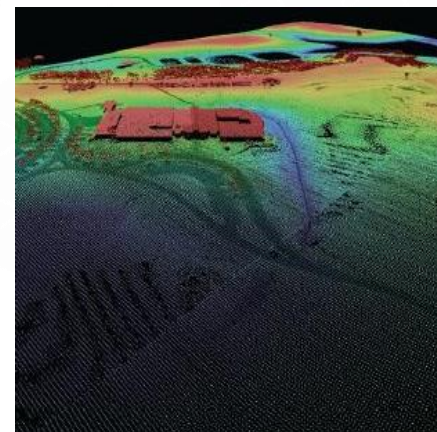
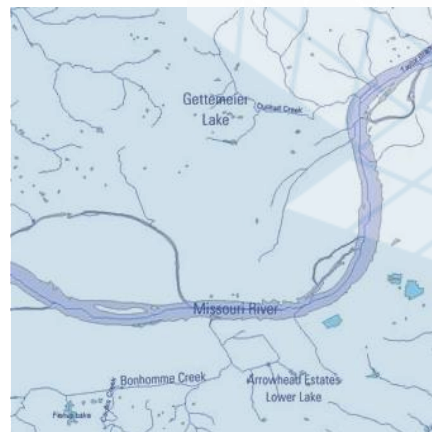
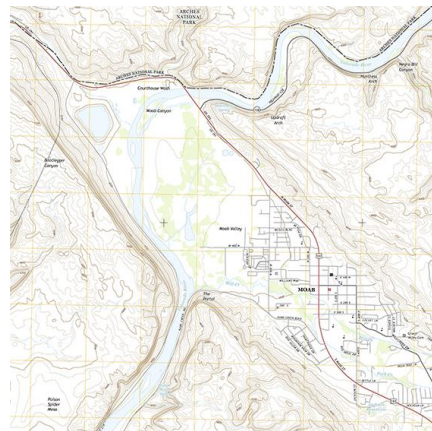




National Map - Data & Services Delivery



Coastal GeoTools Conference 2015
March 31, 2015

Rob Dollison, 703-648-5724,
rdollison@usgs.gov

+ Objectives

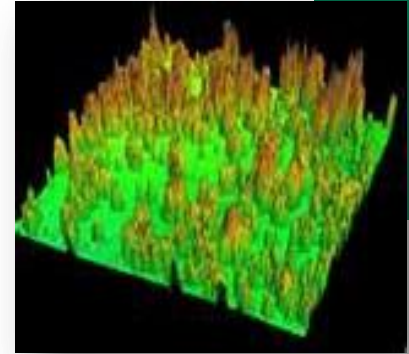
Updates on National Map Data Delivery

- New Elevation Data and Products
- New GIS Cartographic Topo Products
- Our Future Direction in Viewers and Data Delivery
- Demonstration of Beta Data Downloader

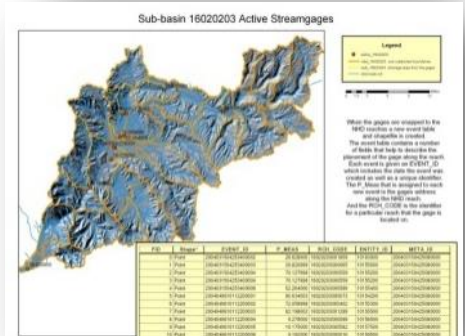


The National Map

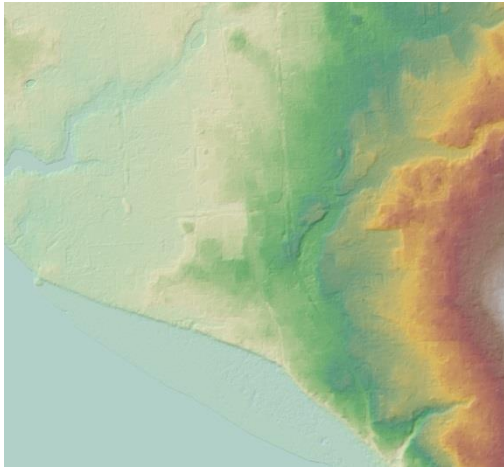
Your Source for Topographic Information



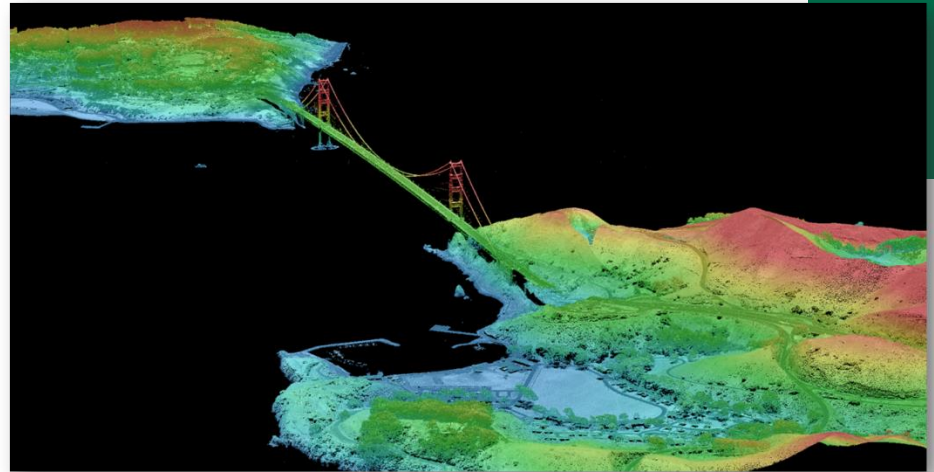
Area of National Leadership	Program Emphasis
A-16 Lead for Terrestrial Elevation	3D Elevation Program (3DEP)
A-16 Co-Lead for Inland Waters (Hydrography)	National Hydrography Dataset (NHD) Watershed Boundaries Dataset (WBD)
National Coverage of Topographic Maps	U.S. Topo and Alaska Mapping



