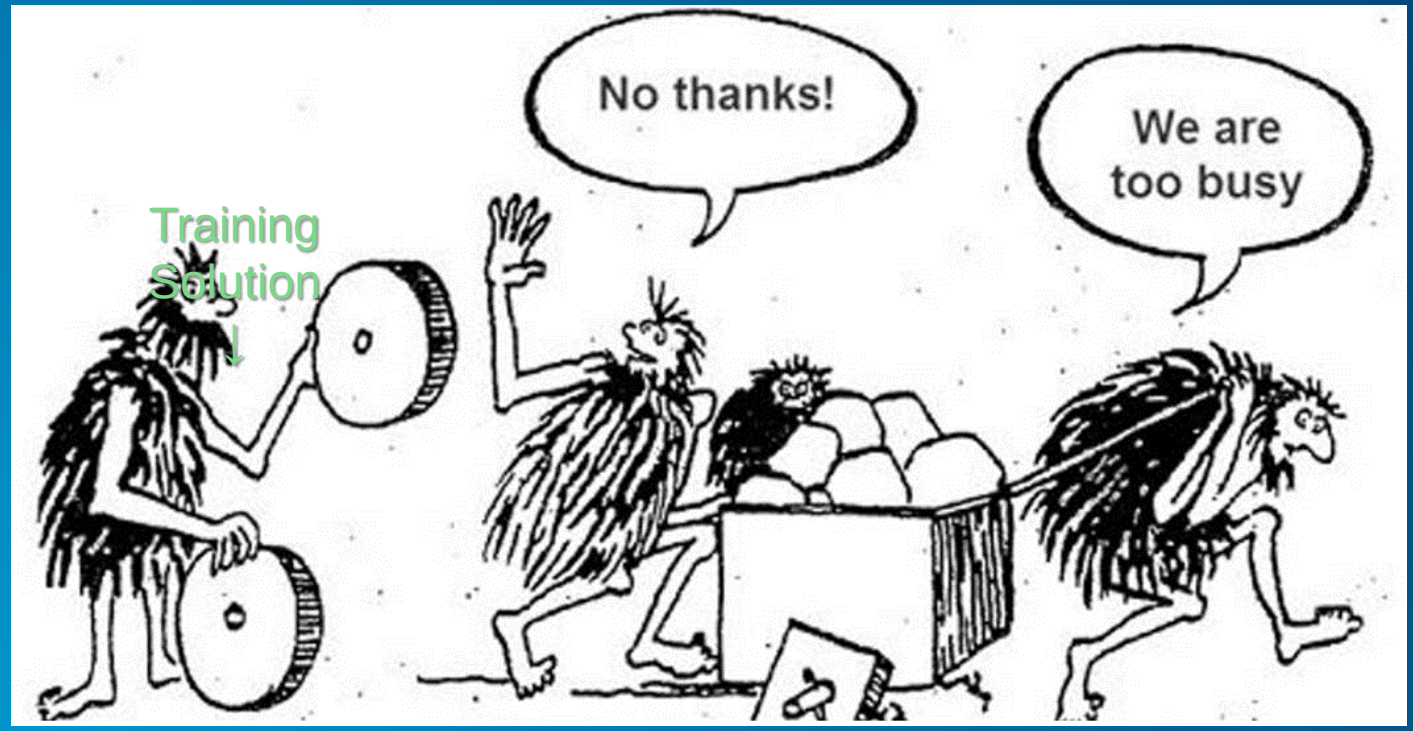
Esri Training & Workforce Development

Tamara Adamson | Training Consultant

Partner with Training

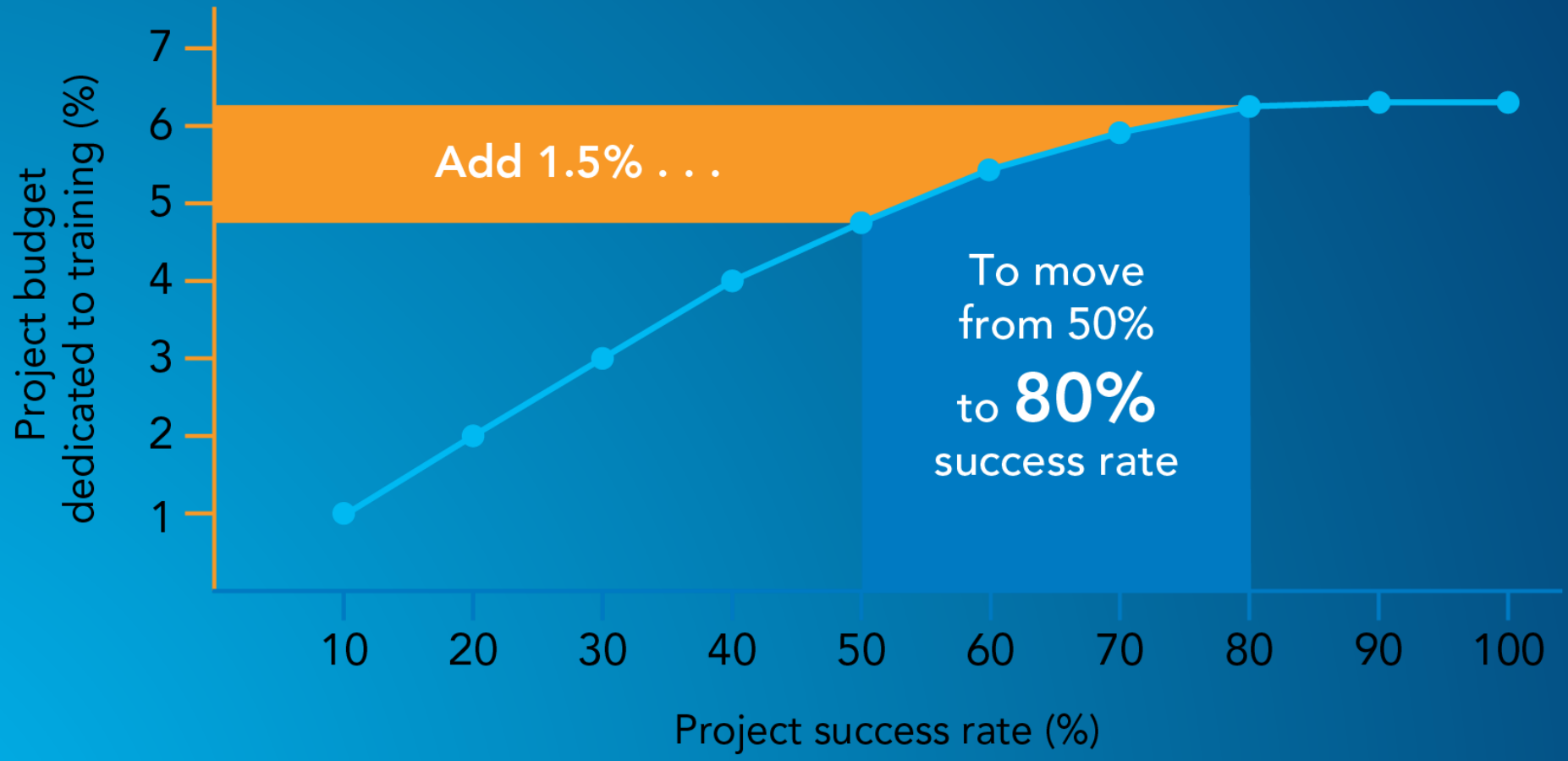


A people-centric approach to achieving business objectives

A knowledgeable staff is better equipped to recognize opportunities for using GIS to help the organization increase productivity, decrease operating costs, and improve the overall quality of work accomplished.

What is a workforce development plan?

