Esri Southeast Regional
User Group Conference

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# Planning for Your Professional GIS Development: Esri Technical Certification

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esri

# Session Overview

- Benefits of Training
- Budgeting/Purchasing
- Training Delivery Methods
- Training Plans
- Esri Technical Certification

# Why is training important?

- Develop staff to maintain GIS service levels
- ArcGIS 10 is a powerful system
- Training is an investment, not an expense

# What can training do for you?

- Complete the Enterprise GIS Solution
- Develop staff to maintain the GIS System
- Increase the return on your investment
- Increase awareness and understanding of Esri technology
- Full Software Utilization

# Benefits of Esri Training

- Taught on the most up-to-date software version
- CompTIA CTT+ Certified Instructors
- Minimum of Desktop Associate Certification
- Variety of delivery methods
- Low instructor to student ratio

# Budgeting/Purchasing training

- Individual seats – traditional or virtual
- On Site Training
- Virtual Campus – Annual User License
- Esri Enterprise Advantage Program (EEAP)
- Esri Developer Network (EDN)
- Add-on a block of instructor-led classes
  - Small Government or Utility ELA
  - Enterprise License Agreement (ELA)
  - Training Pass

# How to sell training to management

- Cost Benefit Analysis
- Workforce is your biggest asset
  - Protect that investment with ongoing training
  - Tie into existing HR Staff Development workflows
- Develop a training plan
  - Identify areas of knowledge
  - Identify gaps of knowledge
  - Identify common training needs
  - Cost savings - bulk purchasing

# Show me the savings…

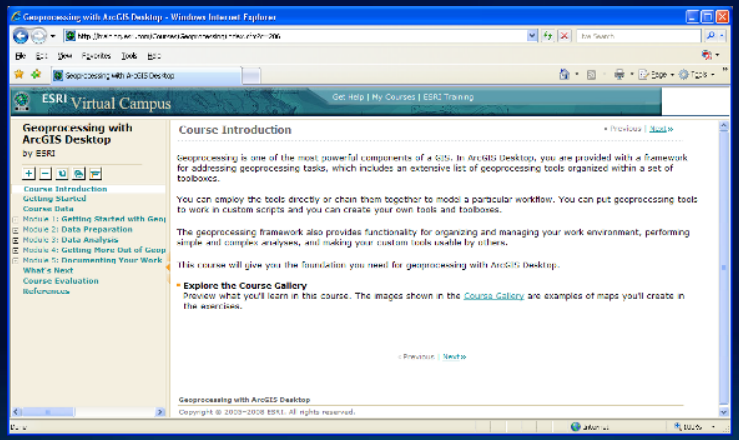
- **Save time and money on projects**
  - **When organizations spent 8% of project budget on training, they met objectives 85% of the time**
  - **Increase investment to 10% and the objective completion rate goes up to 100%**

Source: IDC, “Average IT Project Success: How Successful Do You Want to Be?” January 2009, IDC# 216169, Volume 1

# Training Delivery methods

- Instructor-led
  - Classroom training
  - In-person or online (virtual)

- E-learning
  - Self-paced (virtual campus, web training courses)



# Coaching

- Demos of functionality using a copy of your data
  - On the fly with student collaboration
- Q & A on class topics
- Application to workflows and environment
- Additional in depth topic discussion
- Must accompany a client site class

# Training Plans

# Training Plans

- Complement your GIS plan
- Organized by workflow or job role
- Often tailored
  - Specific projects
  - By department
  - Entire organization

# Types of Training Plans

- Personalized Plan
- Project-Based Planning
- Department/Organizational Development Planning

# Training Plan Development Process

# Where do you start?

## Identify

| People | Roles | Responsibilities |
| --- | --- | --- |
| 5 | IS Manager<br>GIS Analyst (3)<br>GIS DBA/Manager | Data Analysis<br>Versioning<br>SDE Edits |
| **Workflows** | **Wants** | **Needs** |
| GIS Data Management<br>GIS Editing<br>Enterprise GIS Mgmt | MultiUser Geodatabase<br>Web App Development<br>v10 | Intro to ArcGIS Server<br>What's New in v10 |

# Training Plan Document

## Designated Training Consultant works with you to devise a training plan

**GIS Application Programmers (1–2 people)**

The GIS application programmer develops custom applications to meet specific user needs and is responsible for developing and enforcing application development procedures and standards.

