



Esri International User Conference | San Diego, CA  
Technical Workshops | July 14, 2011

# Managing and Editing Annotation

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# Agenda

- **Introduce different types**
- **Manage geodatabase annotation properties**
- **Explore creation options**
- **Demonstrate editing methods**
- **Discuss advanced techniques**
- **Questions**

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# Annotation

- **User-generated**
  - Appearance
  - Behavior
  - Control
  - Use
- **Can create from labels**
- **Two types**
  - Map annotation
  - Geodatabase annotation
    - Spatially indexed
- **Licensing**



# Map document annotation

- Both text and graphics
- Stored in the map document
- Appropriate when:
  - Small amount of text
  - Text is used only in a single map



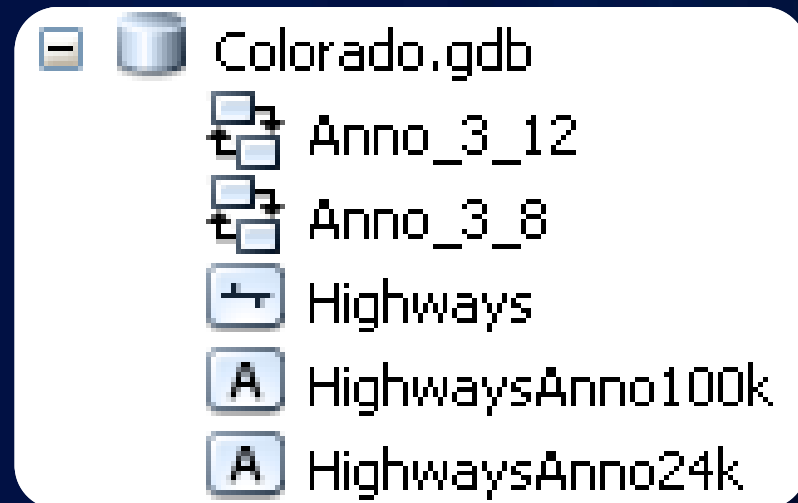
# Managing map document annotation

- **Manage from:**
  - Draw toolbar
  - Data Frame Properties
- **Organized using annotation groups**
  - Automatically generated from label classes
  - Toggle groups of text
  - Associate with a layer
  - Active annotation target
- **Use Draw toolbar to create and edit**



# Geodatabase annotation

- Feature class
- Reuse
- Choose from
  - Standard
  - Feature-linked



## Tip: Re-link previously feature-linked annotation

- What to do if:
  - Feature class becomes corrupt and needs to be recreated
  - Relationship class is lost



HowTo: Re-link previously feature-linked annotation

Article ID:

