Esri International User Conference | **San Diego, CA**

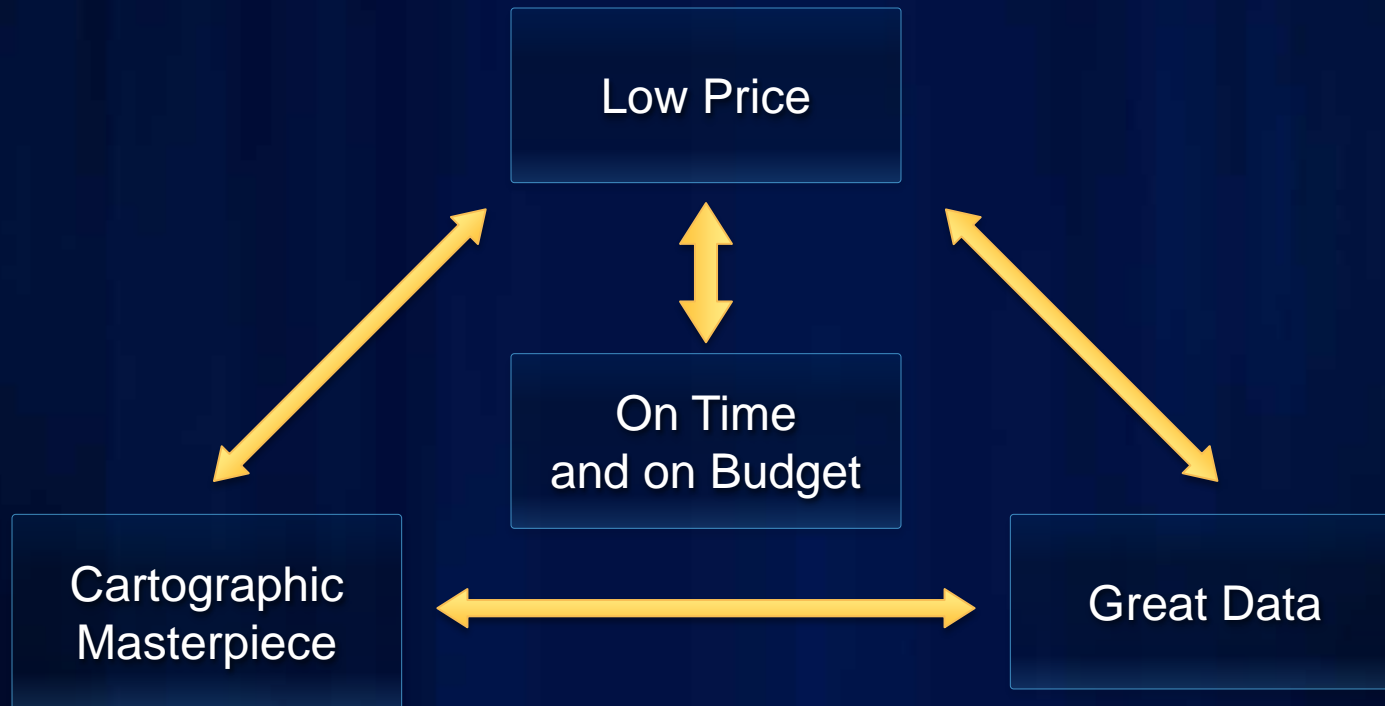**Technical Workshops** | **July 14, 2011**

