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Images used in this presentation:
gps.gov; esri.com; gis.com; garmin.com; popularmechaics.com
GeoSpatial Tech
What is GIS?
The Mapping Platform for Your Organization

Quickly create interactive maps and apps and share them with the rest of your organization. Be productive right away with ready-to-use content, apps, and templates available for browsers, smartphones, and tablets.

30-DAY FREE TRIAL

Get Started Quickly

Get started right away with little to install or setup. Sign-up for a free trial today.

Out-of-the-Box Apps

Take advantage of ready-to-use apps for field data collection, operational dashboards.

Ready-to-Use Maps

ArcGIS includes a living atlas of the world with authentication maps on hundreds.

http://arcgis.com
The ConnectED initiative and Esri:

Open Doors to Many Careers

Give students future options with high-value skills in problem solving, data analysis, and technology integration.

http://connectED.esri.com
Learning
A Tool for Thinkers

• Think about a topic or a place ...
• Ask a question about it ...
• Make a map ...
• Explore the patterns that appear ...
• Enhance the data or modify the analysis ...
• Ask a new question ...
• Repeat ...
Why Use GIS in Schools?

- Data analysis
- Critical thinking
- Spatial thinking
- Project-Based Learning
- STEM
- 21st Century Skills
- College & Career
Web-based Analysis

- Summarize Within
- Summarize Nearby
- Aggregate Points
- Create Buffers
- Overlay Layers
- Dissolve Boundaries
- Field Calculator
- Extract Layer
- Merge Layers
- Enrich Layer
- Find Nearest
- Drive-Time Areas
STEM

- National priority for education and workforce
- Guided by Next Gen Science Standards and Common Core State Standards for Math
- “science & engineering practices”
- Links to “spatial thinking”
Field Studies
Neighborhoods & Architecture
Inventories of the built environment
Interpretative Talks
Trail or park exploration maps
Community Street Light Coverage
Safety and security

Source: Esri T3G 2013
Air Quality

- pH probes with GPS
- SO2 via bioindicator
- AirQuality Egg
Sound Mapping

Off-peak/Peak images: Western Albemarle students in JMU’s Geospatial Semester
Stream Monitoring

source: Bishop Dunne Highschool, Dallas
The GeoMentor Program

GIS professionals can help educators and students learn to use GIS. A GeoMentor is a volunteer who can help a teacher or youth club leader build capacity to help kids use GIS.

A GeoMentor works with an educator. Using tools of geography (such as digital or hardcopy maps), and even field work, the GeoMentor helps the educator and youth develop skills in geographic thinking.

Who can be a GeoMentor?

GeoMentors can be anyone who uses geography, recognizes the ways in which geography matters, and has an interest in helping young people, including:

- users of Geographic Information Systems
- Mapmakers

GeoMentor!
http://geomentor.org
GIS Opportunities for College Students

Summer Internships

UC Student Assistantships

www.esri.com/careers

Developers.arcgis.com
Thank you!

Tom Baker * Ed Crane