

Adoption Strategies: Preparing Your Organization for GIS

Michael Green

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Principal Adoption Strategy Consultant, Esri
MBA. Emphasis in GIS.

- 20+ year track record of business management and strategy planning
- Experienced working with various sized organizations plan, manage, and sustain change through executive sponsorship, effective communication, coaching, and enablement.
- Partnered with large organizations, small departments, and many other organizational sizes in between. Industries include State and Local Government, Transportation, AEC.
- Brings creativity, forward thinking, business-oriented perspectives that attracts senior leadership to vocally advocated for geospatial solutions.
- GIS enthusiast



Education and Professional Certifications:

BS Business. Administrative Management – Cal Poly Pomona | MBA, GIS Emphasis – University of Redlands

Prosci Certified Change Practitioner, TRACOM Social Styles Certification, TRACOM Resiliency Certification, TRACOM Agility Certification

Agenda

- Why is a People oriented Adoption Effort Important?
- Organizational Perspective
- Practical Tips for Successful GIS Implementation and Sustaining Change

Geospatial System Components



People



Process



Data



Technology

Organizational Change Management



People

Process

Data

Technology



People

A structured approach



IRL – In Real Life

Leadership doesn't know what GIS is / does.

We stop what we're doing, build what they ask for, and they don't use it.

Our user complaints are really high.

Asset Management (or other Dept.) is not on board.

Six departments are now using GIS. And each one is doing it different.

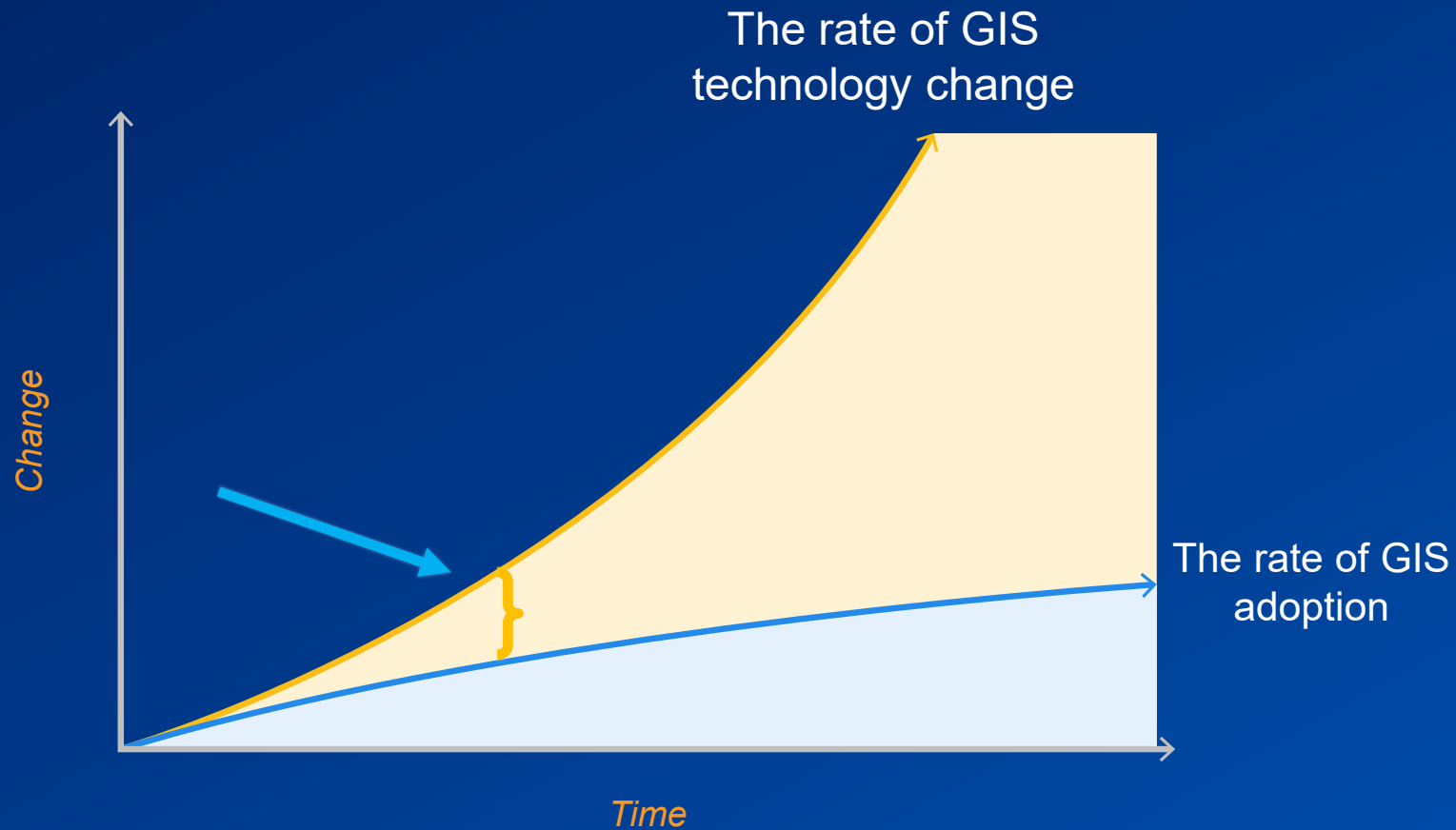
I thought I had leadership support, but there is no action.

