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 to you

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

Are you Delivering Data or Information?

- First, we need data
  - Ideally from reliable and/or authoritative sources
  - Use standardized or accepted symbology
  - Regardless of how you feel about it cartographically
- Consider generalization or reclassification
  - High, medium, or low instead of 0-10000
  - Using meaningful values and words

It’s about Communication

- How do we communicate with geospatial data?
  - First, we need data
    - Ideally from reliable and/or authoritative sources
    - Use standardized or accepted symbology
    - Regardless of how you feel about it cartographically
  - Consider generalization or reclassification
    - High, medium, or low instead of 0-10000
    - 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

Become Part of the Team

• When possible, become part of the decision process…
• Part of the team

Questions

Get ready for your final, two-minute write!