+ New 3DEP Products from The National Map



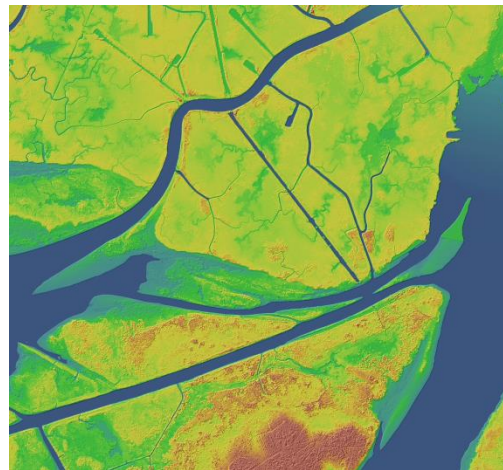
5 meter Alaska DEMs



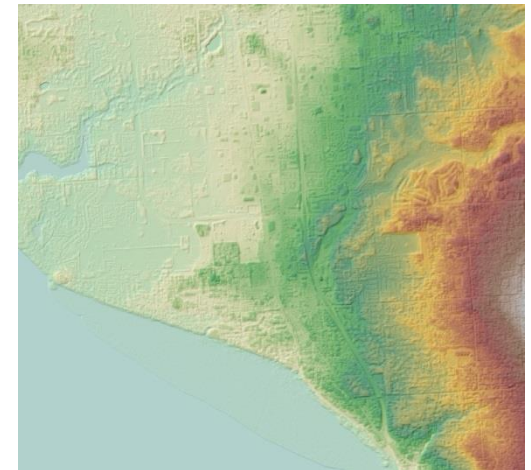
Lidar Point Cloud



Alaska Ifsar ORIs



1 meter DEMs



Alaska Ifsar DSMs

+ Products and Services Delivery

Main Activities for 2015

- Completing our move to Pre-tiled Staged Products
- Improving methods to enable others to use our data
- New Product Index and API to pre-staged products
- Move files to the Cloud
- New Lidar and 1M DEM Products
- Refresh Web Base Maps
- Develop new data access capabilities

+ TNM Delivery News

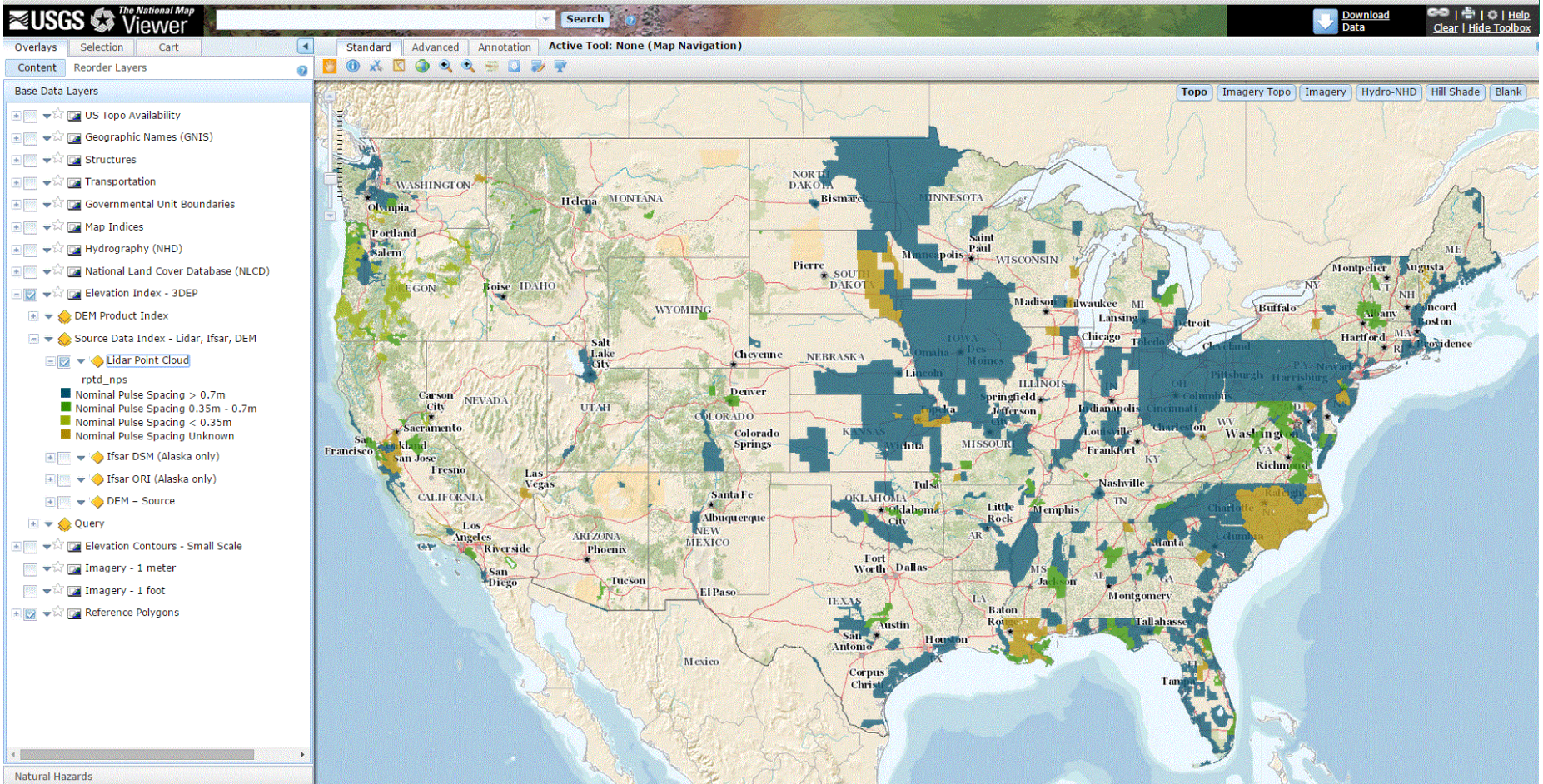
What's here and coming soon

- New and available now
 - Lidar Point Cloud and 1M DEMs available
 - New Elevation Data Availability Service
 - New 2011 Land Cover service
 - National Atlas migrated to Small-Intermediate Scale Program
 - Our Topo Basemap featured on AGOL – Dec
- In April-May
 - TopoView beta2 – Historical Maps (GeoTIFFs Included)
 - New Topo Web Basemap
- In Progress – Combined Staged Vector Product, ORI, DSM



