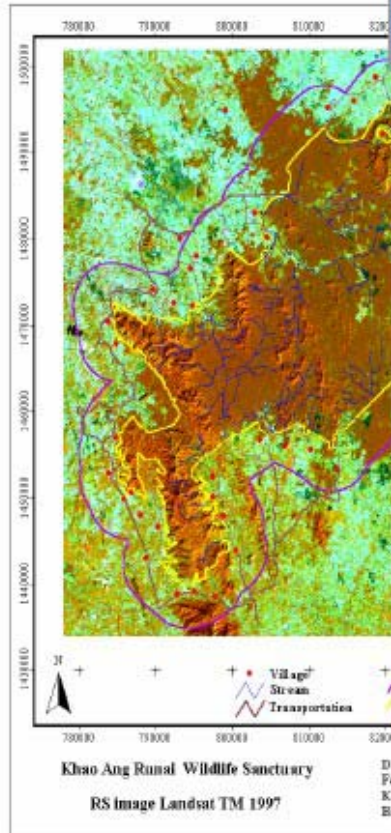


Africa Food Balance

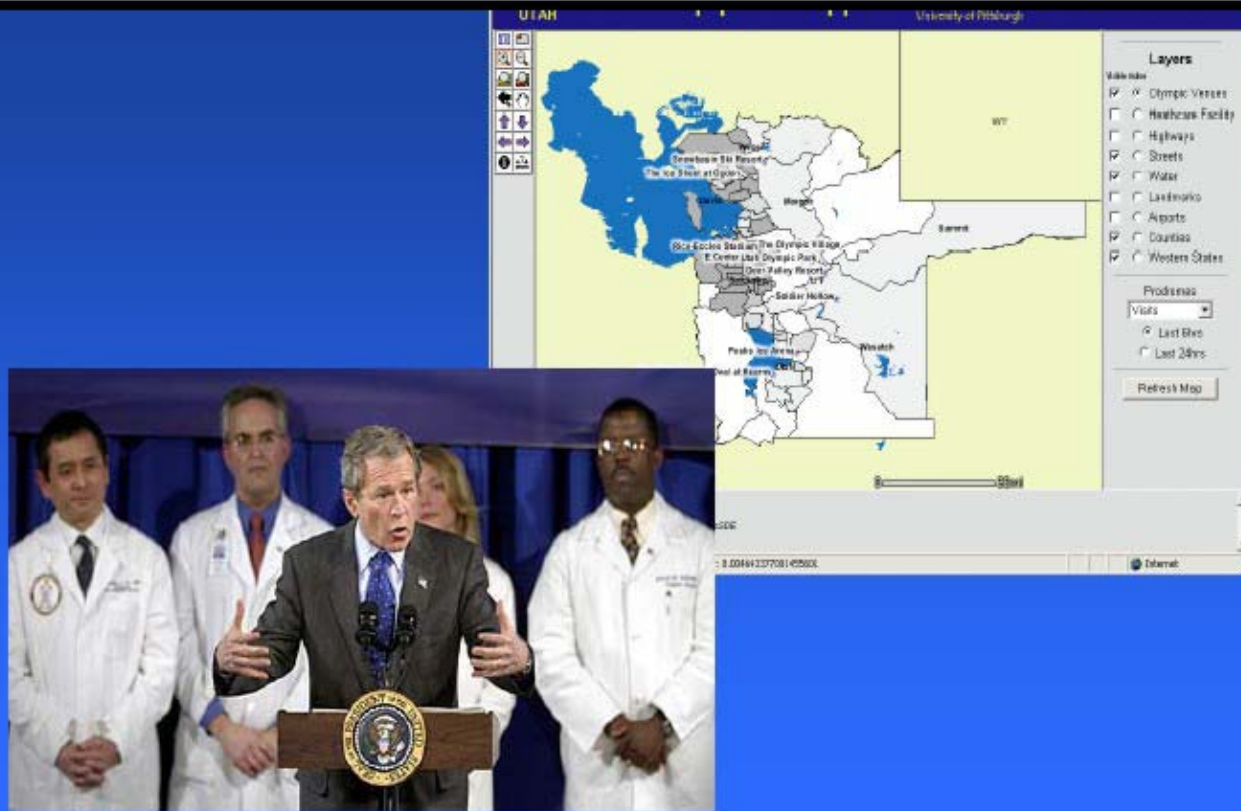
Natural Resource Planning



Conservation Planning

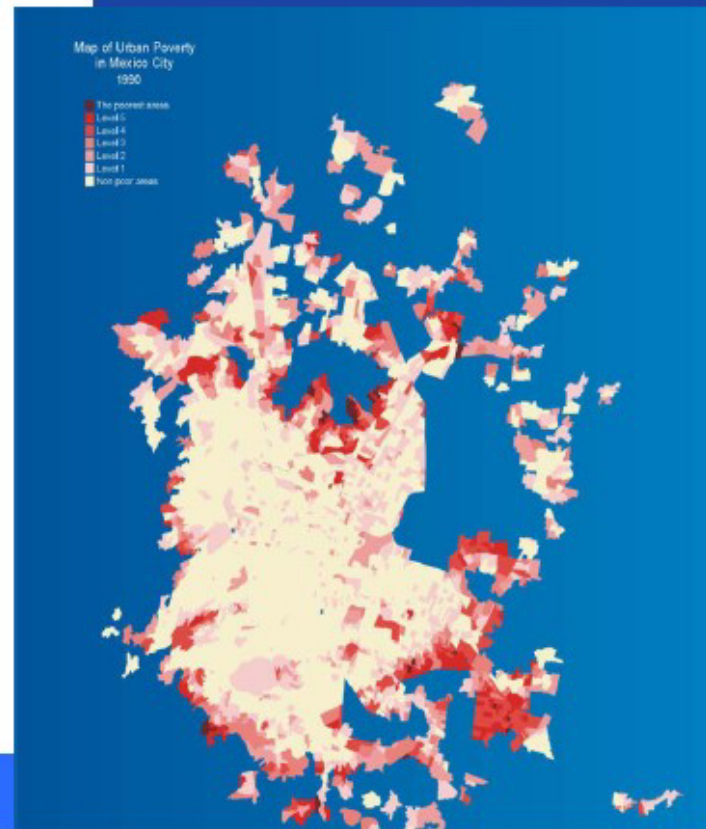
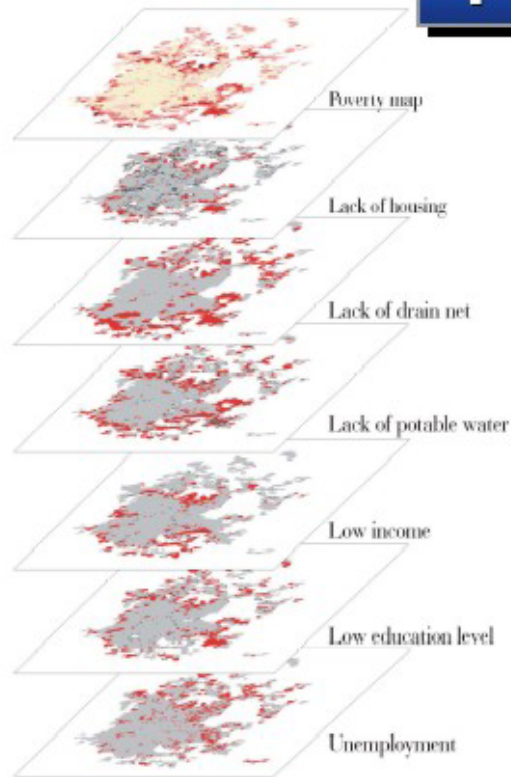