They won't let go of ArcMap

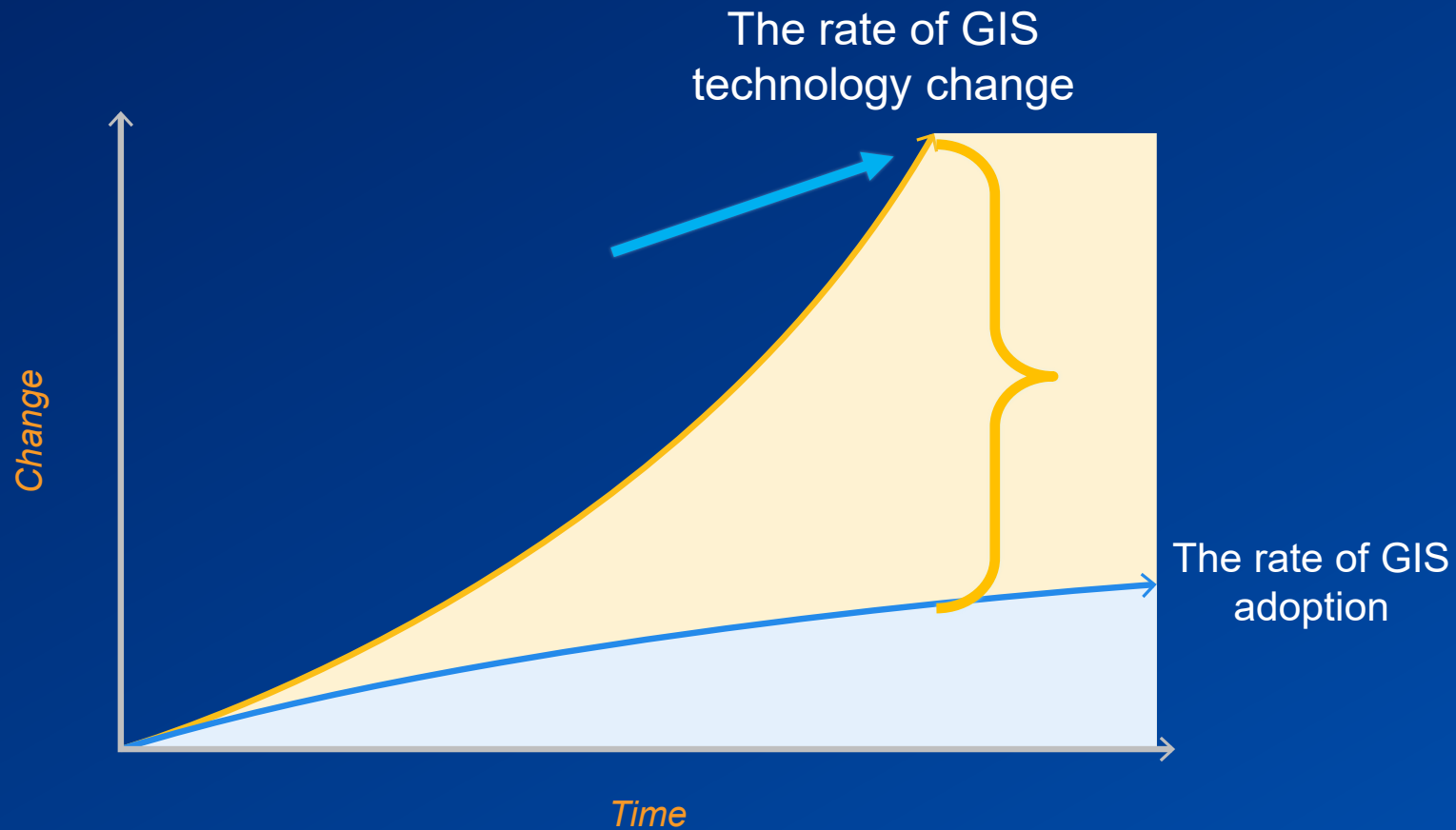
We tried that six years ago - didn't work.