Lidar Point Cloud Data Available

Data Availability Service



+ US Topo

Digital USGS Topographic Maps

- ✓ Seamless
- ✓ Continuously maintained
- ✓ Nationally consistent
- Layered GeoPDF®
- Orthoimage base from the National Agriculture Imagery Program (NAIP)
- Developed and maintained through partnerships
- 3-year production cycle
- Available online
- Producing over 11,000 new, higher-resolution (25K) digital maps for Alaska

The screenshot shows the USGS website interface for 'The National Map'. At the top, there are logos for USGS and 'The National Map' with the tagline 'science for a changing world'. A navigation menu on the left includes links for 'About the "Digital Map - Beta"', 'Download Maps (Map Store)', 'Frequently Asked Questions', 'User's Guide-Quickstart (pdf)', 'Information Sheet (pdf)', 'History of USGS Topographic Maps', 'The National Map', and 'Contact Us'. The main content area is titled 'A New Generation of Maps' and features a large aerial orthoimage. Below this, there are three smaller map examples: a grayscale topographic map, a color topographic map with a grid, and a color topographic map with a river. A text box on the right explains that the 'Digital Map - Beta' is the first step toward a new generation of digital topographic maps, built from NAIP data and integrated with local, state, federal, and other sources. It includes orthorectified imagery, roads, and geographic names in a 7.5-minute quadrangle format. The text also mentions that these maps are available for download and that the USGS will add historical versions and other data layers like hydrography and contours. A 'What Makes Them Special' list includes: Richer content, Can be used nationally, Can be downloaded, User interaction, Users can set Military Grid, Direct 'mash', and Will continue.