Training spending and project success



Source: IDC, Training's Impact on Projects Survey

Levels of Training Engagement

Individual

-Training Recommendations

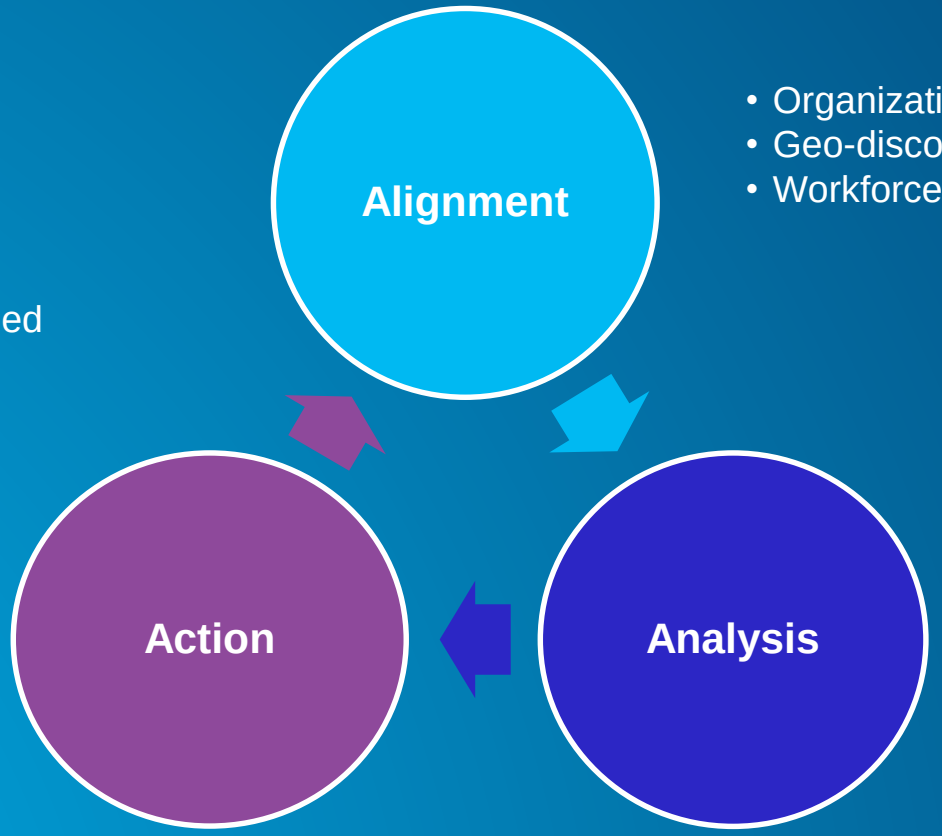
Project and Department

-Training Plan

Organization

-Workforce Development Plan

Workforce Development Planning

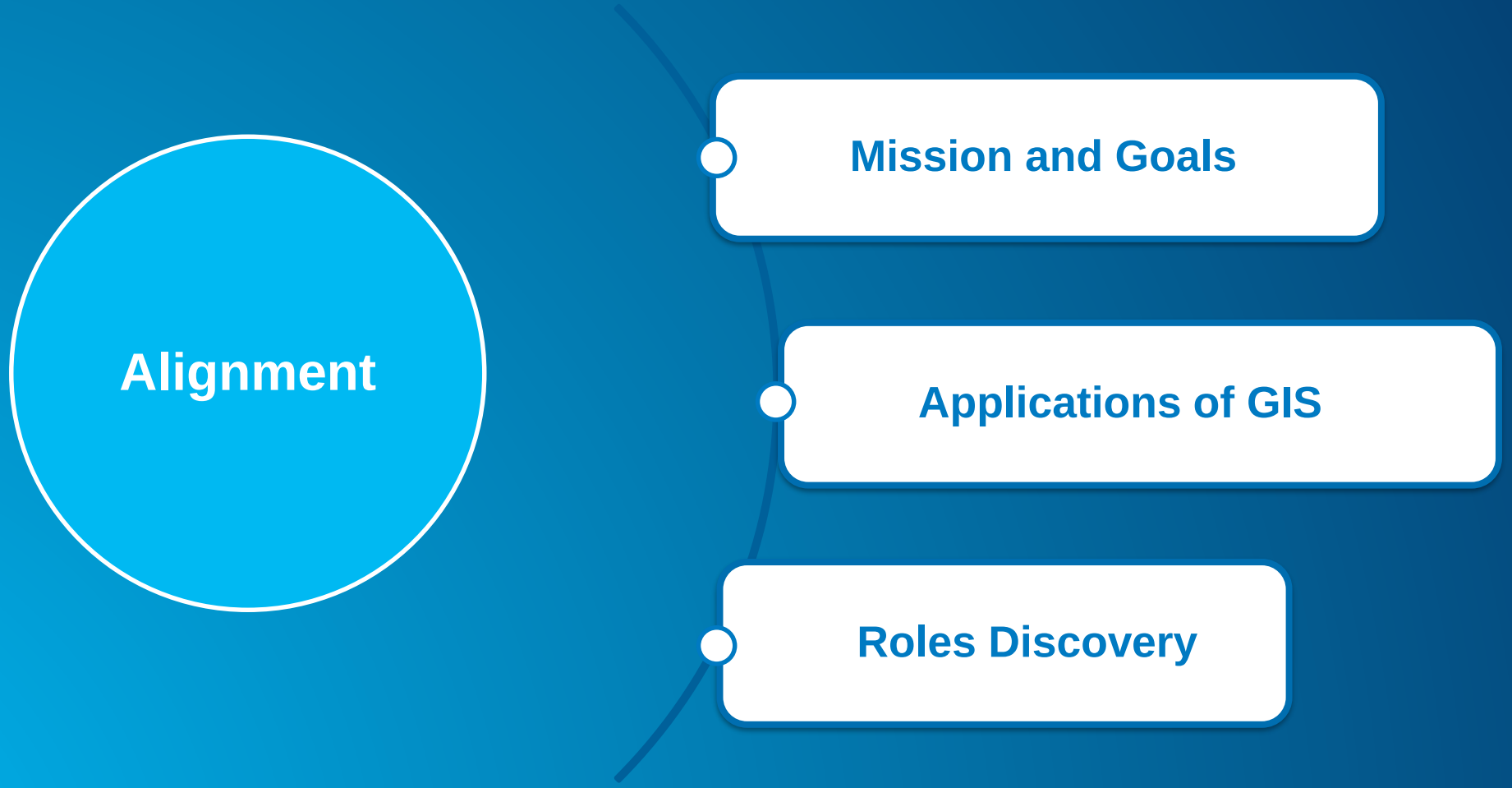


- Organizational objectives
- Geo-discovery
- Workforce roles

- Skills requirements
- Timelines, priorities and budgets
- Delivery methods (training plan)

