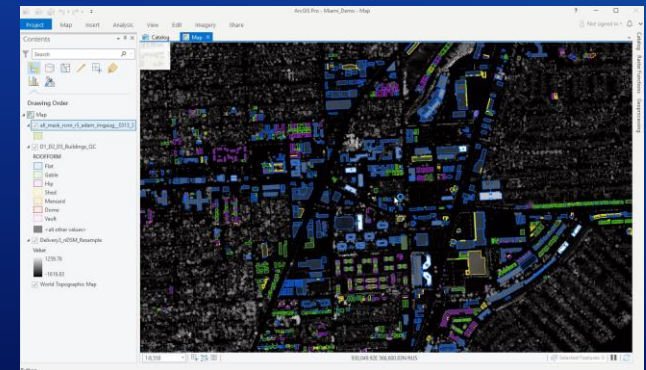
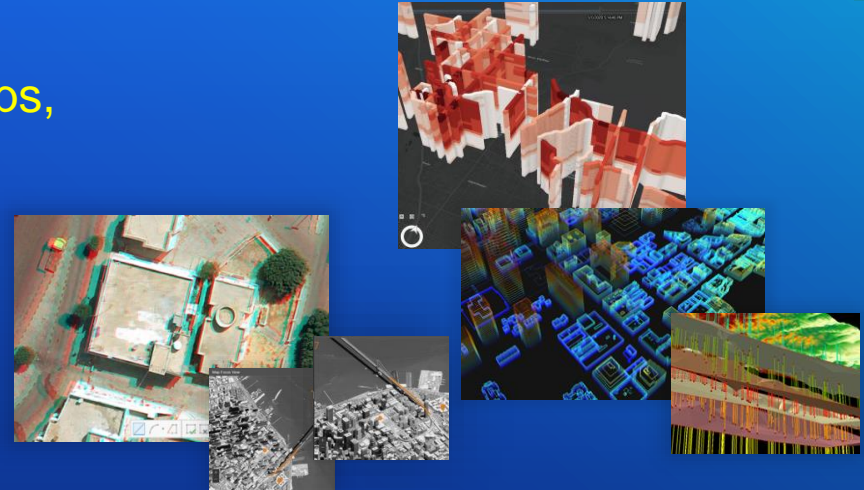