We'll have to change our process and workflow.

Technology change vs. organizational adoption



Technology change vs. organizational adoption



People-focused adoption benefits



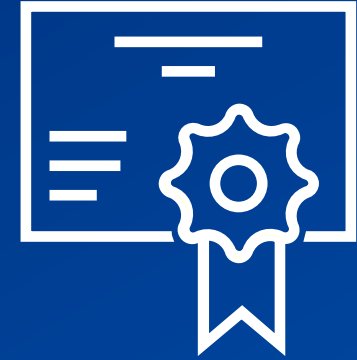
Faster Adoption

Individuals have the willingness and knowledge needed to quickly adopt new technology workflows.



Broader Adoption

The number of new technology users consistently grows to meet or exceed adoption targets.



Higher Proficiency

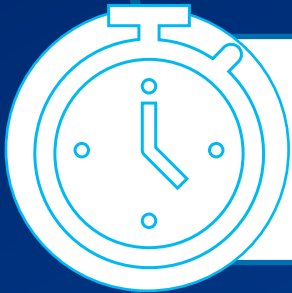
Users efficiently produce the expected output and find new ways to apply ArcGIS capabilities.

Impacts of People-Focused Change Management



2X

More likely to stay on or under budget



5X

More likely to stay on or ahead of schedule








6X

More likely to meet or exceed project objectives

Geospatial Program Framework



Business 	Governance 	Systems 	Engagement 	Capacity 
Strategy & Executive Sponsorship	Organization	Well Architected Framework (WAF)	Awareness & Promotion	Knowledge & Skills Development
Investment and ROI	Policies & Standards	Innovation & Modernization	Communication & Collaboration	Building Capabilities
Value & Alignment	Processes & Procedures	Data & Information Product Management (SOR)	Adoption	Human Capital Management (HCM)
Initiative Prioritization	Controls & Metrics	Insights & Analytics (SOI)	Culture	GIS Patterns of Use
Solution Portfolio (SOE)	Delivery & Operations	Web GIS Operations & Management	Advocacy	Leadership Development

Geospatial Strategy Overview

1. Mission *(How to define success)*

To build, maintain, and proactively support a comprehensive Enterprise Geographic Information System that promotes information sharing and the effective use of geospatial technology for the benefit of our partners, our customers, and our community.