- Implement
- Strategy
- Modify as needed

Workforce Development Process



Workforce Development Process

Workforce Development Process

Essential Patterns of a Location Strategy

Location Enablement

Empower all users to discover, use, make and share maps

Constituent Engagement

Get feedback and communicate with external constituents

Decision Support

Support organization decision making activities

Field Mobility

Get information into and out of the field

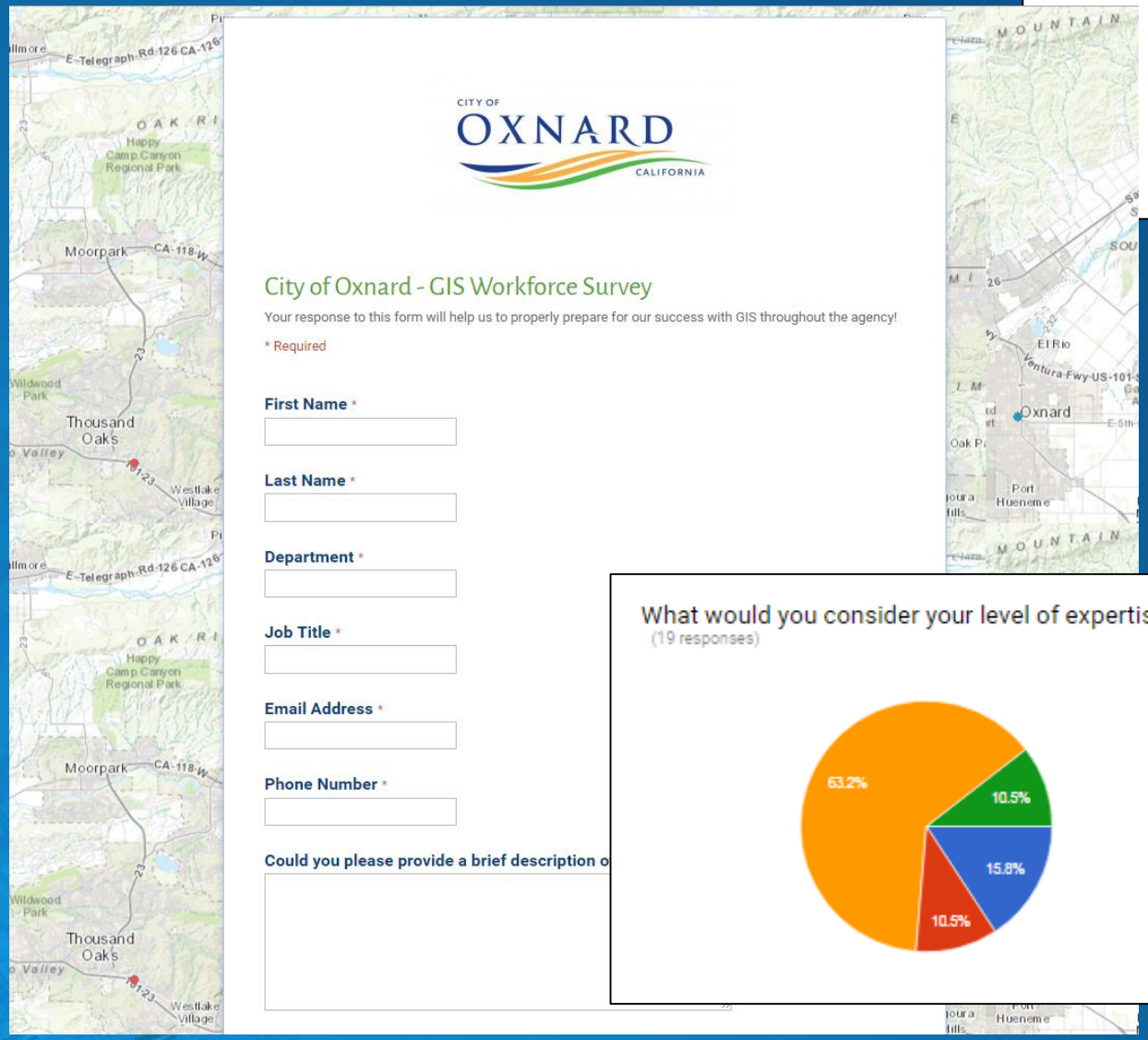
Analytics

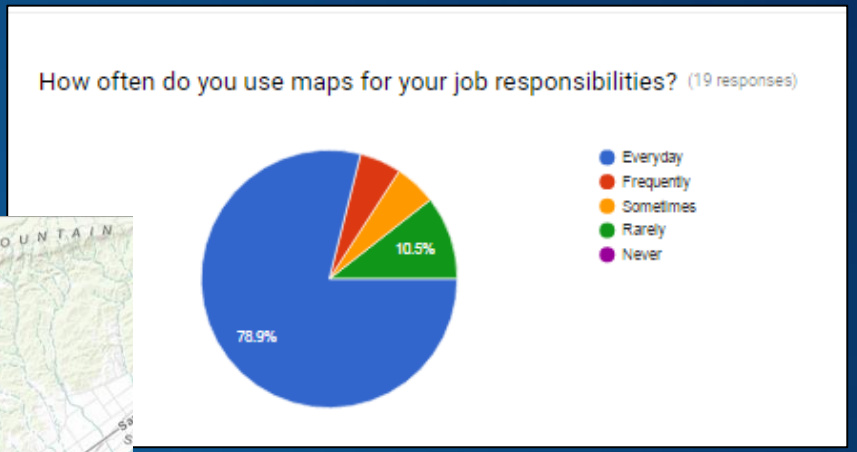
Describe, predict, and improve business performance

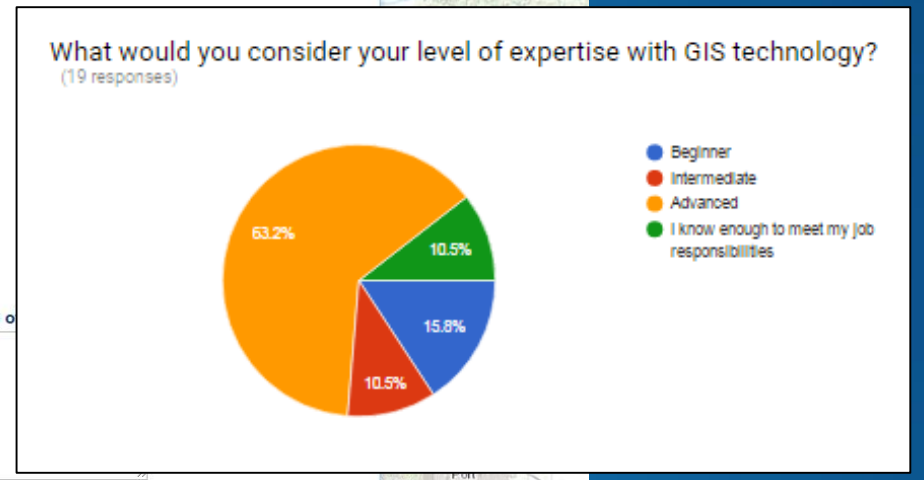