Recommended Training

1. Getting Started with GIS (E)
2. ArcGIS Desktop II: Tools and Functionality (3 days)
3. What's New in ArcGIS Desktop 10 (2 days)—Experience with GIS in place of 1 & 2 above
4. Introduction to Geoprocessing Scripts Using Python (2 days)
5. Developing Applications with ArcGIS Server Using the Microsoft .NET Framework (3 days)
6. Introduction to ArcGIS Server (2 days)

Optional Training

1. ArcGIS Desktop III: GIS Workflows and Analysis (2 days)
2. Building Geodatabases (3 days)
3. System Architecture Design Strategies (3 days)

# Training Implementation Plan

| City of SERUG Training Plan | Traditional/Virtual | Getting Started with GIS - Virtual campus - Web based training | ArcGIS Desktop II: Tools and Functionality | System Architecture Design Strategies | Introduction to ArcGIS Server | ArcGIS Server Web Administration Using .Net | Developing Applications with ArcGIS Server Using .NET | ArcGIS Server Enterprise Configuration and Tuning for SQl Server | Building Web Applications Using ArcGIS API for Flex or Silverlight | Introduction to Geoprocelnsting Scripts Using Python | Introduction to the Multiuser Geodatabase | Data Management in the Multiuser Geodatabase | Managing Editing Workflows in a Multiuser Geodatabase | Creating Effective Web Applications | What's New in ArcGIS Desktop 10 | What's New in Editing at ArcGIS Desktop 10 | # of Classes Per Person | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IS Manager | | X | X | X | X | X | X | X | | | | | | X | | | 8 | IS Manager |
| GIS Analyst 1 | | | | | X | | | | | | | X | X | X | X | X | 6 | GIS Analyst 1 |
| GIS Analyst 2 | | | | | X | | | | | | | | X | | X | X | 4 | GIS Analyst 2 |
| GIS Analyst 3 | | | | | X | | | | | | | | X | | X | X | 4 | GIS Analyst 3 |
| GIS DBA & Manager | | | | | X | X | | X | X | | | X | X | X | X | X | 9 | GIS DBA & Manager |
| # Staff | | 1 | 1 | 1 | 5 | 2 | 1 | 2 | 1 | 0 | 0 | 2 | 4 | 3 | 4 | 4 | 31 | Total # of Classes |
| # Days for each class | | | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | | |
| Total # of days | | FREE | 3 | 3 | 10 | 6 | 3 | 4 | 2 | 0 | 0 | 6 | 12 | 9 | 8 | 4 | 70 | Total Estimate of Training Days |