30509

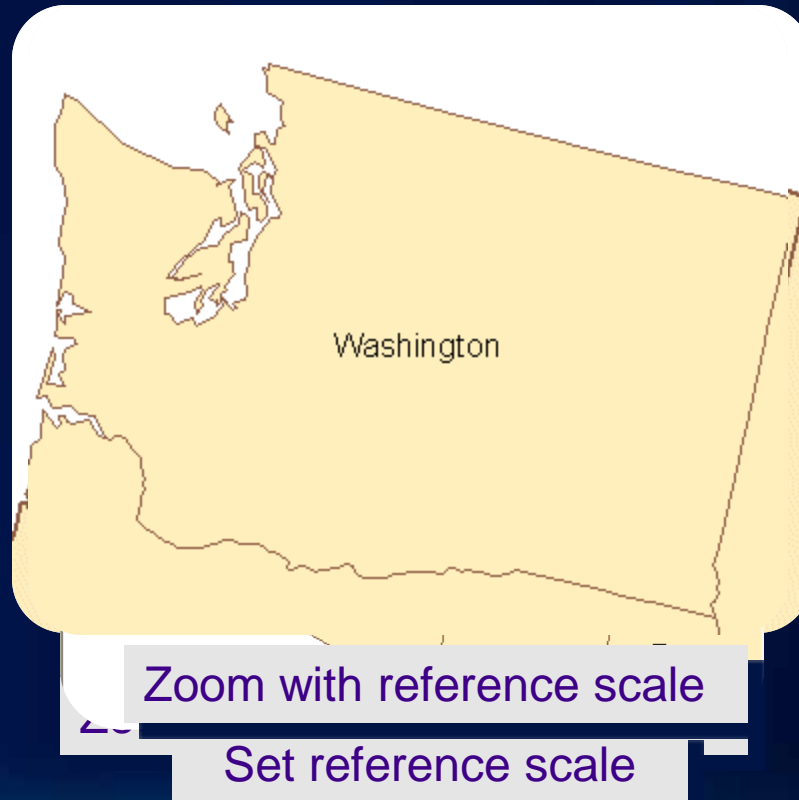


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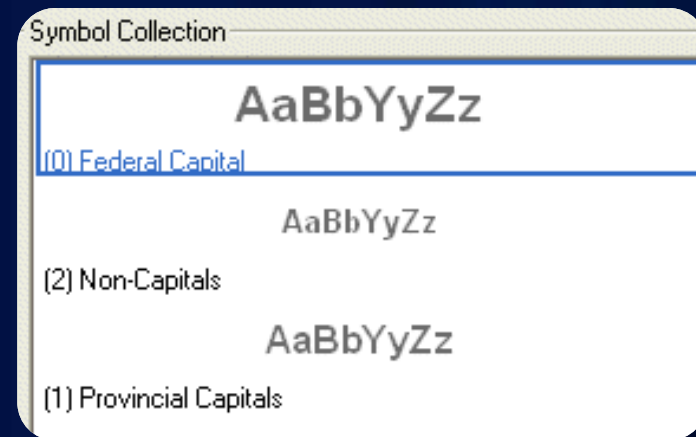
# Reference scale

- Element sizes
- Text scales
- Required



# Symbol collection

- **Named text symbols**
- **Maximizes performance**
- **Reduces storage size**
- **Promote standards**
- **Add or delete**
- **Symbol ID**



# Fields

- **Displays information**
  - Text string
  - Appearance
  - Placement
  - Status
  - Coded value domains
- **Queries**
  - Quality control
  - Batch updates

? **FAQ: What do the different fields in an annotation feature class mean?**

Article ID: 30329

# Override symbol properties

- Edit properties of individual features
- Maintains link
- Substitute values
  - Placement
  - Font
  - Word spacing
  - Leading property
- Text formatting tags
- Inline storage



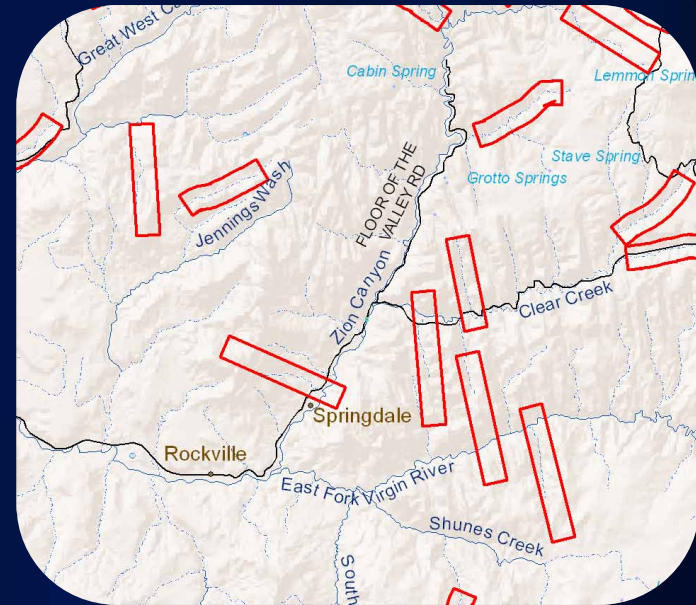
**HowTo:** Determine which symbol properties are overridden in the annotation feature class

## **Problem: Too much inline annotation**

- **Solution: Assign new SymbolIDs**
  - Create new, temporary fields to hold overrides
  - Copy values
  - Calculate new SymbolIDs
  - Return overrides to original fields
- **Result: Annotation now uses a SymbolID and maintains overrides**