Guiding Principles

Self-sustained | Cost Effective | Customer Focused | Open | Innovative

Goals and Outcomes

- Establish and maintain a modern Enterprise GIS infrastructure
- Encourage and enable innovation
- Provide a trusted, authoritative source of geospatial information
- Enable collaboration between partner agencies and the public
- Provide easy and intuitive access to information

2. Value Proposition *(The value delivered to stakeholders)*



All - Improves access to maps, apps and analysis to Residents, Elected Officials, Partners, Managers, Analysts, and End Users; promotes collaboration.



Managers – Improves data integrity by empowering staff to edit and update their own data; enables access to cross dept. information



Analysts - Improves self-service to conduct repeatable or ad hoc spatial analysis with a deeper level of insight and decision support



End Users- Enables end users throughout the consortium to access maps, data, field information, and other authoritative content on desktop or mobile devices in real-time, increasing productivity and lowering costs.

3. Strategy *(How to achieve success)*

Technology

Implement a redundant enterprise geodatabase
Deploy highly available development, test, and production environments
Transition to WebGIS workflows to deliver geospatial solutions
Leverage new technical capabilities to support business needs

Outcomes

Establish a modern Enterprise GIS infrastructure
Improves access to maps, apps, and analysis
Encourage and enable innovation
Expands analytic and real time capabilities to the Consortium

Process

Replace traditional custom first approach with COTS first
Democratize the management of authoritative data
Provide access to self service mapping portals, data, and services
Formalize the authoritative content publishing workflows

Outcomes

Maintain a modern Enterprise GIS Infrastructure
Encourage and enable innovation
Provide a trusted, authoritative source of geospatial information
Provide easy and intuitive access to information

People

Provide training and support for self-service tools to end users
Provide access to formal and informal training to LOJIC staff and partners
Establish workflows and knowledge transfer that encourages collaboration
Maintain business and technical governance and stakeholder engagement

Outcomes

Maintain a modern Enterprise GIS infrastructure
Enable collaboration between partner agencies and the public
Provide easy and intuitive access to information
Encourage and enable innovation

4. Roadmap *(Plan of action)*

Q4 2019 – Q1 2020

Establish the Foundation

- Deploy high availability infrastructure
- Migrate from legacy to new system
- Establish new workflows
- Provide ongoing training and support
- Test new capabilities

Q1 2020 – Q3 2020

Build Capability

- Maintain Enterprise infrastructure (Engage with Premium Support)
- Real Time Workshop and Training
- Geoanalytics Workshop and Training
- Routing support
- Dashboards Workshop
- Enable self service tools and security