+ *National Map Products*

Cartographic Products for a Variety of Users



Print Map
Existing Function

Historical Map GeoTIFF
New Staged Product

US Topo GeoTIFF
Non-Existing Staged Product

Historical Map GeoPDF
Existing Staged Product

US Topo GeoPDF
Existing Staged Product

Web Basemaps
Existing Product

US Topo Layer Services
Non-Existing Dynamic Product

Overlay Services
Existing Dynamic Product

US Topo ArcGIS Template
Planned

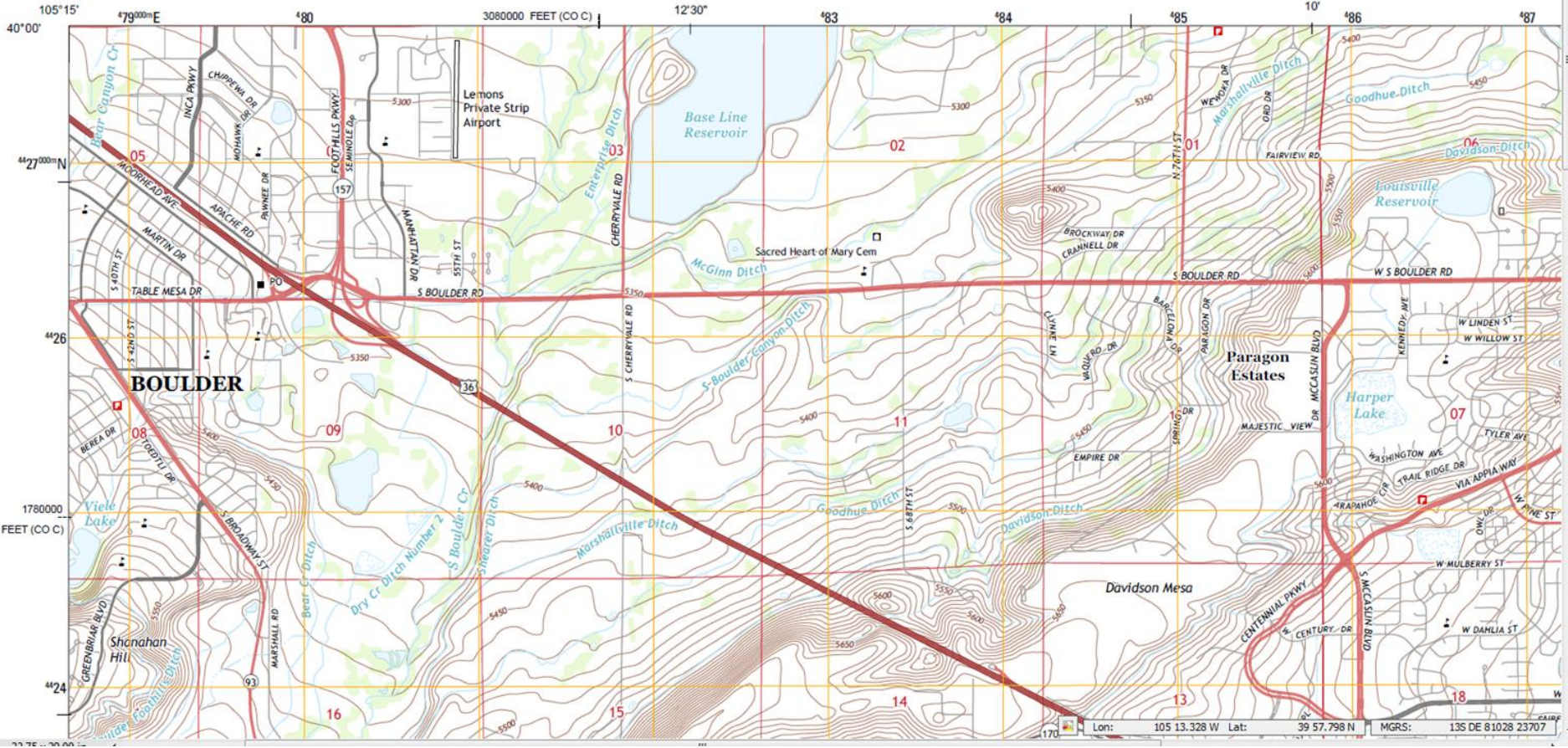
US Topo GIS Packet
Research

OGC Geopackage
Non-Existing Product

+ Map Comparison - Published US Topo



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



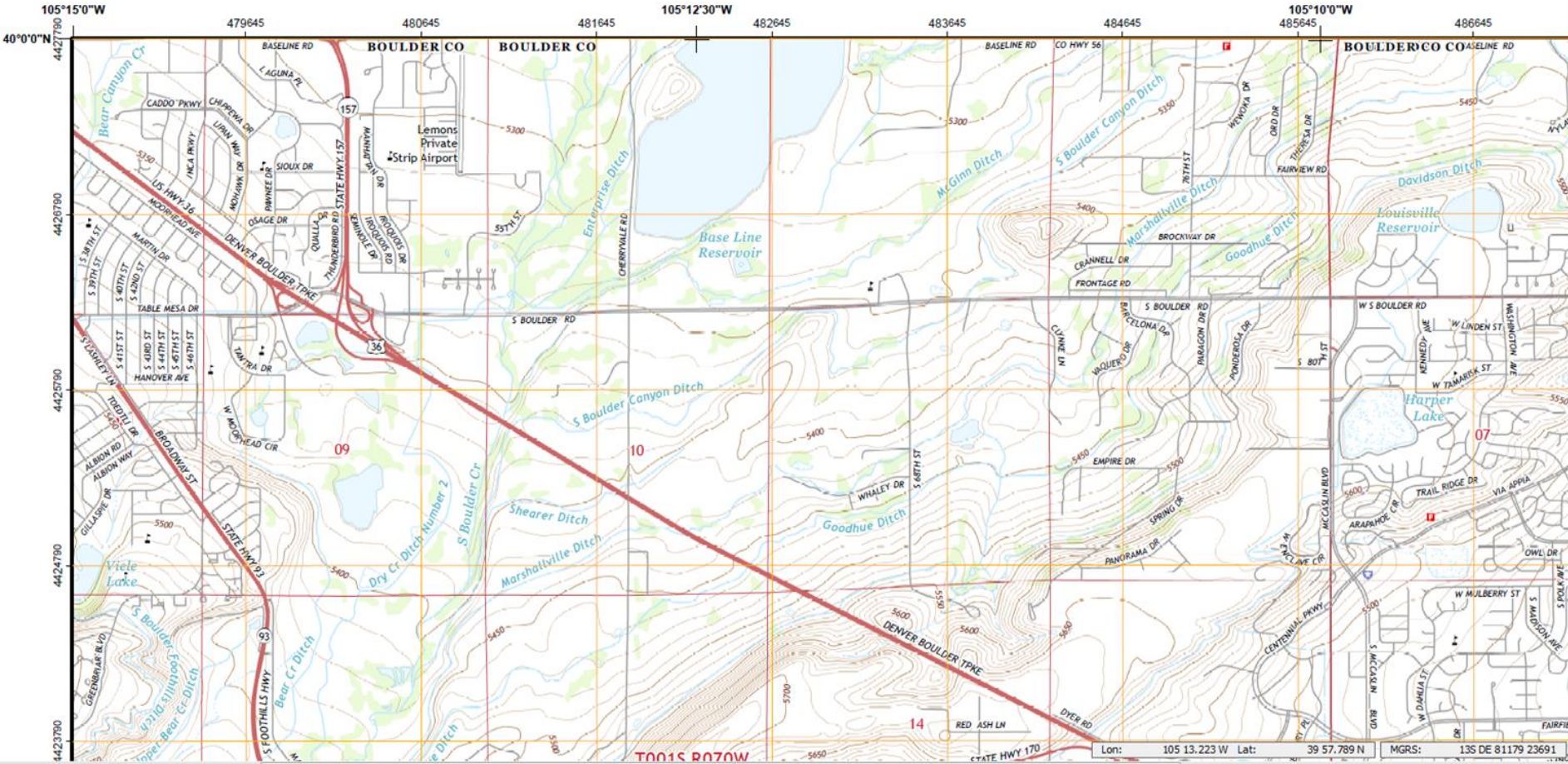
The National Map
Your Source for Topographic Information



