

NOTES

The Best Way to Do Everything: A discussion on best practices from big to small.

We will start with the big picture question of communication, how to promote GIS services and communication within a group of people from various backgrounds and GIS literacy. From there we will explore the institution level questions, how to maintain organizational and quality control standards and the importance of metadata. Last we will share tools and techniques that can help us get our projects done efficiently with accuracy.

This is an interactive panel where your questions and experiences will be much appreciated. The end goal will be to produce a list of questions, answers, tips, and tricks that we can share with the GIS community.

Panel Members:

Jaime Crawford, NW GIS Practice Manager, CH2M

Starla DeLorey, ITS3 GIS Analyst, Department of Natural Resources

Bryan Fiedor, AICP Planner/GIS Analyst, ICF Jones & Stokes

Craig Hanson, GIS Manager, Windward Environmental LLC

Brad Hofman, Business Process Analyst, Snohomish County Public Works

Chris Jansen, Business Development and Systems Integration, Tetra Tech EC

Karl Johansen, Owner, Port Madison GIS

Scott Moore, Solutions Engineer, ESRI

1. Introduction

- a. Personal introductions
- b. What is Best Practices? Jaime Crawford
 - i. A high-performance way of achieving business goals and objectives that solves problems creates opportunities, and improves business results.
<http://www.metrokc.gov/gis/kb/Content/BestPractices.htm>
 - ii. Standard, published operating methods found to produce the best performance and results in a given industry or organization.
www.bridgefieldgroup.com/bridgefieldgroup/glos1.htm
 - iii. Processes and activities that have been shown in practice to be most effective.
www.csumb.edu/site/x7101.xml
- c. Notes
 - i. **Define your goal then define your best practices.**
 - ii. Distinguish between your best practices and others best practices.
 - iii. Best practices can change when the goal changes or resources change.

2. Communication within a group of people from various backgrounds, Bryan Fiedor

- a. Intro – Bryan is going to discuss the broad level best practice of how to improve effective communication between GIS professionals and other non-GIS staff
- b. Communication issues/problems
 - i. How do you help the project team and stakeholders to understand each other, when each person has either a specialized background in which common words like point, locate and map have very specific and different interpretations, or have no familiarity with GIS concepts? Holly Glaser, GISP
 - ii. Solicit additional input from audience
 - iii. Other examples
- c. Potential solutions
 - i. Continuous communications – internal GIS teams and external to non-GIS staff

- ii. Involvement of GIS staff throughout project process/lifecycle
- iii. Communication techniques – jargon, terminology, process/date complexities, focus on project needs/goals
- iv. Education – brown bags, presentations, examples
- d. Notes
 - i. Google Earth is not a GIS, convey its limitations and how much more is possible.
 - ii. **We are all responsible for communicating our abilities and limitations including time and budgetary restraints.**
 - iii. The word buffer may mean different things to a GIS professional and a hydrologist
 - iv. How do you get your best practices techniques adopted? Educate your team on the best practices.

3. Institutional Organizational and Quality Control, Craig Hanson

- a. Organize
 - i. Personnel
 - 1. Make one person responsible for a problem.
 - 2. Identify peoples strengths and weaknesses and utilize them as needed
 - ii. Data
 - 1. Who is using it?
 - 2. How is it accessed and what security settings should be set?
 - iii. Process
 - 1. Establish rules and regulations,
 - 2. Routines for backups
 - 3. Quality assurance that produces forcible and repeatable results
 - 4. Check results with a different process
 - 5. Document everything so if you disappear tomorrow someone else can pick the project up.

4. Metadata (segue to Tools and techniques) Brad Hofman, Chris Jansen

- a. Notes
 - i. **National Parks Service Metadata Tool**
http://science.nature.nps.gov/im/datamgmt/meetings/dm_mtg_2006/presentations/1_Monday/Metadata_Tools_and_Editor.ppt
 - ii. We want our watch files back!
 - iii. While metadata is time intensive and boring it is important.
 - iv. Misuse of data, misunderstandings, can lead to legal and financial liabilities
- b. Questions we did not get to
 - i. What is the best way to catalogue metadata to trace a dataset from it's current state back to each of the datasets used to create it? Holly Glaser, GISP

5. Tools and Technique, Jaime Crawford, Scott Moore (Did not have time for)

- a. How do agencies standardized the their updating when having to use a CAD Data (ex: water, sewer, gas, and/or electric) and importing it into GIS with an accompanying Access Database or SQL Database that has to be reconciled with the Geodatabase. Teresa Mathiesen, GIS Specialist
- b. What is the best way to create and edit fields in ArcInfo? Starla DeLorey, ITS3
- c. Faster processing tips, Starla DeLorey, ITS3
 - i. Process all data inputs locally in one file geodatabase, with a local install.
 - ii. Use select queries to limit the processing
 - iii. Use in_memory/name option to process smaller features more quickly.
- d. What is the best way to parse large datasets for processing? Starla DeLorey, ITS3