

Marketer

Sounding Board

Project Managing

Problem Solver

Teacher

Marketer

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

49th Annual Alaska Surveying & Mapping Conference  
February 19<sup>th</sup>, 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.



GISPD.com

GIS Professional Development



PROFESSIONAL DEVELOPMENT

Encouraging innovative thinking



## Welcome to GISPD.com

Our mission: We endeavor to support GIS professionals by providing informative resources on our website, organizing and participating in professional gatherings and conducting training events.

### Upcoming Events

- FEB** The Value of Coding for GIS
- 18** Presentation to be given at the 49th Annual Alaska Surveying & Mapping Conference
- 2015** David Howes, David Howes, LLC



# 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) - <http://www.gina.alaska.edu>
- **Becci Anderson**
  - Senior Science Advisor
  - USGS, Alaska - <http://alaska.usgs.gov>
- **Scott Norton**
  - GIS Practice Group Lead
  - HDR, Inc. - <http://www.hdrinc.com>

**David Howes** LLC

Geographic Information Systems Development Services



# 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](#))
- [The Lone GIS Professional: Running Your Own GIS Business](#)  
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**



- **What I do**



# Scott Norton

- Background

- Where I work



- What I do



# Michael Knapp

- Background



- Where I work



- What I do

## GIS ANALYST

<p>What my friends think I do.</p>	<p>What my mom thinks I do.</p>	<p>What society thinks I do.</p>
<p>What surveyors think I do.</p>	<p>What I think I do.</p>	<p>What I really do.</p>





# Anne Johnson



- **Background**



- **Where I work**



- **What I do**

# 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. Educator

## Staying 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. Ombudsman

## What to do when things go wrong

- **Becci**      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. Communication. Seek first to understand, then to be understood.

**Questions?**

