What is Insights?
Self service location analytics

Available as a SaaS, within your Enterprise, and locally on Windows or Mac
Powerful Analysis Made Simple
Usable Across Roles, Titles, and Skill Levels

Perform Analysis – Basic to Advanced

Interactive Pages & Reports
Analytical Models & Methodology
Data & Analysis Results
Data Stores & Applications

Viewers
Analysts
Data & Analysis Results

GIS Analyst
Data Scientist
Data Analyst
Business Analyst
Industry Expert
Decision Maker
Exploratory Analysis
- Charts, tables, and maps
- Interactivity between visualizations
- Context of the largest digital atlas in world

Statistical Analysis
- Descriptive stats
- Regression
- Link analysis

Spatial Analysis
- How is it distributed?
- How is it related?
- What’s nearby?
- How has it changed?

GeoEnablement
- Geocode address
- Convert X,Y
- Join to boundaries
- Enrich proportionally with demographic variables

Data Preparation
- Format fields
- Calculate new fields
- Filter data
- Hide fields
- Rename fields and datasets
- Join datasets

Record & Repeat Analysis
- Share model to analysts
- Document best practices
- Re-run with new data

Share Results
- Share with executives
- Tell your story
- Share with public
Insights is analysis first, reporting second

- Analysis *finds answers*
- A process or procedure that *creates new information*
- Derivative *data available for re-use in other systems*

- Dashboards *present answers*
- A visualization or interaction that *communicates information*
- Data *remains within the visualization*
Using Insights
Use Data Where It Lives

- Data Files
- Enterprise GIS
- Relational Databases
- Python or R
Business Data and Spatial Data Together in One Place
Enable Location

- Latitude, Longitude Coordinates
  - Custom spatial references supported

- Address geocoding
  - Granularity down to point accuracy
  - Points of interest
  - Global
  - One or multiple source address fields

- Geography
  - Conflate spatial fields onto your data
    - point, line, or boundary
  - Use boundaries that come with Insights
  - Use your own custom boundaries
Enrichment – thousands of data attributes for over 130 countries

Your Data + Enrich Variables = Your Data with Variables

Visualization Options

**Data type:**
- Qualitative
- Quantitative
- Temporal

**Measure:**
- Ascertain the size, amount, or degree of something

**Change:**
- A bar graph uses either horizontal or vertical bars to show comparisons among categories. They are valuable to identify broad differences between categories at a glance.
- A heat chart shows total frequency in a matrix. Using a temporal axis, values, each cell of the rectangular grid are symbolized into classes over time.
- Bubble charts with three numeric variables are multivariate charts that show the relationship between two values while a third value is shown by the circle area.
- Graduated symbol maps show a quantitative difference between mapped features by varying symbol size. Data are classified with a symbol assigned to each range.
- A density/heat map calculates spatial concentrations of events or values enabling the distribution to be visualized as a continuous surface.
- A data clock creates a circular chart of temporal data, commonly used to see the number of events at different periods of time.
- Line graphs visualize a sequence of continuous numeric values and are used primarily for trends over time. They show overall trends and changes from one value to the next.

**Relationship:**
- A choropleth map allows quantitative values to be mapped by area. They should show normalized values not counts collected over unequal areas or populations.
- Graduated symbol maps show a quantitative difference between mapped features by varying symbol size. Data are classified with a symbol assigned to each range.
- A density/heat map calculates spatial concentrations of events or values enabling the distribution to be visualized as a continuous surface.
- A unique symbol map (areas or points) allows descriptive (qualitative) information to be shown by location. Areas have different fills and points can be geometric or pictorial.

**Interaction:**
- A chord diagram visualizes the inter-relationships between categories and allows comparison of similarities within a dataset or, between different groups of data.
- Spider lines, also termed desire lines, show paths between origins and destinations. They show connections between places.
Charts

Bar & column chart

Key performance indicator

Combo chart

Treemap

Scatterplot

Stacked bar & column chart

Bubble chart

Scatterplot matrix

Histogram

Heat chart

Link chart

Box plot

Chord diagram

Data clock

Donut chart

Line graph

Time series graph
Maps

- Location
- Aggregation
- Binned
- Flow
- Heat
- Proportional symbol
- Choropleth
- Density
- Spider lines
- Unique value
Methodology – Documented and Repeatable
Maximizing Your Work With Others

- Share results
  - Interactive cards
  - Tell your story
  - Internal stakeholders or public

- Repeat and understand analysis
  - Share models to analysts
  - Document your methodology
  - Rerun with new data

- Export resulting datasets
  - Use in different systems
Resources
Free Trial - esri.com/insights
Free Training Lessons - learn.arcgis.com
Encourage Survey Feedback on the App

Download the Esri Events app and find your event

Select the session you attended

Scroll down below the description to find the feedback section

Complete answers and select “Submit”
Q & A