Location Data Management

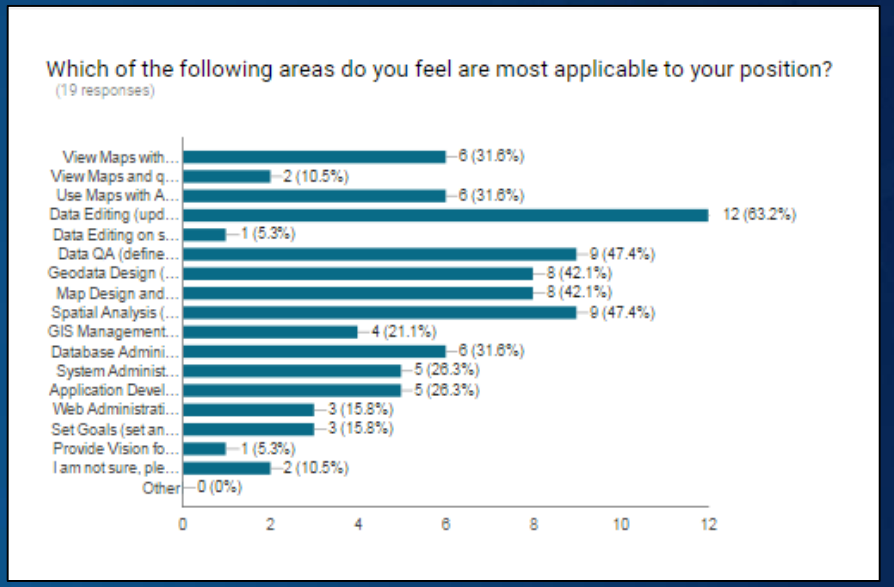
Collect, organize and exchange data about all assets and resources

Workforce Survey









Alignment: Connecting Patterns to Strategic Goals

3.0 Geospatial Goals and Objectives

To ensure alignment with goals identified in Iowa DOT's Geospatial Policy, geospatial specific objectives have been defined and linked to each policy goal. The geospatial objectives are mapped to GIS patterns (introduced on the previous page) that will support their execution and achievement.

Performance Management: Using information every day to improve the goods and services we provide to our customers.

