

The (not so) Secret (but very necessary) Skills of GIS Professionals

49th Annual Alaska Surveying & Mapping Conference February 19th, 2015

David Howes, Ph.D. - David Howes, LLC

Michael Knapp, GISP - Blue Skies Solutions, LLC

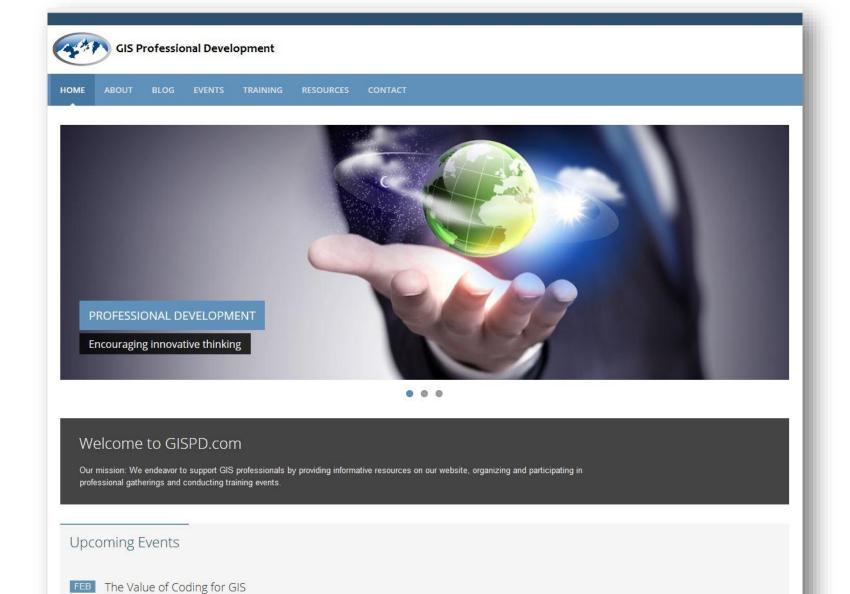
Anne Johnson - Geographic Information Network of Alaska (GINA)

Becci Anderson - USGS, Alaska

Scott Norton - HDR, Inc.



GIS Professional Development





David Howes, David Howes, LLC

Presentation to be given at the 49th Annual Alaska Surveying & Mapping Conference

Who Are We?

- David Howes, Ph.D.
 - Geospatial Information Scientist
 - David Howes, LLC http://dhowes.com
- Michael Knapp, GISP
 - GIS/Database Programming Specialist
 - Blue Skies Solutions, LLC http://blueskiessolutions.net
- Anne Johnson
 - SDMI Coordinator
 - Geographic Information Network of Alaska (GINA) -<u>http://www.gina.alaska.edu</u>
- Becci Anderson
 - Senior Science Advisor
 - USGS, Alaska http://alaska.usgs.gov
- Scott Norton
 - GIS Practice Group Lead
 - HDR, Inc. http://www.hdrinc.com













An Ongoing Sequence

 They'll Stone You When You're Trying to Build Your GIS: The Multi-Dimensional Role of the GIS Coordinator

Howes, D.A., Eklund, J., Owen, C., Radcliff, J., Stull, M. and Wallis, D. (proceedings entry)

- <u>The Lone GIS Professional: Running Your Own GIS Business</u> Howes, D.A., Stevenson, M., Savele, M. and Vennemann, K.
- Supporting the Lone GIS Professional: The Concept and Rationale Howes, D.A., Benson, J. and Bailey, A.

Slides for these and others available from

http://dhowes.com/presentations
http://gispd.com/events



Objectives

Most GIS career paths are based on levels of technical proficiency

But what about the "other" skills we need to remain successful?

This diverse group of professionals will discuss what skills they've learned that weren't contained in the "Help" section of ArcGIS!

This group will *mystify* you with their knowledge



Becci Anderson

Background



Where I work







Scott Norton

Background

• Where I work

FDS





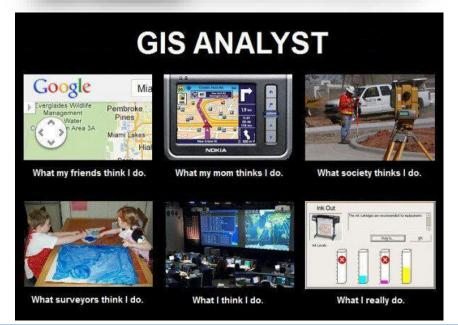
Michael Knapp

Background



Where I work







Anne Johnson

Background



• Where I work



1. Marketing

Developing ideas and selling them (literally & figuratively)

- Scott Internal Marketing "brown bag" lunch meetings, etc.

 Communicating to marketing group on GIS capabilities.
- Anne Leverage, leverage, leverage: identify shared needs and build partnerships.
- Becci Garnering support internally while engaging externally with diverse groups (and random people on the street) to inform about products and services - know your stuff!
- Mike "Indirect Marketing" getting yourself out in front of people and talking about what you like to do; how you use GIS, etc.

2. Project Management/Client Management Balancing needs vs. expectations, funding, and time

- Anne Realistic problem solving. Understand key requirements, limitations and risk factors. Communicate and set expectations early and often.
- Scott Estimating time "Cadillac vs . Chevy". Clear understanding of project and client goals. Constructive dialog.
- Mike Tend to act as own project manager. Small organizations put their trust in you to turn their ideas into something concrete. Provide useful alternatives. Don't leave a mess.
- Becci Balancing differing (conflicting?) program schedules with partner data and resource availability (e.g., US Topo).

3. Data Managing Knowing how your project fits into the big picture

- Becci Struggled with being the data flow linchpin if I drop the ball, there's
 no one else to pick it up! Tight coordination and tracking was the
 cure.
- Scott Many GIS "users" at HDR Alaska. Encouraging staff to use good file management by demonstration rather than scolding. Picking my battles.
- Mike Mostly happens (for me) at the beginning of a project. Then sticking around long enough after a project to see how it's used. Could it be better? Does it need to be rescaled?
- Anne Stretch your data! Look for license uplift options, ways to improve cataloging, compatibility, discoverability, web access, etc.

4. EducatorStaying up on trends and communicating them to others

- Mike People want you to take the latest trends in GIS and have you apply them to their work; how to use the product/software.
- Scott Providing in-house support to other GIS users. Exercising patience.
 Champion of metadata.
- Becci Focused on benefits of our products and services from a local boating group to USGS scientists; make it relatable and individualize the message.
- Anne
 Peer-to-peer education: chances are someone else has or is encountering the same challenge. Solve it together, and share the solution.

5. OmbudsmanWhat to do when things go wrong

- You represent your employer/profession/good name. Don't make promises you can't keep and DON'T pick up the phone at 4:55 PM on Friday (aka politely excuse yourself if you get in hot water)!
- Anne Opportunity for improvement! Understanding, empathy and action.
- Mike Solicit input as projects progress. Take the time to make things right. Or at least listen.
- Scott Maintain positive, solution oriented thinking. <u>Communication.</u> Seek first to understand, then to be understood.

Questions?