□ High Value

□ Quick Wins

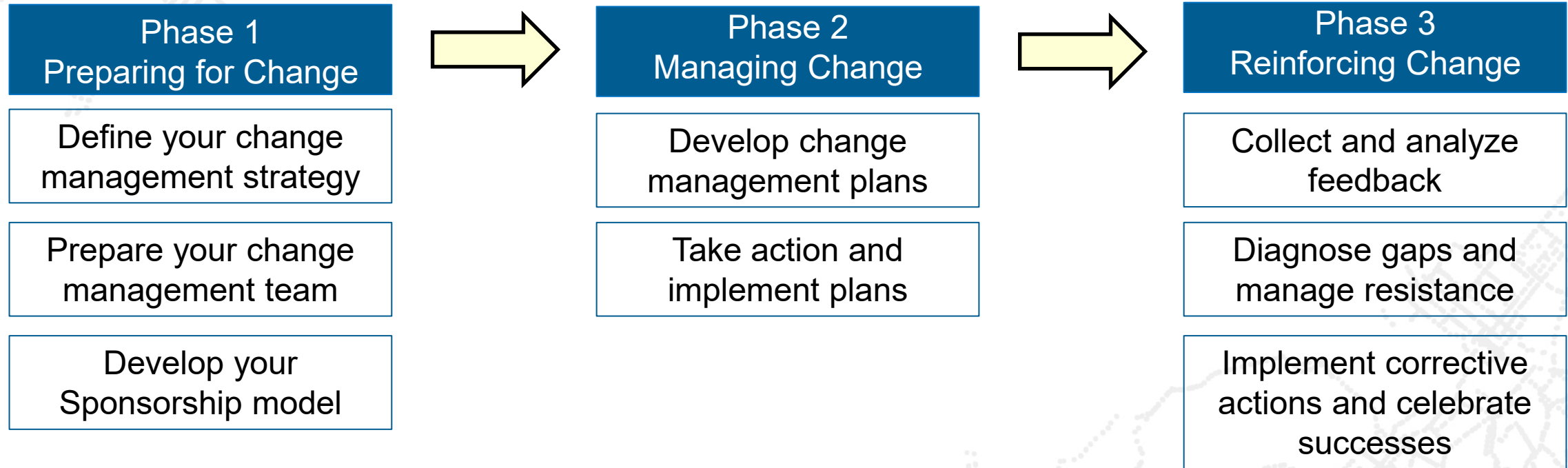
Q3 2020 – Q1 2021

Extend Capability

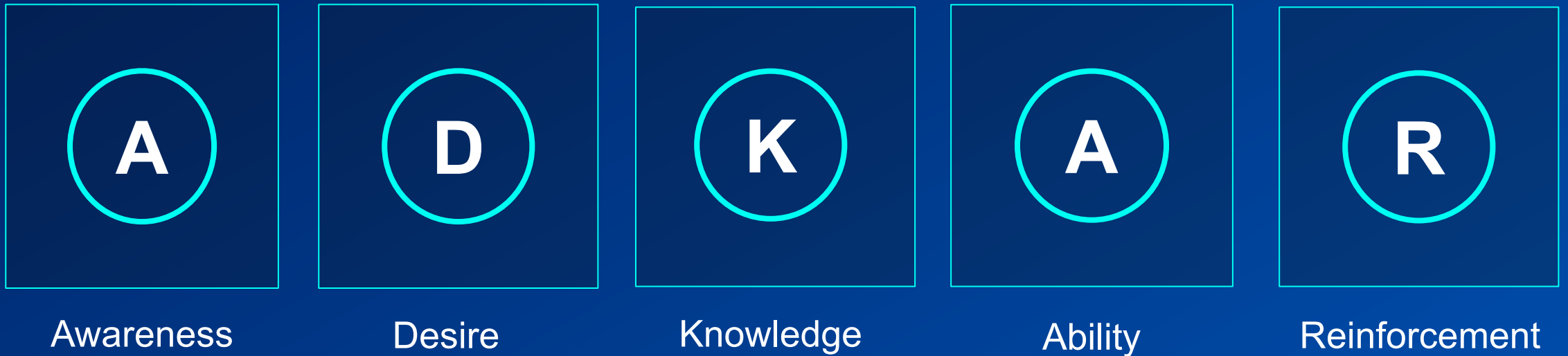
- Begin upgrade planning
- Prototype geoanalytics solutions
- Prototype real time solutions
- Provide ongoing training and support
- Automation and scripting support

Prosci three-phase change management process

Ability to listen, communicate with people in ways they understand, to develop good relationships



Driving ArcGIS adoption through individual adoption. . .