GIS Goals	
1. Geospatial efforts align with the Department's strategic initiatives.	• Locat • Const • Decis • Field • Analy • Locat
2. Geospatial technology and concepts are used to support Department performance measures	• Locat • Const • Decis • Field • Analy • Locat

Data Integration: Better understand the data and information s within the department and determine how we can best leverage

GIS Goals	
1. Expand access to geospatial information	• Locat • Const • Decis • Field • Analy • Locat
2. Data custodians have full control over their spatial data	• Locat • Field • Locat
3. Spatial objects are imbedded into enterprise databases	• Locat

Geospatial Roles Identified

4.0 Roles, Competencies and Training

The work of geospatial users will play an important role in Iowa DOT's evolution. Tools and applications that tackle new kinds of problems are being developed daily. The goal of this document is to enable and empower map users to fully leverage resources so they can maximize their effectiveness by staying current with the technology.

Iowa DOT has a diverse need for GIS technologies to support its strategic plan. As mapping, or location enablement solutions, continues to expand throughout the department, it will make it easier for everyone in the organization to discover, use, make and share maps. This requires a strong base understanding of geospatial solutions, awareness of available resources, and knowledge of training capabilities to ensure worker productivity and promote continued employee skill development.

It is possible a person reading this document may not fit neatly into one of the GIS roles identified on the following pages. Often a person will wear many hats due to his or her personal interest or because of a lack of organizational resources. If this is the case for you, find the GIS roles that apply to your workflows and see the corresponding training associated with each role.

The curriculum developed for each role assumes the employee has no prior experience with the department's GIS software. It is the responsibility of the employee, in collaboration with management, to review course descriptions, requirements and prerequisite technical competencies prior to registering for a course to ensure the training will support his or her role and career aspirations.

Iowa DOT Geospatial Core Roles

Users	Administrators	Managers
Map Consumer - Field	Geospatial Web Developer	Geospatial Project Manager
Map Consumer - Office	Geospatial Data Manager	
Map Consumer - Management	Geospatial Server Administrator	
Geospatial Knowledge Worker		
Geospatial Data Editor		
Geospatial Analyst		

Training Recommendations by Role

Map Consumer - Office

Staff: Rail, Transit, Aviation, Grants, Bridge, etc.

Description: Office users consume and create content to exchange information with others in the department. Often this work is published with others via various solutions such as story maps, web apps and dashboard. Office users may also need to map information from excel and various databases. These individuals may or may not have any prior geospatial education or workplace experience with geospatial tools.

Technical Competency: Basic knowledge of geospatial solutions for creating and publishing information, including web mapping and select mobile solutions.

Technology & Training Overview

Technology: ArcGIS Online account

Training: Geospatial Infrastructure 101 (rest policies, policies, philosophy, imagery and data available), ArcGIS Online training for publishers, portal training, Esri for Office; Story Maps; Esri Web Apps