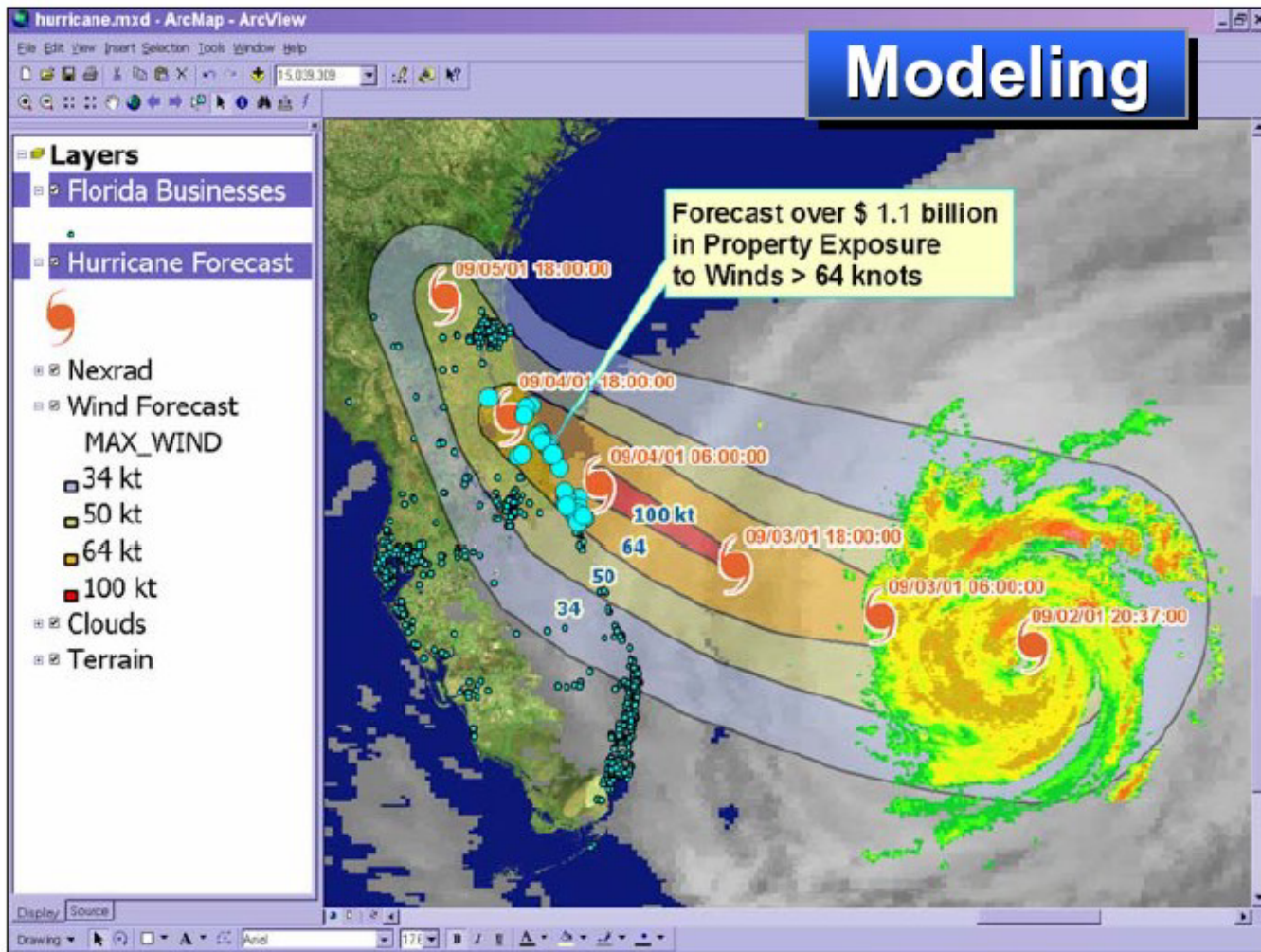
Health and the Environment