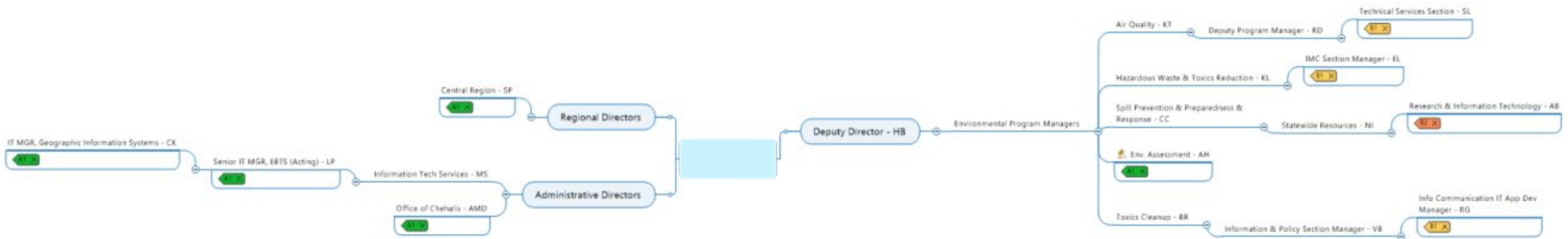
Success - Outreach

Sponsorship and Communication



Advocacy

Advocacy





Communication Components

Senders and Audiences

Key Messages

Various Channels of Communication

Feedback Channels

Alignment of activities and communications

Sharable Communication Tools

Metrics of Success





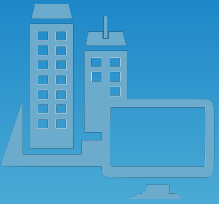
Success – Perceived Value

Visibility



Visualize

Mapping and visualization



Understand locations and relationships with maps and visual representations

Data management



Collect, organize, and maintain accurate locations and details about assets and resources

Monitoring



Track, manage, and monitor assets and resources in real time

Analyze

Design and planning



Evaluate alternative solutions and create optimal designs

Analytics



Discover, quantify, and predict trends and patterns to improve outcomes

Decision Support



Gain situational awareness, and enable information-driven decision-making

Share

Constituent engagement



Communicate and collaborate with citizens and external communities of interest

Sharing and collaboration



Empower everyone to easily discover, use, make, and share geographic information

Field mobility



Manage and enable a mobile workforce to collect and access information in the field