Map Comparison - exported from template



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

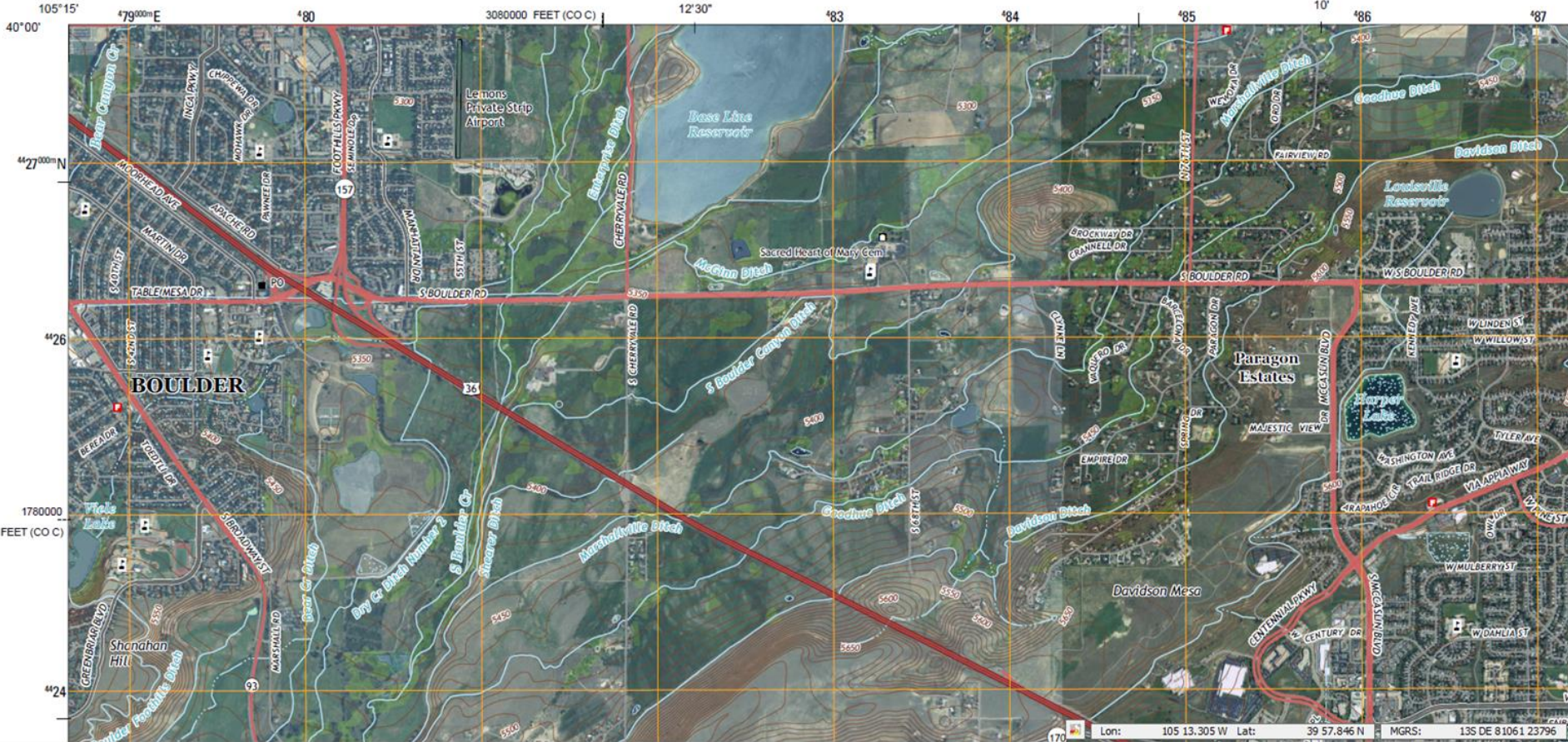


The National Map
Your Source for Topographic Information

+ Map Comparison - Published US Topo



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