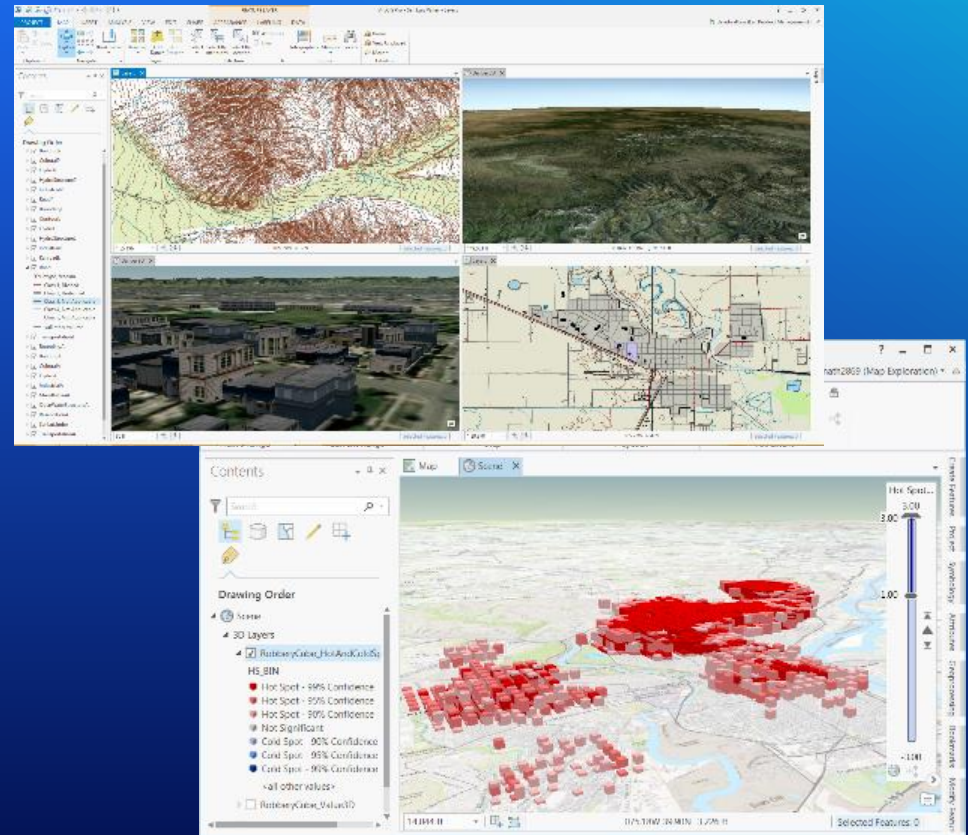
ArcGIS Pro

- The primary authoring tool for Web Maps, Scenes, and Layers used by apps
- 3D Analysis and Visualization
- Image Analysis Workstation
- Spatial Data Science Workstation
- AEC CAD Integration



ArcGIS Pro

- Integrated with the Platform
- Combined 2D/3D experience
- 64 Bit, multi-threaded
- Modern application
- Simplified user interface
- Multiple maps and layouts
- Comprehensive analysis tools
- Simple search and query
- More new functionalities



The Modern GIS Paradigm



Software products	→	Platforms and APIs
Client/server	→	Web Services and apps
Standalone desktop	→	Connected devices
Printed maps	→	Web maps, dashboards, other apps
Static data	→	Data services, live streams, big data
Custom applications	→	Interoperable packages, libraries
Single, all-purpose application	→	Focused apps
Proprietary data	→	Open Data & Shared Services
Using data created by others	→	Combining others' data with our own
Limited sharing	→	Many ways to share
Niche technology	→	Ties to larger IT community: GitHub
Some attention to societal concerns	→	Much attention to societal concerns

GIS has changed.

ArcGIS Pro supports seamless integration with Web GIS



ArcGIS Pro includes Machine Learning and Deep Learning Tools



Adding data, symbolizing, selecting



Importing, Exporting, and more

The screenshot displays the ArcGIS Pro interface. The top ribbon includes tabs for Project, Map, Insert, Analysis, View, Edit, Imagery, and Share. The 'Insert' tab is active, showing options like 'New Report', 'New Notebook', 'New Map Layout', and 'Toolbox'. A 'Command Search' bar is visible in the top right. The 'Layer Templates' section shows various map styles such as 'Bright Map Notes', 'Dark Map Notes', 'Light Map Notes', 'Paired Map Notes', 'Pastel Map Notes', and 'Red Green Map Notes'. The 'Import Map' dialog box is open, providing instructions on how to import an existing ArcMap, ArcGlobe, or ArcScene document. The 'Drawing Order' section shows 'Map1' with 'World Topographic Map' and 'World Hillshade' checked. The main map area shows a topographic view of the United States, with labels for states like Oregon, Idaho, Wyoming, Utah, Colorado, and California, and cities like Sacramento, San Francisco, Fresno, Los Angeles, San Diego, Las Vegas, Phoenix, Tucson, Denver, Salt Lake City, and Dallas. The map scale is 1:13,134,342 and the coordinates are 121.1745004°W 45.5614125°N.

Import Map

Import an existing ArcMap, ArcGlobe, or ArcScene document, a map or basemap package, or a map or layout file to the project.

The original data frames and layout are converted to the ArcGIS Pro format, if appropriate, and added to the project. Future changes to the original document are not reflected in the project. One of the new maps or layouts is opened in a new view.

Drawing Order

- Map1
 - World Topographic Map
 - World Hillshade

1:13,134,342 121.1745004°W 45.5614125°N Selected Features: 0

Content Management

The screenshot displays the ArcGIS Desktop interface for a project named 'Ex08_lab1_zebra_mussels1'. The main map shows the central United States with a distribution of zebra mussels represented by blue and orange dots. Two green standard deviation ellipses are overlaid on the map, indicating the spatial distribution of the data. The interface includes a ribbon menu with various toolsets, a Contents pane on the left, and a Geoprocessing pane on the right.