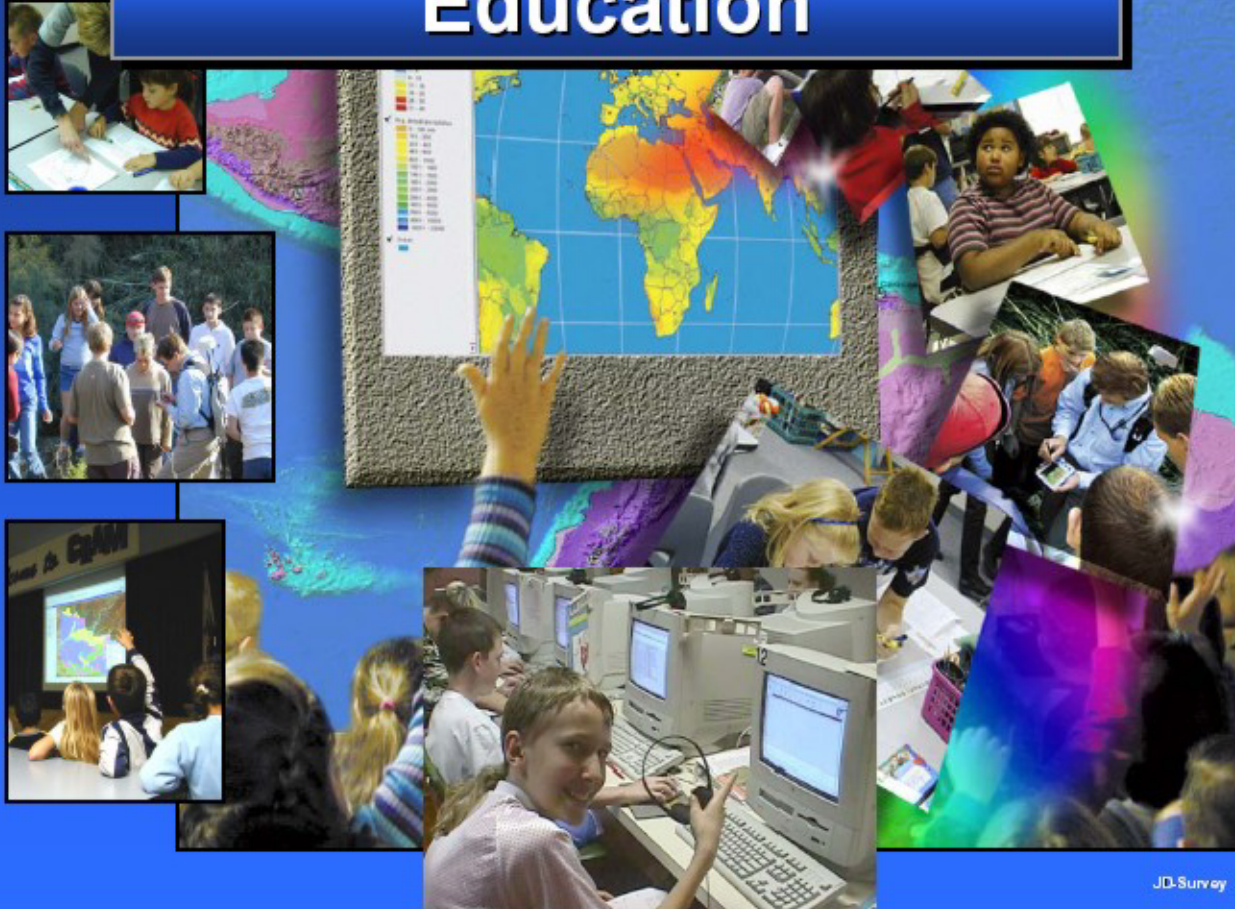
Overlay analysis of Urban Poverty in Mexico City