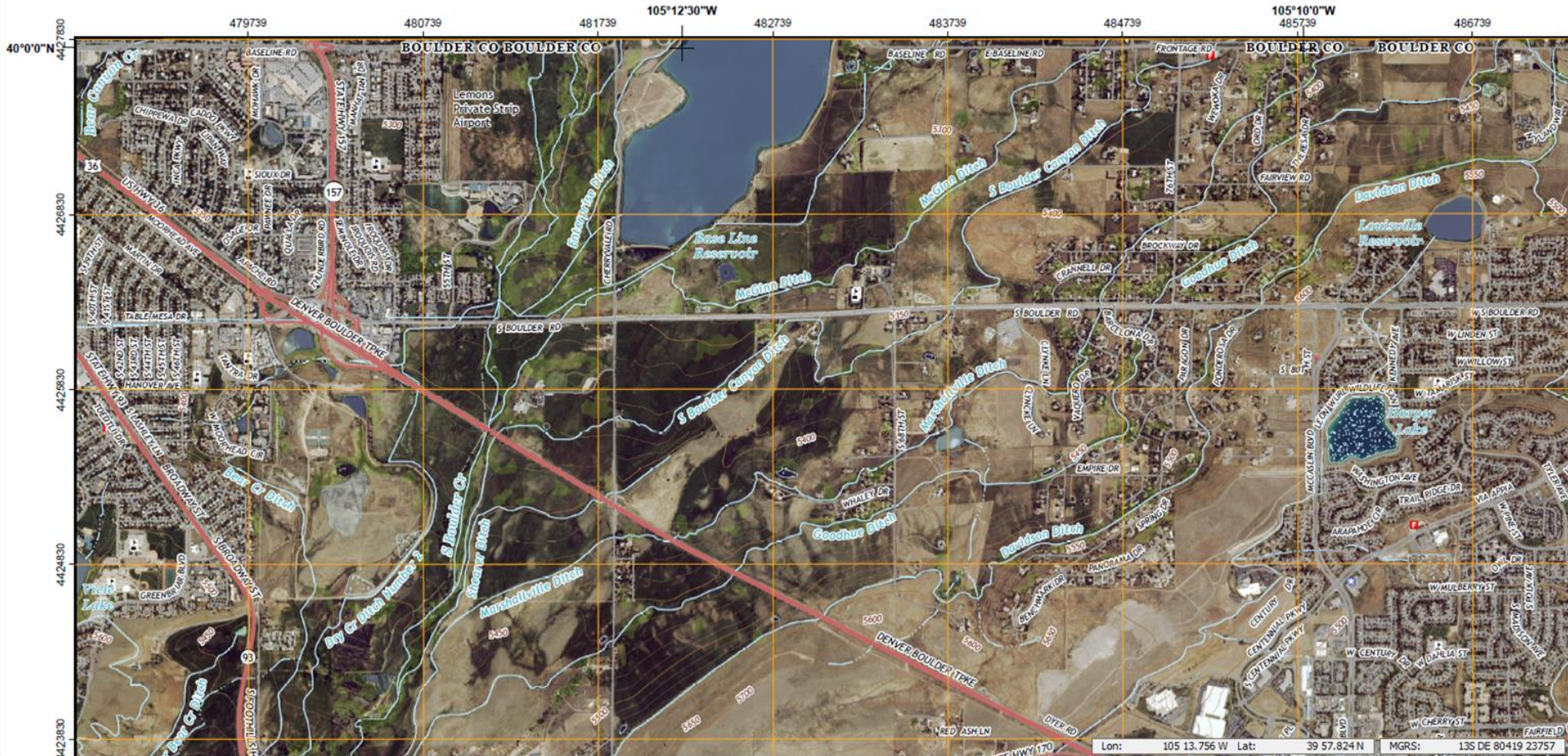


The National Map
Your Source for Topographic Information

+ Map Comparison - exported from template



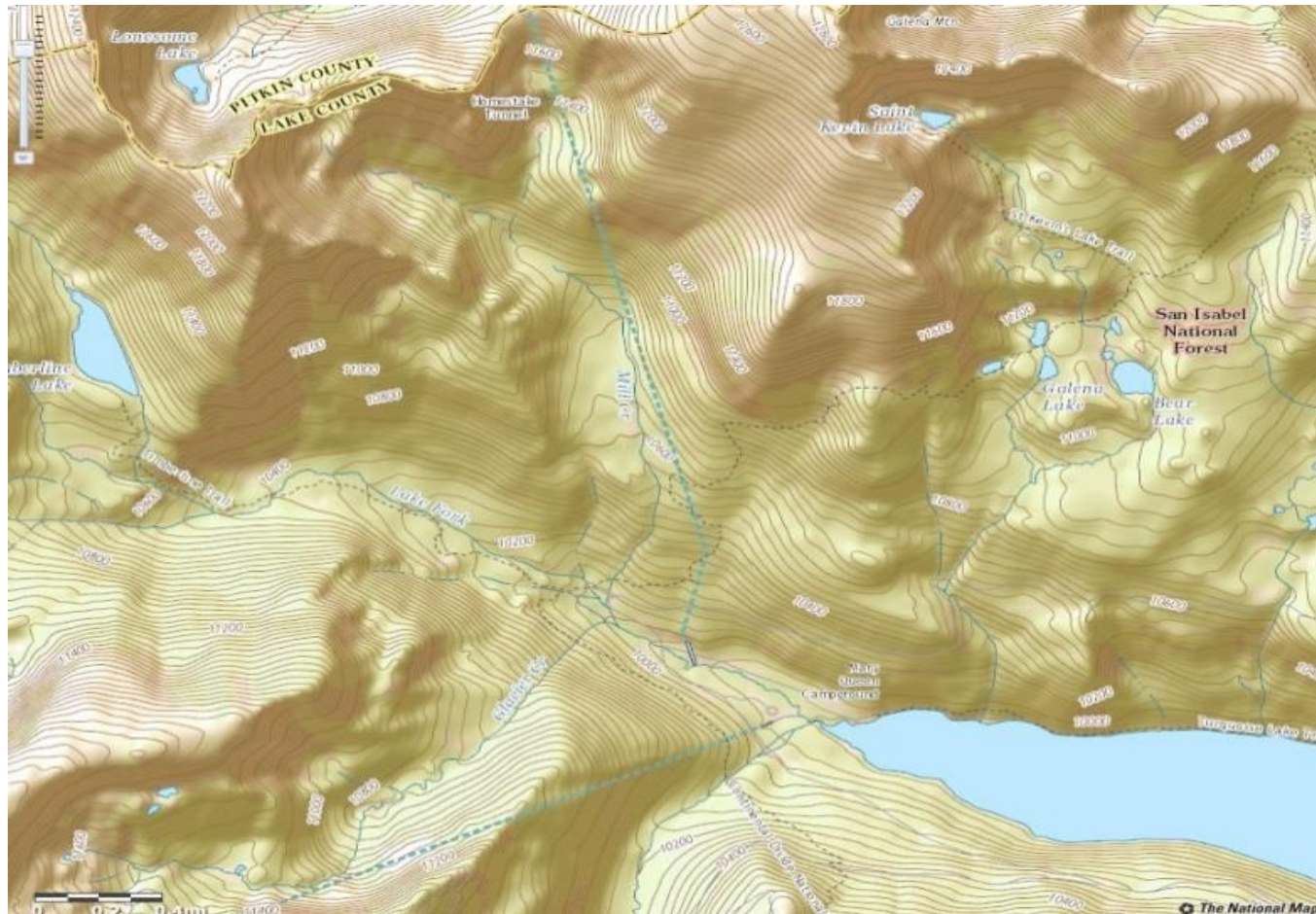
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