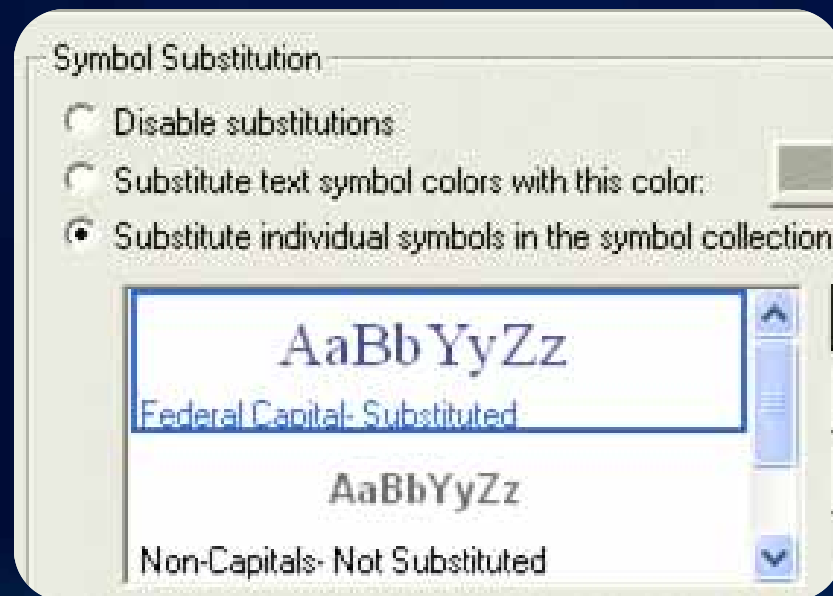
# Problem: Red bounding box

- **Causes:**
  - Symbol ID does not exist in target feature class
  - Symbol ID has been deleted
- **Resolution:**
  - Create new symbol and calculate IDs
  - Calculate IDs to use an existing symbol



# Annotation layer

- Read-only
- Symbol substitution





# Demo: Symbol Collection

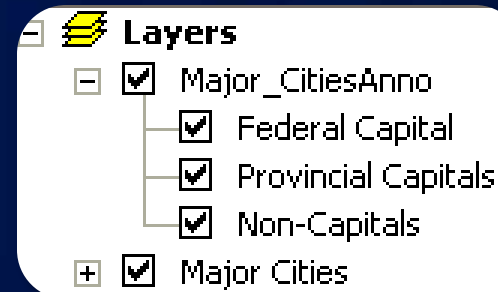
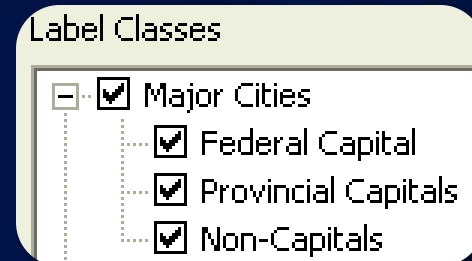
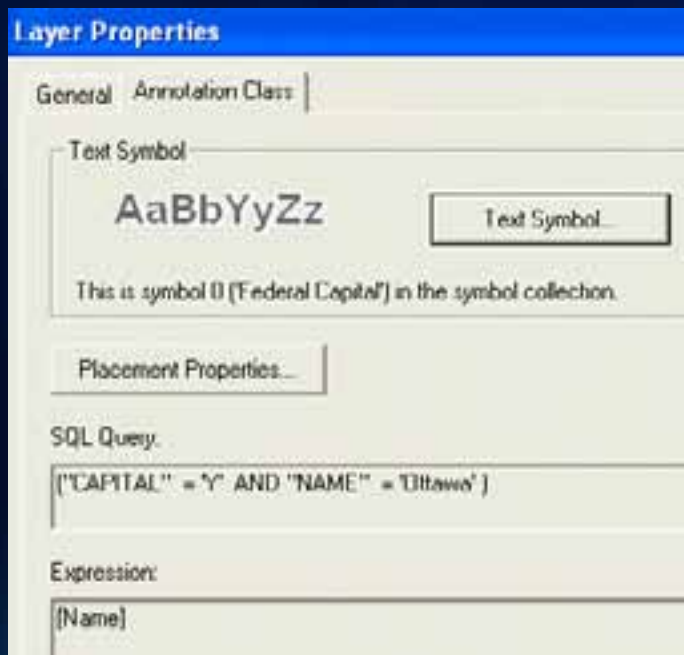
Substitution

Overrides



# Annotation classes

- Subgroups
- Properties
- Performance



# Additional properties

## Reference Scale

Specify the reference scale for the annotation.

If you zoom in to a larger scale than the reference scale, the annotation will appear larger, and if you zoom out to a smaller scale the annotation will appear smaller.