Non-Esri Training

- Geospatial Infrastructure 101 (REST, Policies, philosophy)
- GeoCortex 101

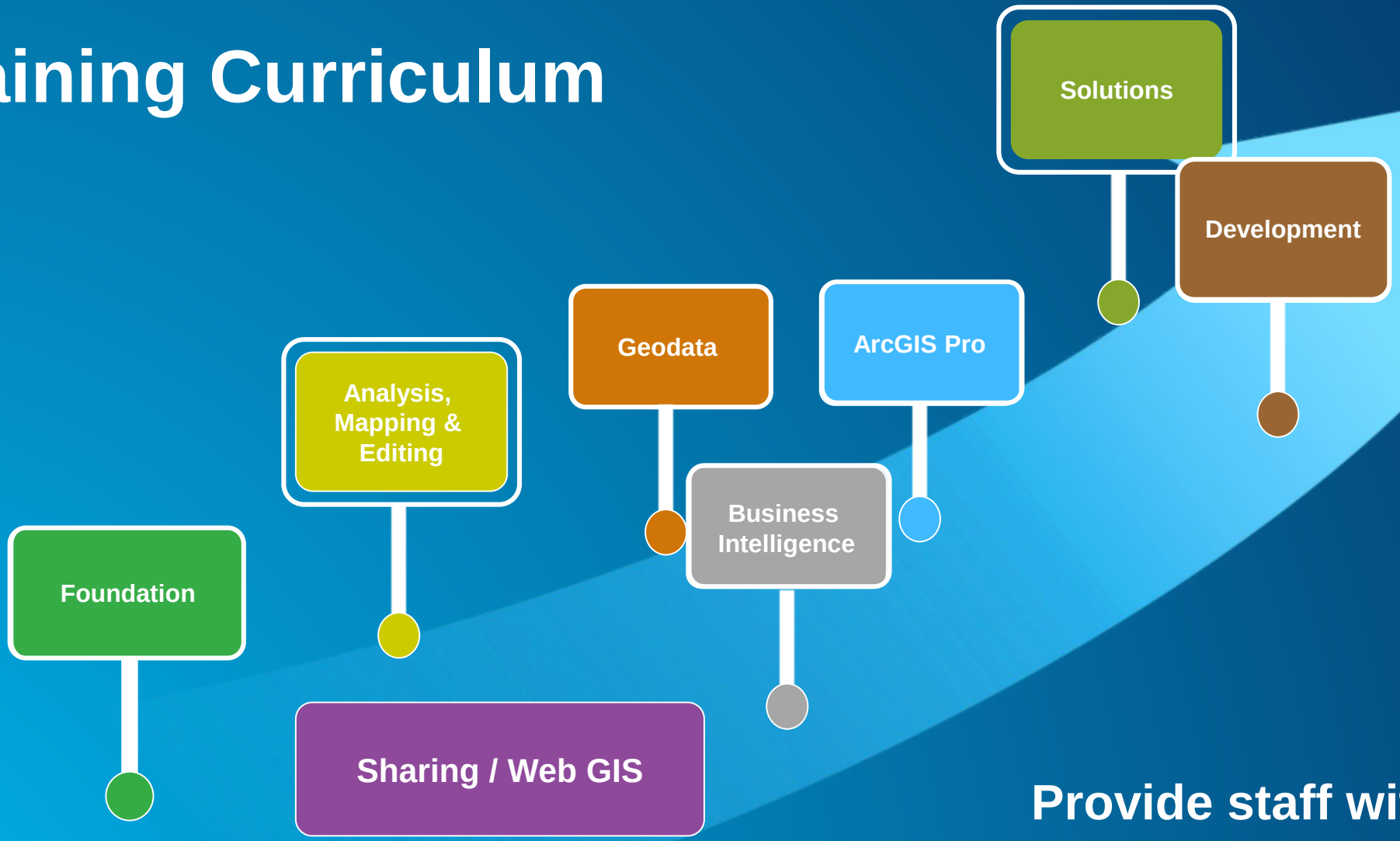
Esri Instructor-Led Training

- ArcGIS 1: Introduction to GIS
- ArcGIS Online Subscriptions for Organizations: Publisher Workflows
- Designing Maps with ArcGIS - OPTIONAL