Crafting Business Outcome Statements

Minimize
or
Increase

Amount

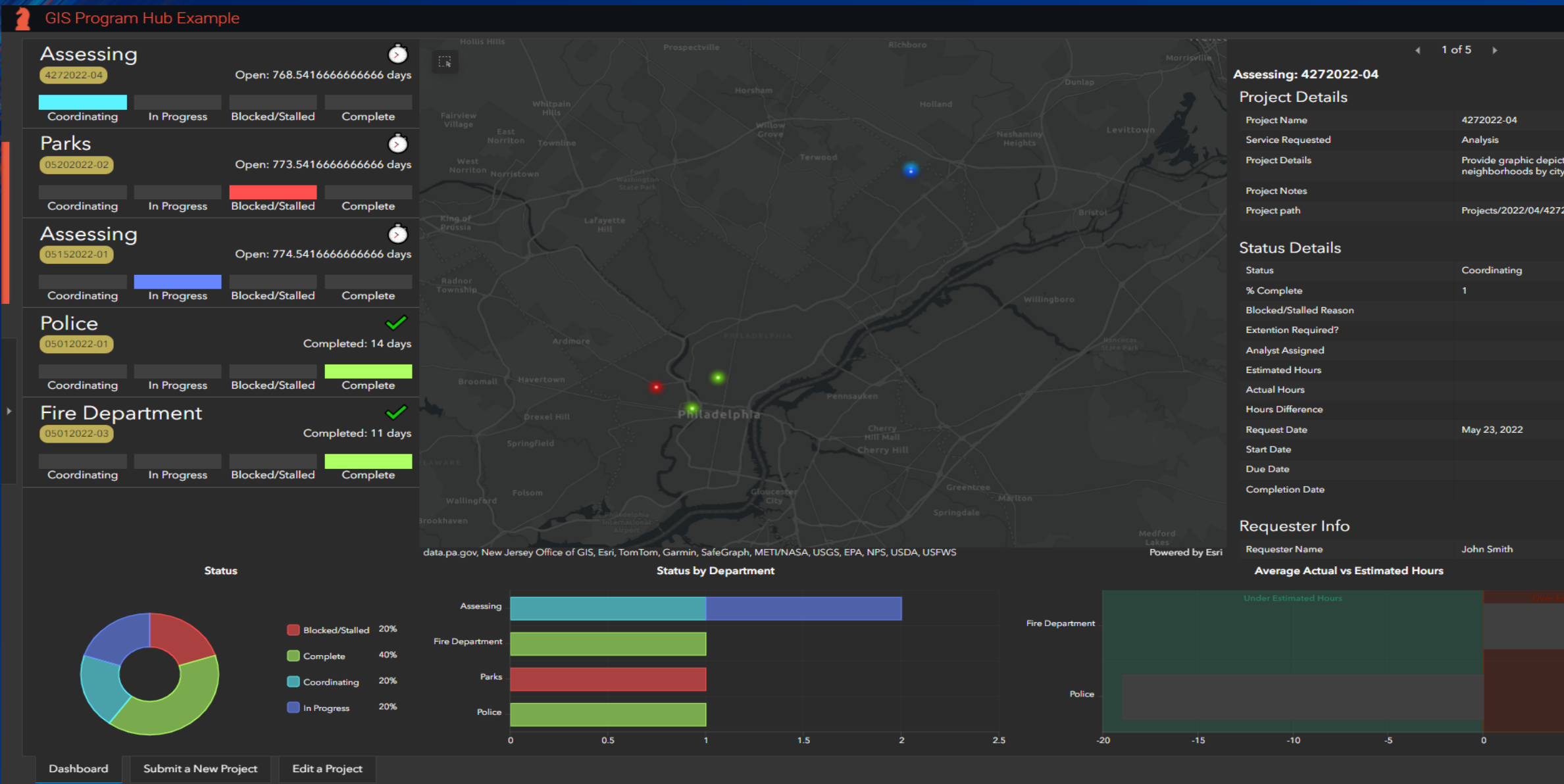
Number

Time

Likelihood

Frequency

Risk



Like what you see? Make your own version using these resources: Copy this dashboard ([Link](#)) & Download the S123 XLS Form ([Link](#))



Geospatial Strategy

Initiative Progress

Strategic Theme

None

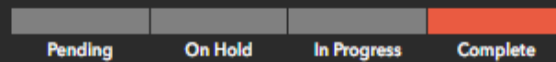
Status

None

Define Project Tracking Process

Build Capacity

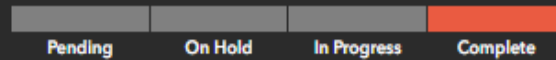
Establish a process for tracking initiative progress.



Workforce Development

Build Capacity

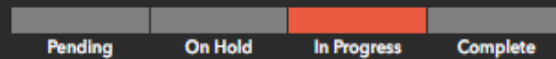
Establish an organization knowledge hub to showcase and promote training resources and opportunities.



Establish and Support Geospatial Community of Practice

Build Capacity

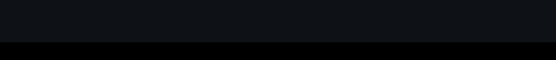
Empower the workforce to build and expand GIS knowledge through a community of practice. Find GIS power users and leaders within the organization to lead it.



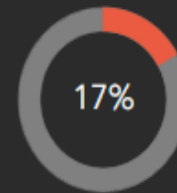
Qualify Automation Opportunities

Build Capacity

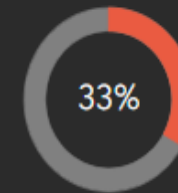
Determine which workflows have potential for automation and conduct an estimated level of effort to accomplish.