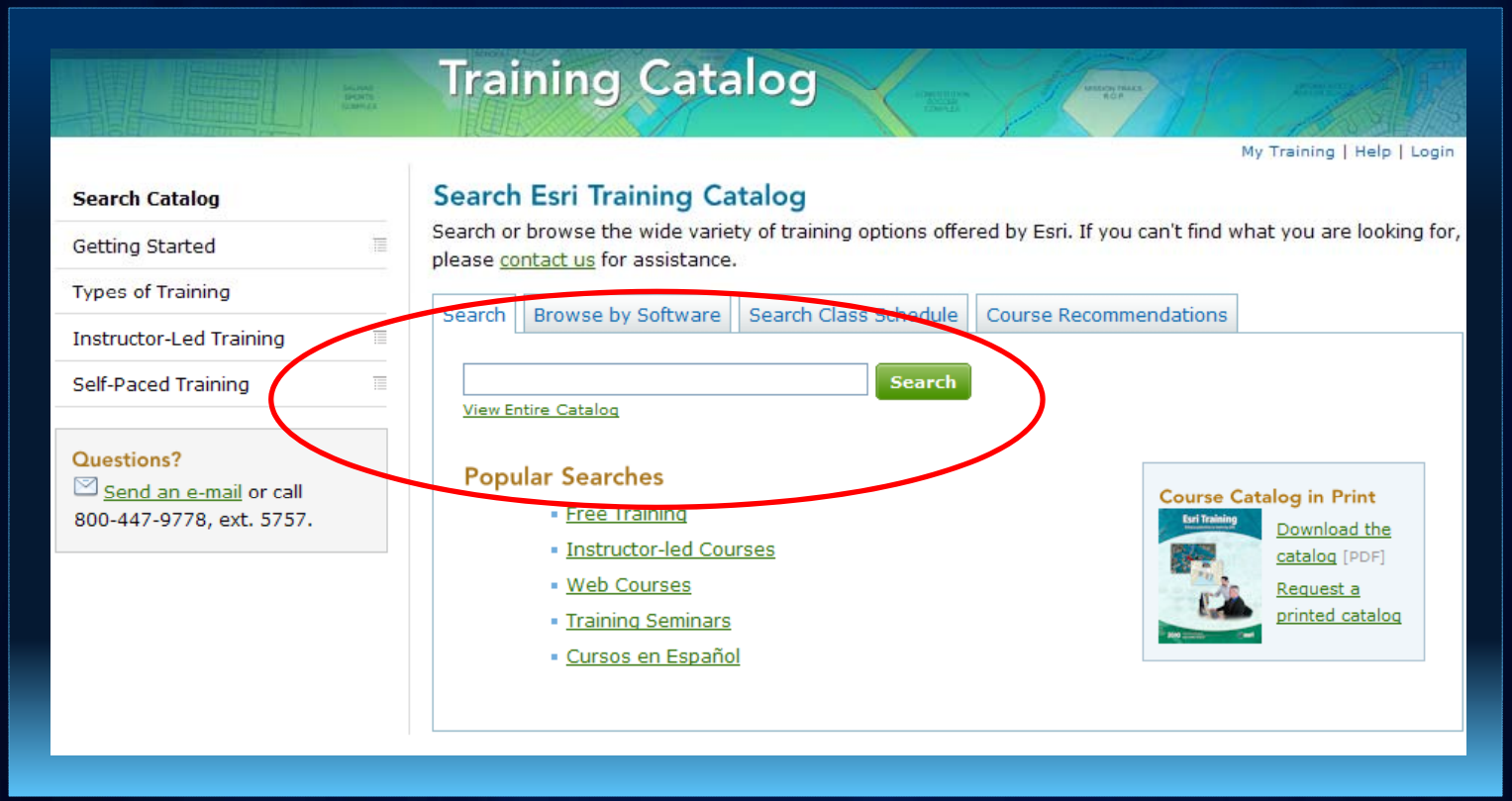
# Implementation Plan

- Departments Collaborate to offer onsite training
- Clearly identify training opportunities and needs
- Ability to track attendance
- Customized Implementation template
- Used for Planning & Budgeting
- Identify opportunities for training savings

# What's new in training 2011?

# New training website

# New Search Feature



# Classes at ArcGIS 10

**Almost all instructor led classes are available at 10**

- **Client-site classes can still be scheduled at 9.3**

New instructor led classes:

- Programming ArcGIS Desktop using Add-Ins
- What's New in ArcGIS Desktop (Virtual)
- What's New in Desktop Editing (Virtual)
- Managing Imagery Using ArcGIS
- Building Web Apps Flex API
- Building Web Apps Silverlight API
- Building Web Apps JavaScript API
- Working with 3D GIS