The Business Case for Mapping: Key Technologies that Save You Time

Charlie Frye, Esri, Redlands,

Craig Williams, Esri, Redlands

Overview

- **Using Maplex for optimal text placement**

- **Leveraging the Geodatabase for data quality and cartographic display**

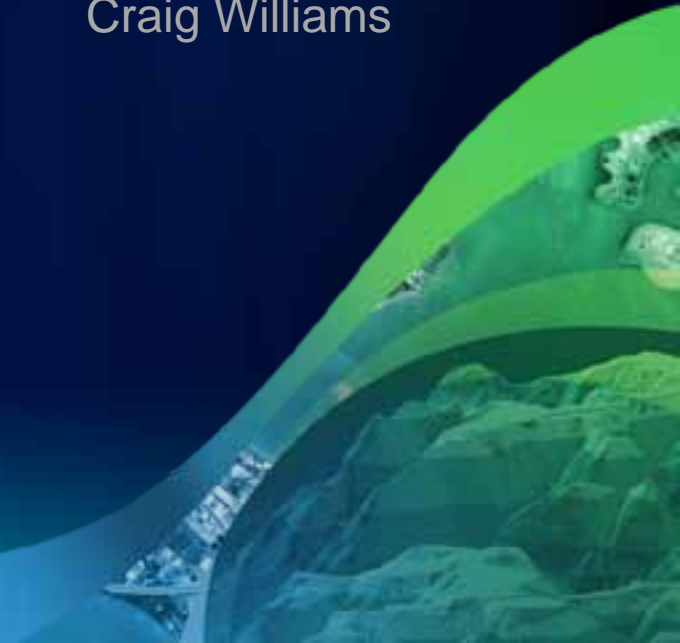- **Map Templates: High quality examples of how we make maps**

Customers Want it All

"You get what you pay for."

Maplex

Craig Williams

Maplex: Considerations and Questions to Answer

- **Text Placement ranges from 20-80% of the cost to produce a map**

- **Is it required (not just important) that the text be placed, or placed correctly?**

- **What percentage of text can automatically**
  - **be placed out of the total required text?**
  - **be placed correctly?**

- **If you plan to edit the location of text, how much time will you spend per map sheet or extent?**

Calculating the Cost Benefits of Maplex

- **Using the Standard Label Engine, label a map and produce annotation for a study area**
  - **Manually edit the result into an acceptable final state, keeping track of:**
    - **Number of edits**
    - **Type of Edits**
    - **Average time it took to complete each type of edit**
- **Repeat using Maplex**
- **Limit yourself to a timed iteration**
- **Extrapolate …**

Extrapolate to the entire project extent

- **Calculate:**
  - **Total edits**
  - **Total time**
- **Multiply by the hourly rate you would be paid (or would pay an editor)**

Maplex label engine included at all license levels with ArcGIS 10.1

If you're not a cartographer, consider:

- **Could you have edited some of that text as well as Maplex placed it?**

- **Could you have set up Maplex or the Standard Labeling to do a better job?**
  - How would you figure out what was needed?
  - How long would it take you to get the settings correct?

- **While there is a learning curve for Maplex, it will pay off in most applications**
  - Map templates reduce the learning curve as examples to follow

Geodatabase

Charlie Frye

If its not in the database…

- … It won't be on your map.
  - Label strings
  - Symbol codes
  - Complex (slow) queries made simple and stored as attributes
- GIS and data-driven cartography are semantically linked

The Geodatabase also provides

- **Domains and SubTypes**
  - **Help enforce consistency by eliminating some human errors**
  - **Use default values**
  - **Combine default values with editing templates**

- **Useful derivative data**
  - **Geometric Networks (Junctions)**
  - **Topology**

Tools to Change GIS data into Cartographic Data

- *If you haven't used these tools:*

  - Feature to Line

  - Integrate

  - Polygon to Line

  - Dissolve

  - Collect Events

- *Look them up and read the help. They turn less than idea data into good enough, if not great data.*

Map Templates

Charlie Frye

Avoid Re-Inventing the "Wheel"

- **Map Templates are useful examples of how to make a certain kind of map**

- **Map Templates contain:**
  - **Sample geodatabase data model—that is a good or best practice to just use or expand on**
  - **Maplex rules are already defined, so you don't even have to look at them (though we encourage you to do so)**

- **Find map templates in the ArcGIS Resource Center Galleries**

Templates Are Based On A Proven Pattern

- **Basemaps and operational layers**
  - **Basemaps contextualize and orient**
  - **Operational layers communicate status, statistics, overviews, reports, etc.**

- **The purpose of these maps is to efficiently convey specific information to specific audiences**
  - **Minimum effort to implement**
  - **No extras to distract map users**

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Thank you

- **Questions (if time allows)**

- **Evaluations at: www.esri.com/sessionevals**
  - **You will receive a reminder email**