Reference Scale: 1:50,000

Map Units: Meters

## Editing Behavior

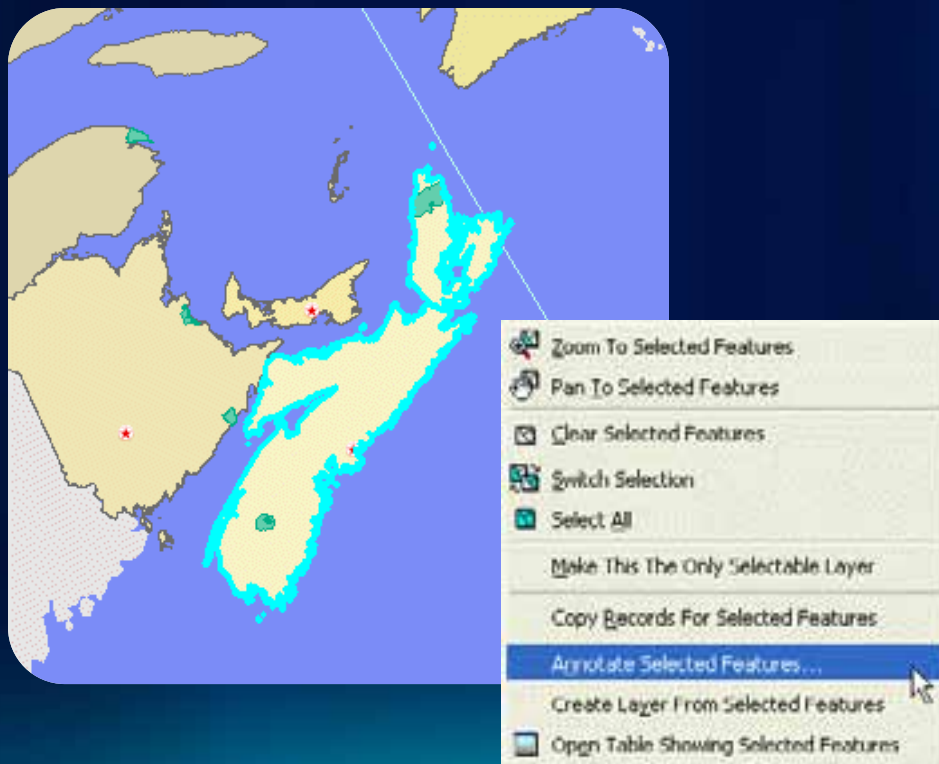
- ☒ Require symbol to be selected from the symbol table
- ☒ Create annotation when new features are added
- ☒ Update annotation when feature's shape is modified

Label Engine: ESRI Maplex Label Engine

Properties...

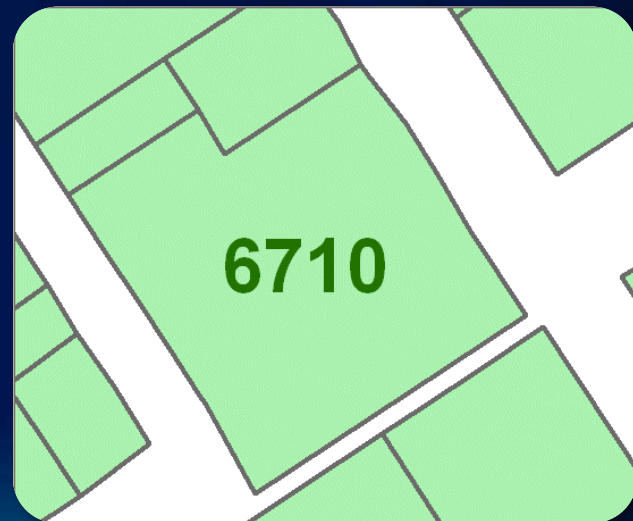
# Creating annotation features

- **Caveat: bulk edits**
- **Selected Features**



# Updating annotation features

- When feature shape is updated
  - Reposition
  - Labeling rules
  - Use caution