Esri E-Learning Training

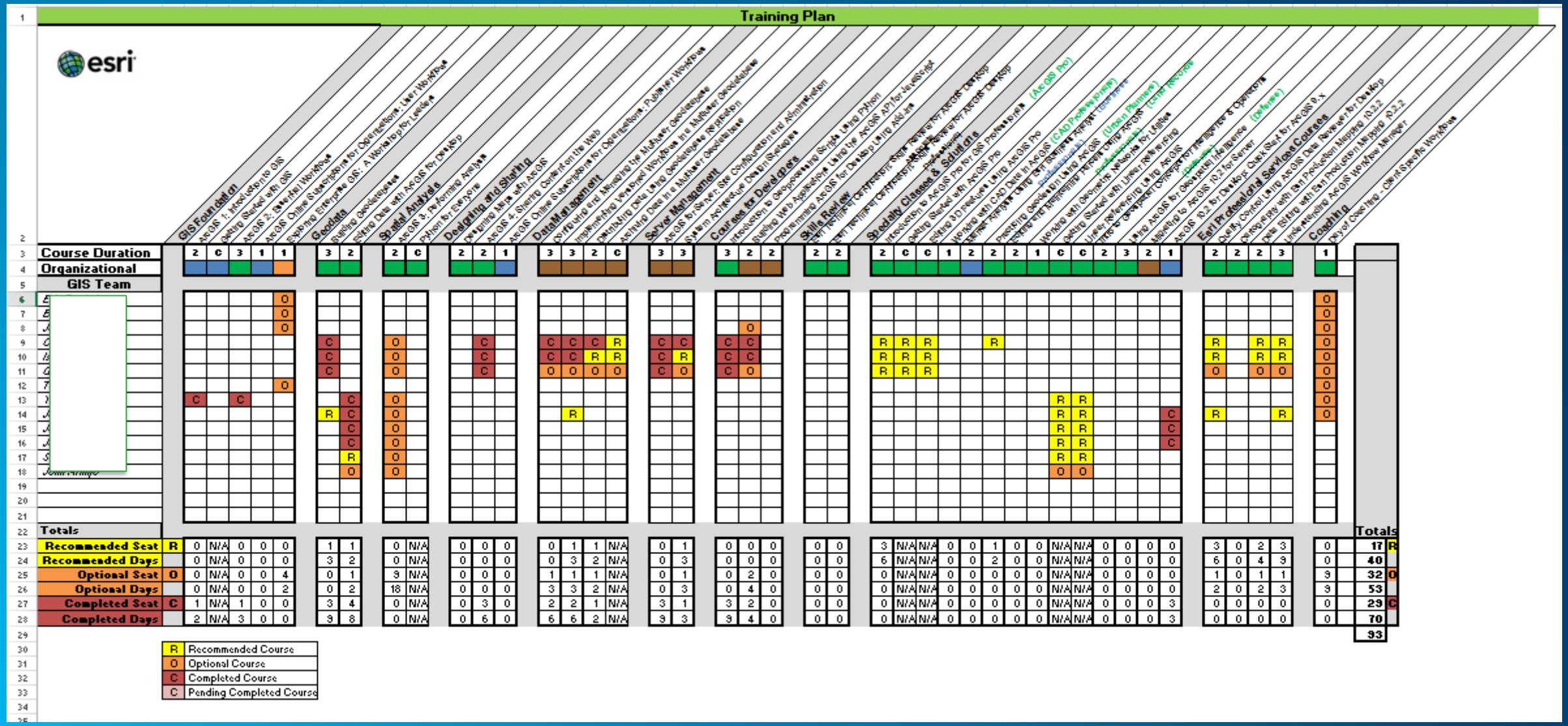
- Getting Started with GIS
- Finding Geographic Data in ArcGIS
- Maps and More: Discover the Living Atlas of the World
- Telling Your Story with Esri Story Maps
- Creating Dynamic Maps Using Esri Maps for Office