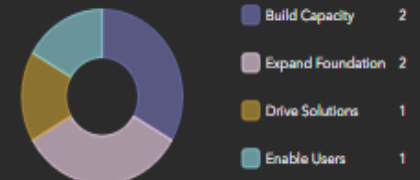
Initiatives In Progress



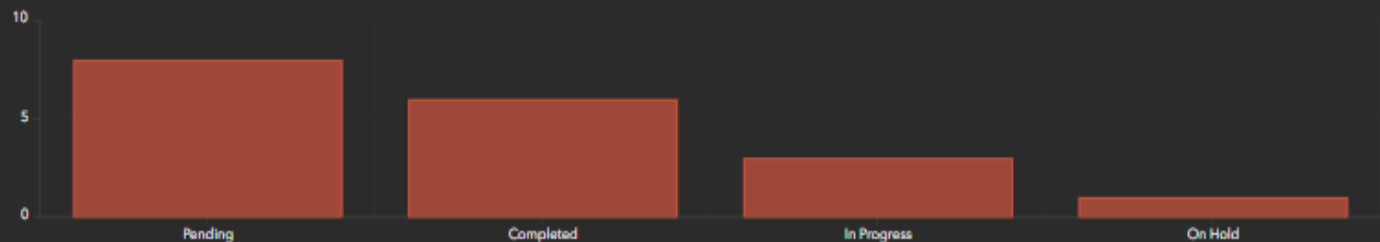
Completed Initiatives



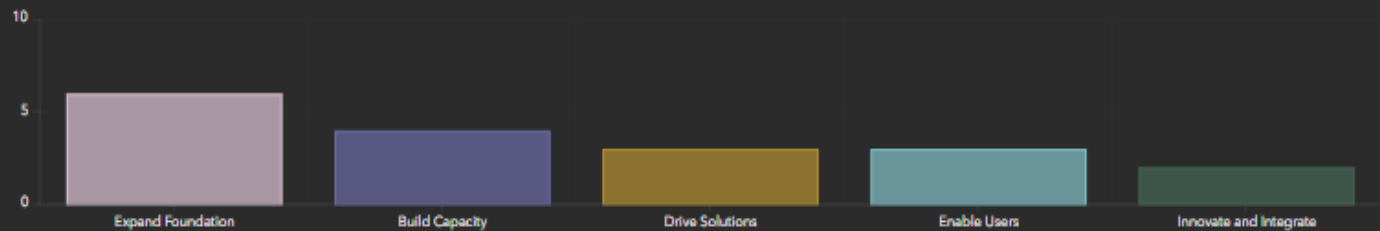
Completed Initiatives by Strategic Theme



Initiatives by Status



Initiatives by Strategic Theme



Departments Supported

5

Pending Requests

5

62.5%

In Progress Requests

2

25%

Completed Requests

1

12.5%

Search...	
Technical Support: License Elevation	
ArcGIS Mission	In Progress
Public Safety	
Data Request: ETL	
Traffic Operations	Pending
Product Request: Map	
Helicopter Landing Zones	Pending
Public Safety	
Technical Support: Access Issue	
Data	Pending
Public Safety	
Technical Support: Account Creation	
ArcGIS Enterprise	Pending
Customer Care	
Service Request: Training	
Capability Presentation	Pending
Field Operations	
Technical Support: Software Issue	
ArcGIS Insights	In Progress
Human Resources	
Product Request: Map	
Helicopter Landing Zones	Complete



Success – Sustaining Change

Maintain Momentum





We're HUMAN!

Habits rule our behaviors!



Maintain Momentum

- **Reinforcement** – Success Stories, Feedback/Analysis/Actions, IS...DOES...MEANS
- **Metrics** – Scorecard of activities, Visible accomplishments, You Get what you Measure
- **Ownership by Leaders** – Feed them communication content, Provide Apps for Leaders!
- **Proactive Resistance Management** – Identify one or two key influencers and work hard to earn their trust

Five Elements of Successful Change



AWARENESS

- What
- Why
- Risk of not changing



DESIRE

- WIFM
- Personal Choice
- WIFU



KNOWLEDGE

- How to change
- Training
- Learning



ABILITY

- Action in the right direction
- Demonstrated capability



REINFORCEMENT

- Sustainable action
- Resources
- Recognition and rewards



Resource Links

Success Stories

- [Organizational Support is Key to Initiative's Success](#)
- [Proactive, Unified Approach to Modernizing GIS](#)

Adoption Strategies Information

- [Informational Web page](#)
- [Brochure](#)

Workshops

- [Communicating & Collaborating for ArcGIS Success](#)
- [Building Organizational Agility and Enabling Change in a Geospatial World](#)
- [Creating Organizational and Geospatial Resiliency](#)

