Delivering Actionable Information

Keith T. Weber, GISP
GIS Director, ISU
IT4GIS

End-users, Customers, Stakeholders, and Decision-Makers
• GIS is a fantastic decision-support tool
• Yet, the decision-makers are often Drowning in Data...Thirsting for Information

The Data to Wisdom Pathway
• Data
• Information
• Knowledge
• Wisdom
What is?

• Data

What is?

• Information
  – Context
  – Meaningful

What is?

• Knowledge
  – Context
  – Meaningful
  – Speaks to you
  – Part of your paradigm
What is?

- Wisdom
  - Context
  - Meaningful
  - Speaks to you
  - Part of your paradigm
  - Appropriate use of knowledge

Wisdom

- Where has all the wisdom gone?

Are you Delivering Data or Information?
It's about Communication

• How do we communicate with geospatial data?
  – First, we need data
    - Ideally from reliable and/or authoritative source
  – Use standardized or accepted symbology
    - Regardless of how you feel about it cartographically
  – Consider generalization or recategorization
    - High, medium, or low instead of 0-1000
    - Using meaningful values and words

It’s about Communication (cont’d)

• Use meaningful units
  – Acres instead of the number of pixels
  – Miles instead of meters
  – “Sagebrush-steppe” instead of code 4622

An Example

• Q: How much of the 2015 Widget fire was considered a high severity burn?
  – A: 1,968 pixels
  – A: 1,771,200 m² (1,968 30x30 m (900 m²)
    pixels)
  – A: 437.673052 acres (be cognizant of significant
digits)
  – A: 437 acres
How can we fix it...

- Brainstorm

A Checklist

- When you have finished spatial analysis and are ready to deliver the results...
- Ask yourself:
  - How can I explain this, so the results can immediately support sound decisions
  - How can I best communicate these data
  - How can I help turn these data/results into actionable information

Questions