Training Curriculum



Provide staff with the skills needed to gain greatest ROI from your Esri Platform

Training Plan - Sacorecard



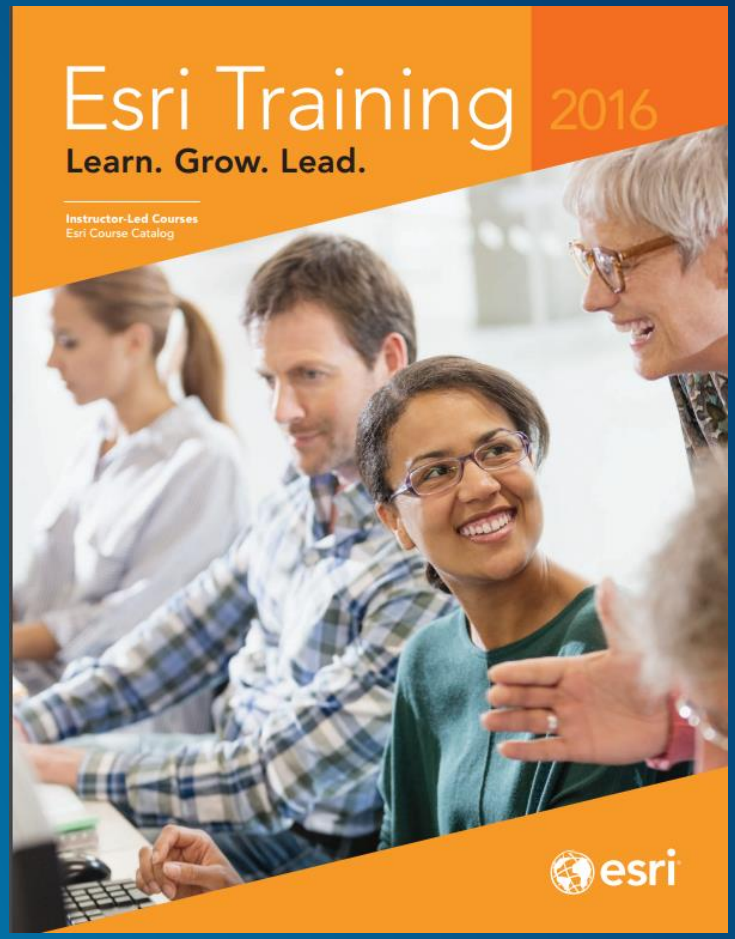
Training Web Site

Everything in One Place

When we try to pick out anything by itself, we find it hitched to everything else in the Universe.

~John Muir

Training | Instructor-led



Benefits:

- **Interactive**
- **Peer-to-peer learning**
- **Hands on exercises**

Delivery:

- **In a Esri Training Facility (14 in the U.S.)**
- **Online (virtual classroom)**
- **Your facility (on your infrastructure or mobile lab)**

Training | Coaching/Custom

Coaching

- **Best practices**
- **Agency tasks & specific workflows**
- **Student application using a copy of client data**

Full Custom Class

- **Unique and specific to organizational needs**
- **Can include pieces from existing courses**
- **Change in delivery method (remove exercises)**

Esri's MOOC Program

Online Courses on How to Apply Geography for a Better World

The Location Advantage : April 12, 2017 - May 22, 2017

Going Places with Spatial Analysis: April 12, 2017 - May 23, 2017

Do-It-Yourself Geo Apps: Sept 6 – Oct 3, 2017

Earth Imagery at Work: Sept 6 – Oct 17, 2017

Millions of adult learners around the world use massive open online courses (MOOCs) to expand their horizons and advance their careers. The MOOCs described here are offered by Esri, as well as leading university partners that use Esri's ArcGIS platform.

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THE
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