Virtual Campus (v10) classes will roll out through 2011

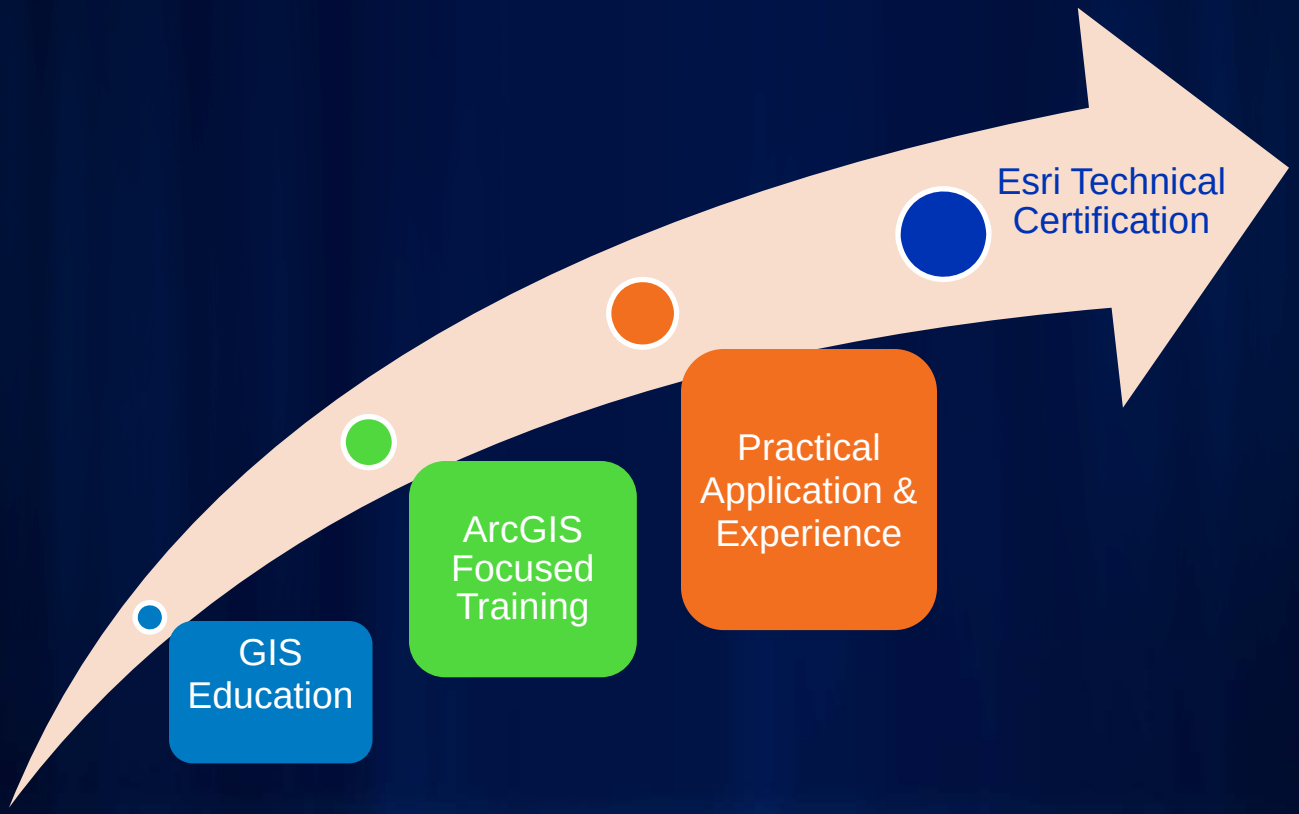
# Esri Technical Certification

# Why Esri Technical Certification?

The purpose of the Esri Technical Certification Program is to create a standardized level of expertise for the use of Esri products and technology.