Poverty Assessment





Education



Internet Applications

Cabarrus County

SoCal Gas

NOAA

The collage features several web-based maps and data visualizations:

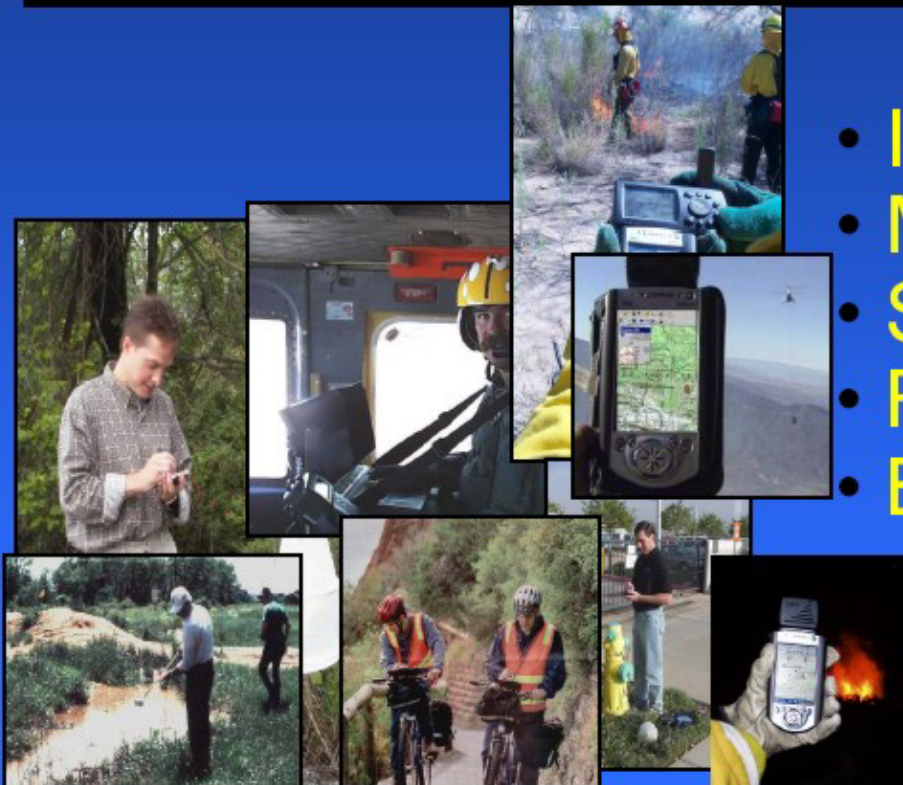
- Cabarrus County:** A map showing land parcels with red numerical values (9497, 1490, 3435, 342) and street names like 'WILLS' and 'CENSINGTON'.
- SoCal Gas:** A map showing a network of gas lines in purple and pink, overlaid on a street grid.
- NOAA:** A map of a coastal area with various colored overlays (red, yellow, blue) and labels like 'HEALTH CENTER' and 'COVENT'.
- CDC:** A map of Georgia titled 'Cardiovascular Health' showing 'Heat Disease Death Rates, 1991-1995'. The map is color-coded by county, with a legend on the left showing a scale from 201-215 to 402-412. The CDC logo is visible at the bottom left.

Other elements include a Microsoft Internet Explorer browser window at the top center and a 'DER NAVIGATION' window at the top right.

CDC

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Mobile GIS Applications



- Inventory
- Monitoring
- Survey
- Reporting
- Editing