The National Map
Your Source for Topographic Information

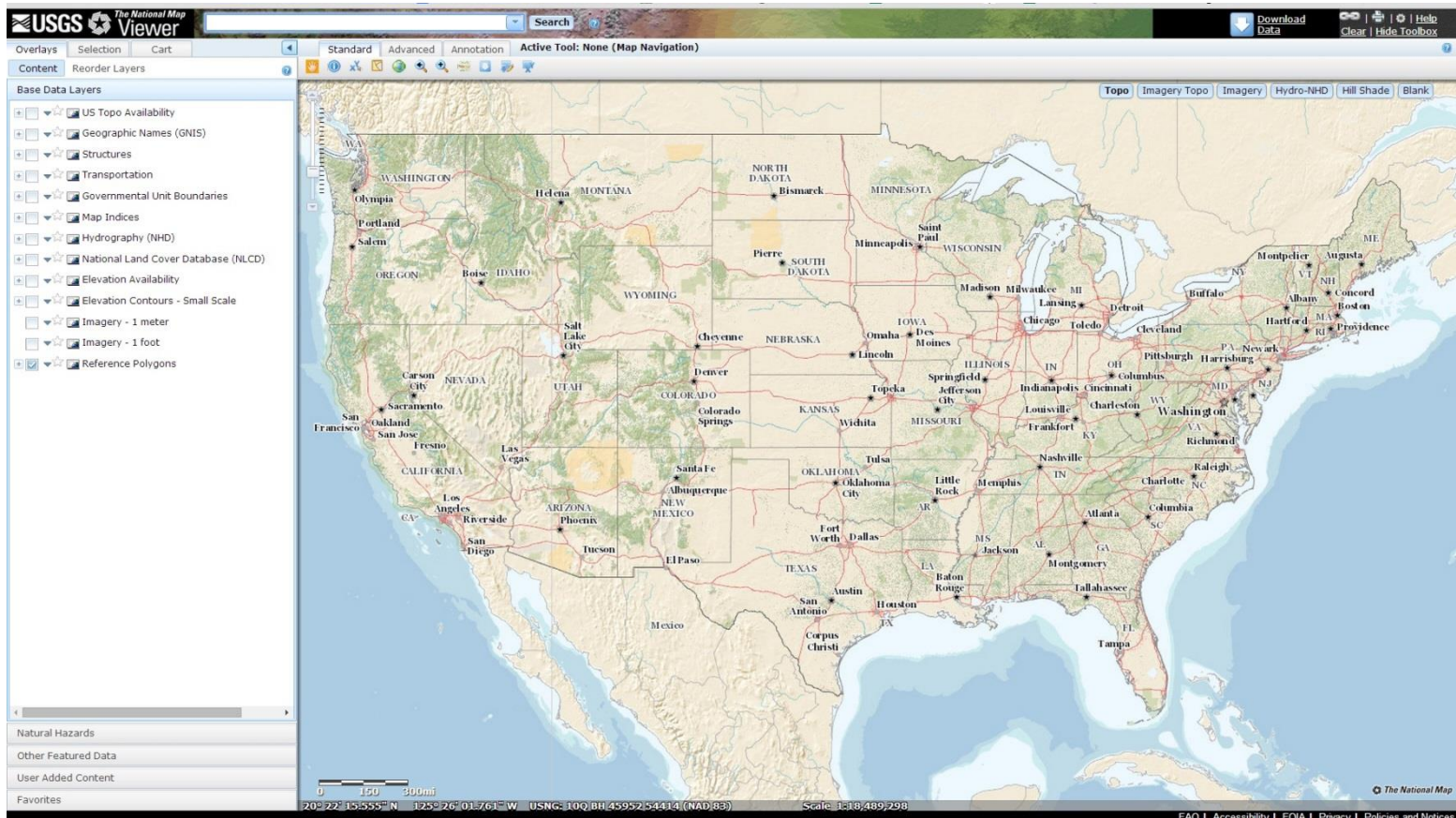
+ USGS Topo Web Base Map V3

Available May 2015



+ The National Map Viewer

Visualize, Explore and Download GIS data
@ viewer.nationalmap.gov



+ New beta download applications

Search, filtering and bulk download added



beta



VIEWER

COMMENTS

ABOUT

HELP



Accessing Historical Topographic Maps Has Never Been Easier

TopoView highlights one of the USGS's most important and useful products, the [topographic map](#). In 1879, the USGS began to map the Nation's topography. This mapping was done at different levels of detail, in order to



The National Map

Your Source for Topographic Information



DEMO

Beta Downloader

The screenshot shows the USGS TNM Download (Beta V0.2.0) web interface. At the top, there is a navigation bar with the USGS logo, the title "TNM Download (Beta V0.2.0)", and links for "Customized View" and "Restart Order Process". Below this is a "Categories" section with a search bar and a "Search Products" button. A "Filter Categories" sidebar lists various datasets with checkboxes: Historical Topographic Maps, National Boundary Dataset (NBD), National Boundary Dataset (NBD) - Map Indices, National Elevation Dataset (NED), National Hydrography Dataset (NHD), National Structures Dataset (NSD), National Transportation Dataset (NTD), Small-scale Datasets, and US Topo. To the right is a map of the United States with a search bar, a "Go" button, and a "Clear" button. The map shows state boundaries and major cities, with a scale bar and coordinates (36.03133, -118.08105) at the bottom.

+ Enabling Other Applications

Examples

The screenshot displays the USGS Historical Topographic Map Explorer interface. At the top, the browser address bar shows the URL: maps.google.com/gallery/details?id=z4f-ZuClmiKqHlQos96GzVzs8bl-en. The page title is "USGS Historical Topographic Map Explorer".

On the left side, there is a search bar with the text "New Orleans, Louisiana, L". Below the search bar, there are instructions: "Go to a location to the location you want to explore, then Click on a place to see its historical maps." and "Slide transparency on map to compare, or drag/drop to re-order maps." There are also buttons for "Reset view" and "Zoom in" / "Zoom out" controls.