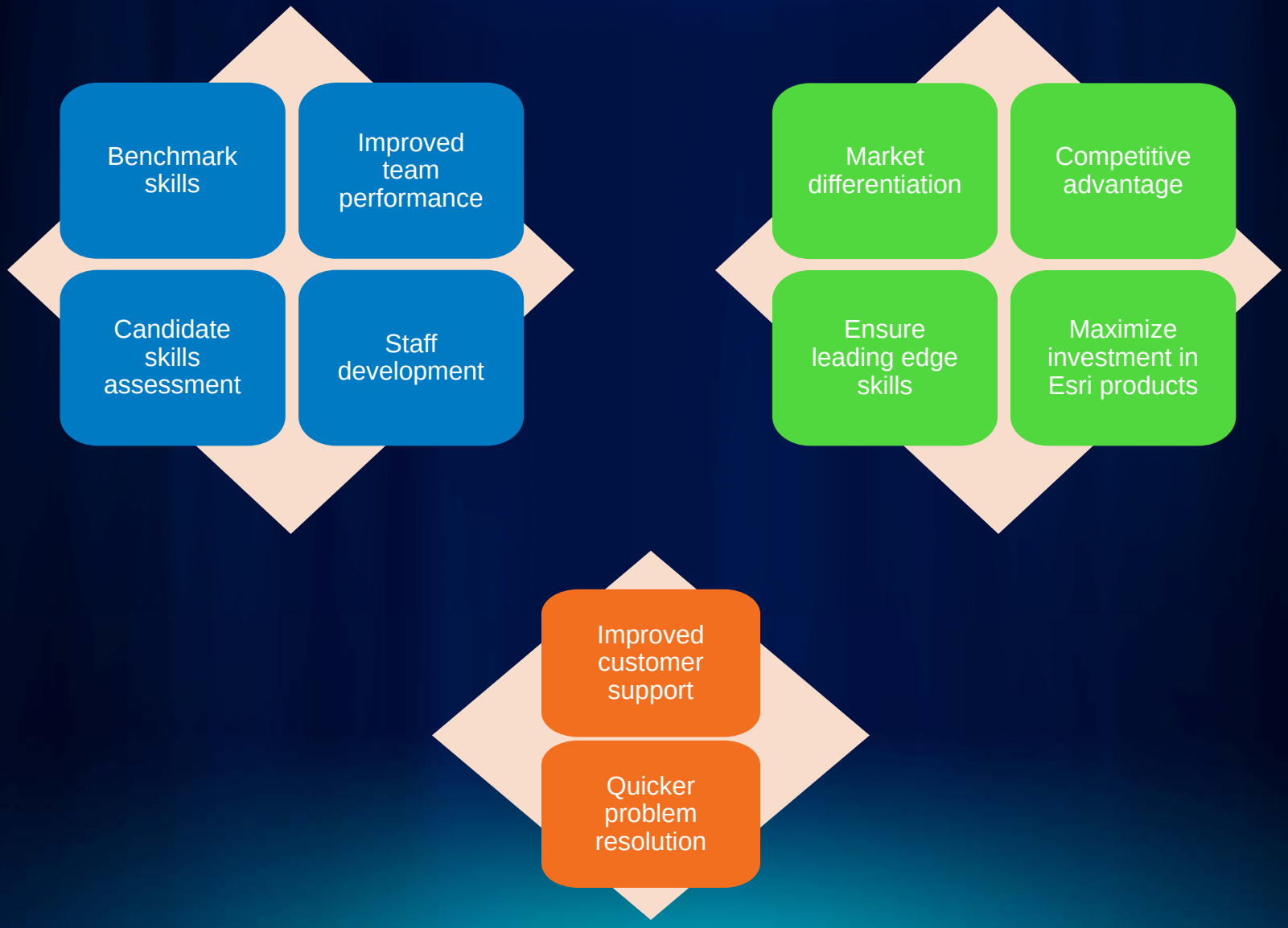
This is achieved by allowing individuals to validate their knowledge, skills and abilities against a proven and measurable level of competency.

# Foundation for Technical Certification



# Benefits for Individuals

# Benefits for Organizations



# Quick Facts

## IDC Study*:

- 65% of managers believe that certification is important to team performance
- 66% of managers believe that certification improves the level of service and support offered to IT end users/customers

*"Impact of Training: Functional Excellence Leads to Operational Productivity," IDC, Doc# 215762, Dec. 2008

# Quick Facts

## IDC Study*:

- **Team performance increases every time a new team member is certified.**
- **With a sufficient percentage of team members certified, IT operational performance can increase up to an average of 11%**

*“Impact of Training: Functional Excellence Leads to Operational Productivity,” IDC, Doc# 215762, Dec. 2008

# Quick Facts Cont'd

- Unscheduled downtime is about 20% lower at organizations with more certified IT staff. *
- Overall, professionals who had earned an IT or project management certification during the last five years earned an average of $5,242 more than their counterparts. **

* IDC, Impact of Training on Network Administration: Certification Leads to Operational Productivity Survey, Doc # 220563, November 2009.