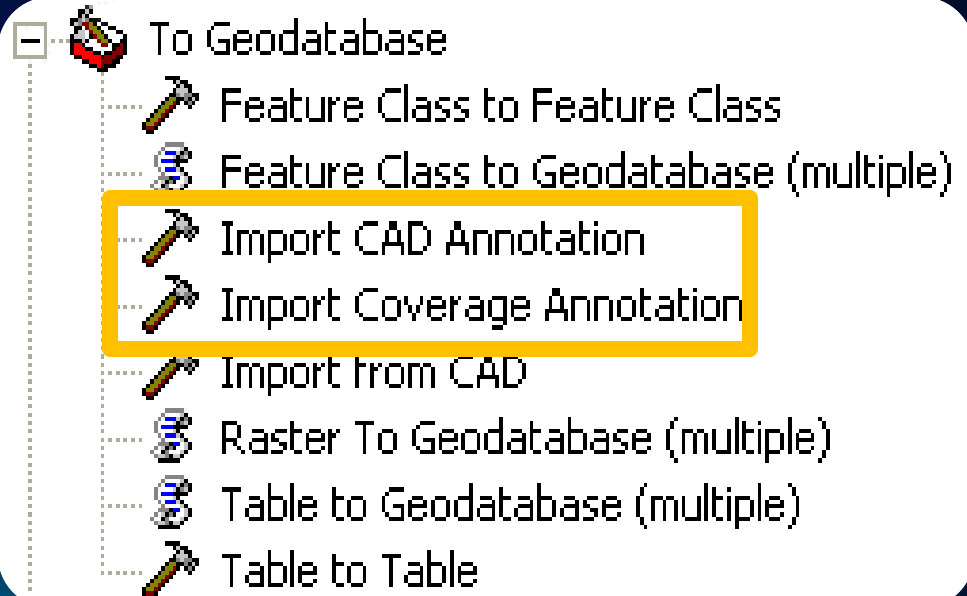


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# Creating annotation feature classes

- What are you starting with?
  - Labels
  - Nothing
  - CAD or coverage annotation



# **Append Annotation Feature Classes tool**


- **Use to combine multiple annotation feature classes**
  - Each one becomes an annotation class
- **If feature-linked all annotation:**
  - Must be linked to same feature class
  - Must use the same label engine
- **Clean up your symbol collections before appending**
- **Tip: Use the Append tool if schema is the same**

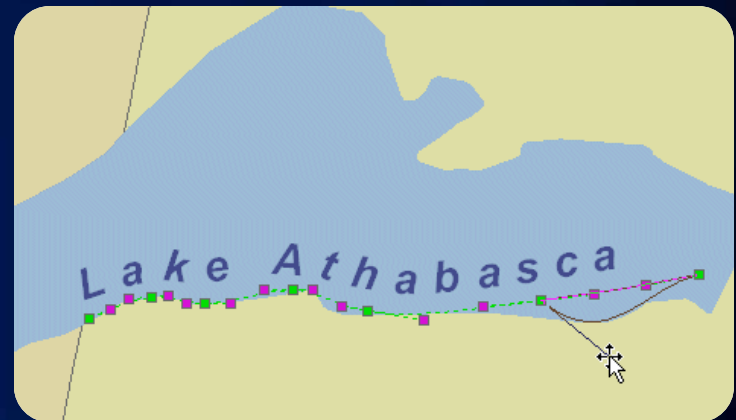


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# Manual construction and editing

- **Tightly integrated with feature editing environment**
  - Editor toolbar
  - Annotation Construction window
  - Feature templates
- **Optimized tools**
- **Edit Annotation Tool** 
  - Context menu
  - Baseline editing
  - Instant visual feedback
- **Productivity shortcuts**



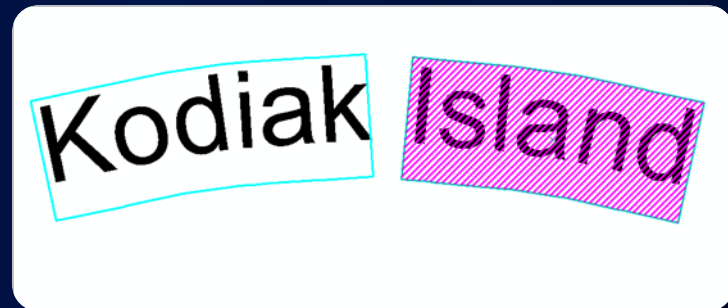
Curved annotation following user-defined baseline sketch

# Creating new features

- **Choose a feature template**
- **Choose a placement type**
  - Horizontal
  - Curved
  - Leader line
- **Use the Annotation Construction window**
  - Enter text
  - Control placement
  - Override default properties