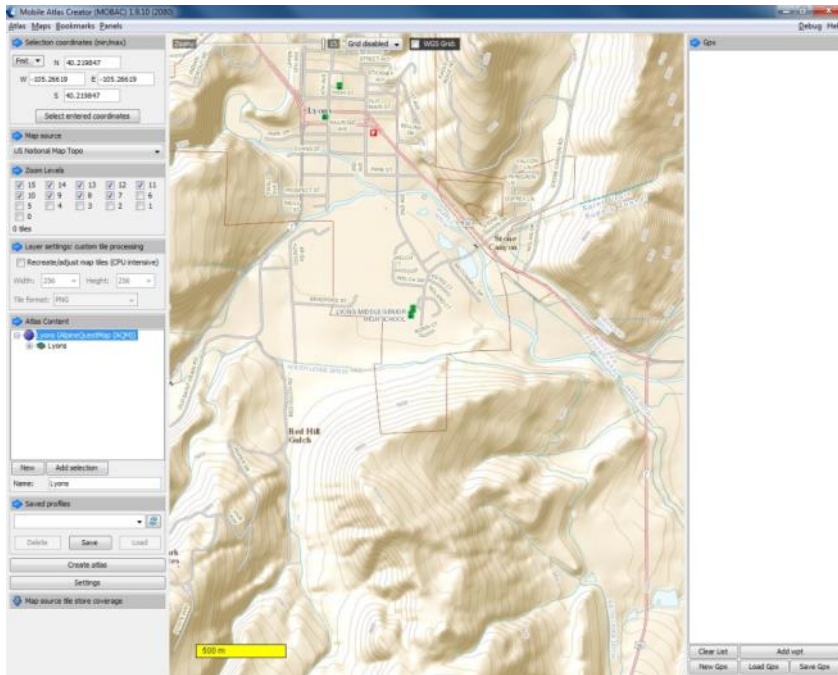
The main map area shows a topographic map of New Orleans, Louisiana, with various geographical features like Lake Pontchartrain, Lake St. John, and Lake LeVey. The map is overlaid with a grid and a semi-transparent historical map layer. The USGS logo and the Esri logo are visible in the top right corner of the map area.

At the bottom of the interface, there is a "Historical Map Scales" section. It features a color-coded legend for scales: 250,000 (dark blue), 125,000 (medium blue), 62,500 (teal), 24,000 (light teal), and 12,000 (green). Below the legend is a timeline from 1890 to 2000, with various historical maps of New Orleans plotted as colored bars corresponding to the legend. The timeline shows the following maps and their approximate dates:

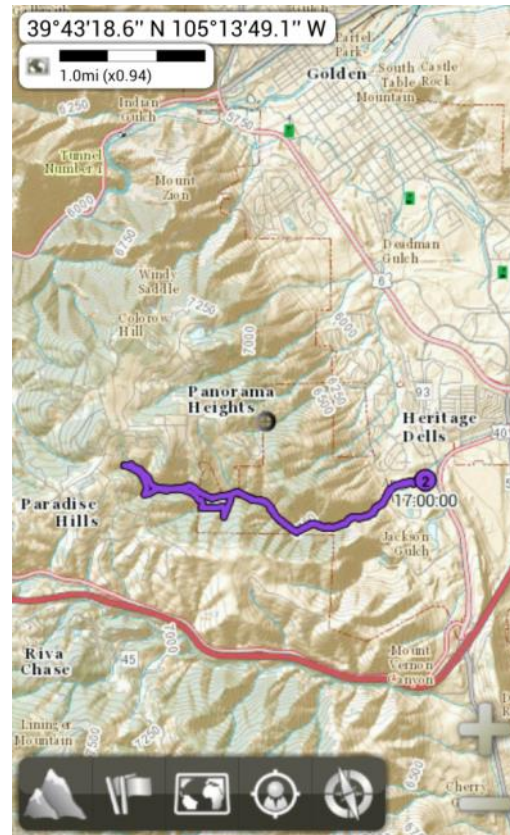
Map Name	Approximate Date
New Orleans	1890
New Orleans N1	1930
New Orleans E1	1935
New Orleans	1940
New Orleans	1945
New Orleans	1950
New Orleans E1	1955
New Orleans	1960
New Orleans E1	1965
New Orleans	1970
New Orleans E1	1975
New Orleans	1980
New Orleans E1	1985
New Orleans	1990
New Orleans E1	1995
New Orleans	2000

+ The National Map in Mobile

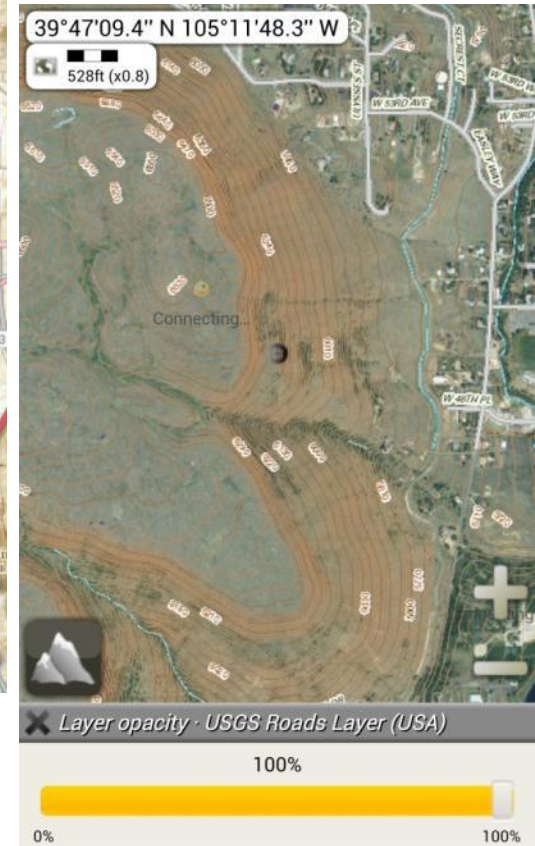
Stimulating the private sector



MOBAC Atlas Creator



AlpineQuest



+ Download

Review of some key points

- **Completing move to Staged Products**
 - **Process once – reduce server footprint**
- **Moving to the Cloud**
- **Our Viewer development focus is more on an enablement role**
 - **Enterprise product index**
 - **Open API for Download**
- **Delivering a US Topo Cartographic Data Package by end of year**



Questions?