** Global Knowledge Training LLC, 2010 IT Skills and Salary report, 2010.

# Esri Technical Certification

- Exam Registration Opened January 17, 2011
- Two Levels: Associate & Professional
- Three Esri Technical Certification Tracks
  1. ArcGIS Desktop
  2. Developer
  3. Enterprise

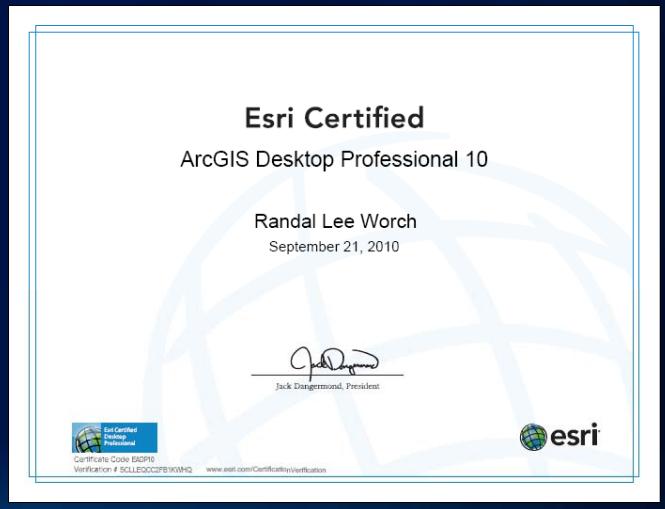
# Overview of Certification Tracks

| | |
|---|---|
| Desktop | **ArcGIS Desktop**<br>Associate \| Professional |
| Developer | **ArcGIS Desktop Developer**<br>Associate \| Professional |
| | **Web Application Developer**<br>Associate \| Professional |
| | **Mobile Developer**<br>Associate \| Professional |
| Enterprise | **Enterprise Geodatabase Management**<br>Associate \| Professional |
| | **Enterprise System Design**<br>Associate \| Professional |
| | **Enterprise Administration**<br>Associate |

# Release Timeline

# Esri Technical Certification

- Built for Esri version 10
- Exam-based measure of skill
- 95 multiple choice questions
- 2 to 2 ½ hours in length
- $225 per exam
- Pearson Vue Testing Center



# Preparing for Esri Technical Certification

- Review the Candidate Qualifications and Skills Measured
- Align your skills with the listed skills and qualifications
- Review the training resources and identify classes to prepare.
- Visit the ArcGIS Resource Center
- Esri product web pages for: demos, PowerPoint slides, blogs, and online content.

# Skills Review

- Esri Technical Certification: Skills Review for ArcGIS Desktop Associate

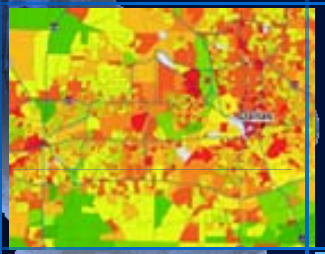
Esri Technical Certification: Skills Review for ArcGIS Desktop Professional

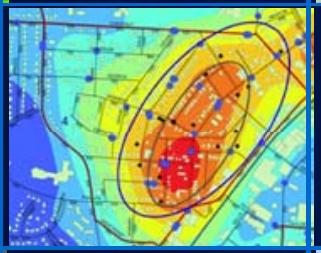
- Get plenty of rest the day before the exam and relax!

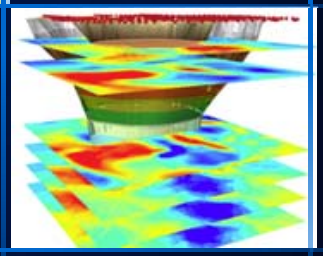
# Resources

- Esri Technical Certification website
  - www.esri.com/certification
- Pearson VUE website
  - www.pearsonvue.com/esri
- Questions
  - certification@esri.com
- Downloadable brochure
  - http://www.esri.com/library/fliers/pdfs/esri-technical-certification.pdf
- Voucher store
  - http://www.pearsonvue.com/vouchers/pricelist/esri.asp

# Questions?







# Contact Information

- We are always available to answer your training questions.

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