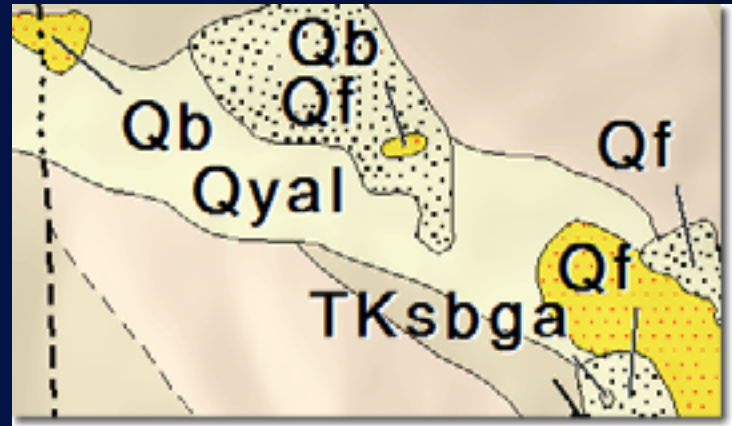
# Editing annotation

- **Edit individual features**
  - **Resize**
  - **Move**
  - **Rotate**
  - **Apply follow feature options**
- **Create multi-part annotation**
  - **Maplex**
  - **Distinct locations**
  - **Revert to single part**



# Leader lines and callouts

- For individual features
  - Set the default leader symbol
  - Use the Leader tool
- For many annotation features
  - Add a symbol to the collection
  - Create a feature template



# Demo: Editing Annotation

Place unplaced annotation

Create new annotation

Modify existing annotation

Shortcut keys for editing

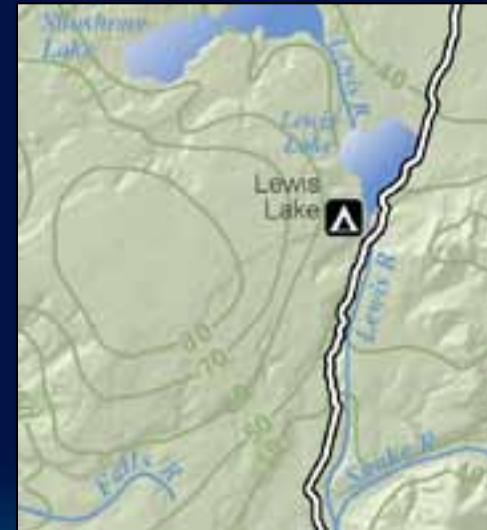
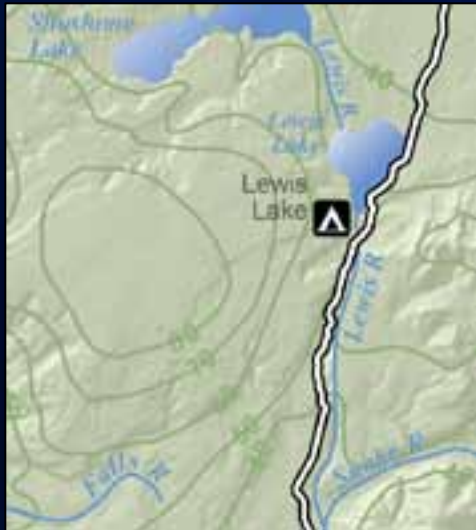


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# Masking features

- Feature Outline Masks geoprocessing tool and Advanced Drawing Options
- Contour Annotation geoprocessing tool **\*New at 10**





## Symbol Level Masking

- Hide only some parts of a feature



# Demo: Masking Annotation



## New at 10 – Annotation toolset

- Support for very large areas
  - Map Server Cache Annotation Tile Features tool
  - Tiled Labels to Annotation



# Summary

- **There are different types of annotation**
  - **Map**
  - **Geodatabase (standard or feature-linked)**
- **Geodatabase annotation has a special set of properties**
- **To create annotation you can convert from labels, create from scratch, or use geoprocessing tools**
- **To edit, use the standard editing environment**
- **Geoprocessing tools are available for advanced techniques and batch creation**

## Related Presentations

- **Creating Great Labels Using Maplex**
  - Room 6F Thursday 1:30pm
- **See us at the Mapping and Visualization Island at the ESRI Showcase**
- **Check out the Esri Press *GIS Tutorial 3: Advanced Workbook***

**Questions?**

***Thank you for attending!***

**Please fill out the online survey:**

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