Contents Pane:

- Albers Map
- post_2000_median_center
- post_2000_mean_center
- post_2000_central_feature YEAR
- 2002
- pre_2000_median_center
- pre_2000_mean_center
- pre_2000_central_feature YEAR
- 1990
- zebra_mussels_alb_SpatialJoi
- zebra_mussels_alb_MeanCenter
- post_2000_std_dev_ellipse

Geoprocessing Pane:

Tool: raster calculator

Data Table:

OBJECTID *	CenterX	CenterY	MajStdDist	MinStdDist	Rotation	SHAPE *	SHAPE_Length	SHAPE_Area
1	599908.46389	526687.902903	1198094.663697	375269.607881	250.639899	Polygon	5286991.602643	141

Vector Analysis

The screenshot displays the Esri ArcGIS Desktop interface. The main map view shows a map of the United States with numerous wilderness areas labeled, such as "Medicine Lake Wilderness", "Theodore Roosevelt Wilderness", "Chase Lake Wilderness", "White Earth Reservation", "Rainbow Lake Wilderness", "Black Badlands Wilderness", "Fort Niobrara Wilderness", "Hercules-Glades Wilderness", "Buffalo National River (Ponca Unit) Wilderness", "Wichita Mountains Wilderness (Charons Garden Unit)", "Salt Creek Wilderness", "Boundary Waters Canoe Area Wilderness", "Isle Royale Wilderness", "Rock River Canyon Wilderness", "Horseshoe Bay Wilderness", "Northhouse Dunes Wilderness", "Hickory Creek Wilderness", "Shenandoah Wilderness", "Three Ridges Wilderness", "Clifty Wilderness", "Beaver Creek Wilderness", "Unaka Mountain Wilderness", "Middle Prong Wilderness", "Cohutta Wilderness", "Dugger Mountain Wilderness", "Cheaha Wilderness", "Caribou-Speckled Mountain Wilderness", "Breadloaf Wilderness", "Big Branch Wilderness", "Aiken Wilderness", "Monomoy Wilderness", "Great Swamp National Wildlife Refuge Wilderness", "Brigantine Wilderness", "Otter Creek Wilderness", "Dolly Sods Wilderness", "Shenandoah Wilderness", "Thunder Ridge Wilderness", "Little Wilderness", "Run Wilderness", "Birkhead Mountains Wilderness", "Pond Wilderness", "Pocosin Wilderness", "Pine Wilderness", "Svanquarter Wilderness", "Cape Romain Wilderness", "Moosehorn Wilderness (Baring Unit)", "Bristol Mountain Wilderness", "George N/A Wilderness", "D Aiken Wilderness", "York National Wildlife Refuge Wilderness", "Norfolk Wilderness", "Swanquarter Wilderness", "Pine Wilderness", "Cape Romain Wilderness".

The interface includes a menu bar with options like Project, Map, Insert, Analysis, View, Edit, Imagery, and Share. Below the menu bar are toolbars for various functions such as Convert, Link Views, Link Cursors, Catalog Pane, Geoprocessing, Workflow Manager, Create, Import, Color Vision Simulator, Add, Remove, Enable Location, and View Clipping. The Contents pane on the left shows the Drawing Order, including layers like "zebra_mussels_alb_SpatialJoi", "zebra_mussels_alb_MeanCenter", "zebra_mussels_alb_Directiona", "states_alb", "zebra_mussels_alb", "YEAR" (with a legend for years: ≤1993, ≤1996, ≤2000, ≤2005, ≤2011), "hydropolys_alb", "hydrolines_alb", "wilderness_areas_alb", and "federal lands_alb". The map view at the bottom shows the current map extent, scale (1:11,845,690), and coordinates (94.7604194° W, 41.4324786° N). The status bar at the bottom right indicates "Selected Features: 59".

Raster Analysis

ex03_lab03_blair_fire_tower Command Search (Alt+Q) Joseph - Esri Denver Regional Office

Project Map Insert Analysis **View** Edit Imagery Share

Convert Link Views Cursors Catalog Pane Geoprocessing Workflow Manager Create Import Color Vision Simulator Add Remove Enable Location Mode Automatic Distance 0.05 m

Contents Search Drawing Order

- Map UTM
- roads_utm_Clip
- hydro_utm_Clip
- roads_utm
- hydro_utm
- grid_index_latlong_in_gdb_UTM
- landcover_blair

CLASS_NAMES

- No Data
- Irrigated Corn
- Irrigated Soybeans
- Irrigated Alfalfa
- Irrigated Small Grains
- Range, Pasture, Grass
- Urban Land
- Open Water
- Riparian Forest and Woodlands
- Wetlands

1:1,057,976 627,924.34E 4,646,281.82N m Selected Features: 1