“GIS Learning in Indian Country”

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Who are we?

• The National Geospatial Resource Center (NGRC) in Albuquerque, NM

• Services Bureau of Indian Affairs & all Federally-Recognized Tribal Entities

• Goals: Building an Enterprise GIS via Training, Help Desk, Licensing, Application Development, Systems Administration
NGRC Mission

• It is the mission of the NGRC to fulfill the government’s trust responsibilities and promote self-determination on behalf of Tribal Governments, American Indians, and Alaskan Natives. The National Geospatial Resource Center (NGRC) is responsible for the establishment and promulgation of policies, procedures, standards, goals, and objectives for all spatial data technologies and applications throughout Indian Country. The NGRC provides quality technical services and products to carry out its mission.
BIA Regions & Tribal Locations
Training

- 2-5 day courses taught at training center and field locations
- ESRI authorized courses include: LGIS, IGIS1, IGIS2, Spatial Analyst
- Custom courses: GIS for Decision Makers, Cartography, 3D Analyst, GRID/TIN
- Provide support on use of ESRI ELA Distributed Products to Tribes & BIA
- Emphasis placed on GIS as decision support tool
Some Stats

• 30 classes taught in 2007 = 10 at the NIPTC + 20 field locations

• 296 students completed = 101 BIA + 195 Tribal

• Natural Resources 35%, Forestry 20%, Transportation 15%, Realty 10 %, Water Resources 10%, Cultural 5%, Emergency Management 5%

• Both NGRC instructors recognized by ESRI as ‘Top 5 Performers’ in 2007

• Cost savings
Cost Savings, training

• $204,000 actual savings in CY 2007

• ESRI: $450 per person / day vs. in-house: $55 / day

• Travel costs vs. savings
Benefits of the ATP

- Provides cost savings opportunity for training within the BIA
- BIA Instructors “add value” w/ instruction of “Indian Country” topics
- Familiarity with operations, security, operations
- Student incentives: GIS Pathways
- Just-in-time materials stay “fresh”
- Course development w/ version updates
- Direct interaction with students long-term, they keep “coming back for more”
- Top-notch instructor resources
Tips for effective GIS learning

• No such thing as a “stupid question”

• No assumptions

• Quality over quantity

• Real-world homework matters

• Sharing experiences & networking

• The power of rapport
Tips for effective GIS learning (cont)

• Do you speak GIS?... ‘Learning the Lingo’ the first time.

  • Map, ArcMap, Map Layout View, Map Document, Map Tip, Map Template...

  • Data, Data Layer, Data Frame, Data View, Data Source, Data Dictionary...

• Metaphors for learning: “Sunglasses” & “The Tree”

• ‘Fun’ knowledge checks without stress or pressure
Real-world learning: topology w/ network datasets
Rapport Building:

“Guess the Tribe”
The Classroom Experience

NIPTC

Field

The Bigger Picture…
real-world learning
Visit the NGRC booth located at “F1029”