



# UNCOVER THE POWER OF YOUR DATA WITH A SYSTEM OF ENGAGEMENT

Let location intelligence drive your agency to new heights.



# TRANSFORM YOUR ORGANIZATION WITH LOCATION INTELLIGENCE

High-performing organizations are increasingly turning to the power of information and a location intelligence strategy to encourage collaboration and make better-informed decisions. By empowering their workforce with the information, spatial data, and applications they need to more effectively carry out their daily tasks, transportation agencies are transforming themselves into smarter organizations.

These are some of the types of organizations that are benefiting from the Esri System of Engagement (SoE) offer:

- Departments of transportation and road administrations
- Public transport and transit agencies
- Airports and aviation administrations
- Ports and maritime administrations
- Railways and railroads



# ESRI'S SYSTEM OF ENGAGEMENT

The real value of technology comes when everyone in an organization feels empowered by having access to authoritative information and applications, allowing them to work more efficiently and make better decisions. A system of engagement is designed to deliver the maps, apps, and analytics your organization needs to transform the workflows of its workforce through digital tools such as operations dashboards, field mobility tools, information inquiries, and data collection tools. The return on investment comes from improved performance and enhanced communication and collaboration across departments.

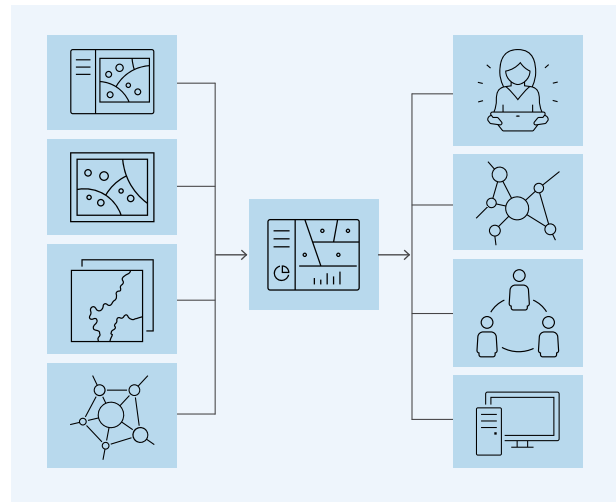
Location plays a critical role in everything the transportation industry does. A system of engagement founded on geographic information system (GIS) technology provides the platform to organize your data, making it easy to understand, analyze, and act on.



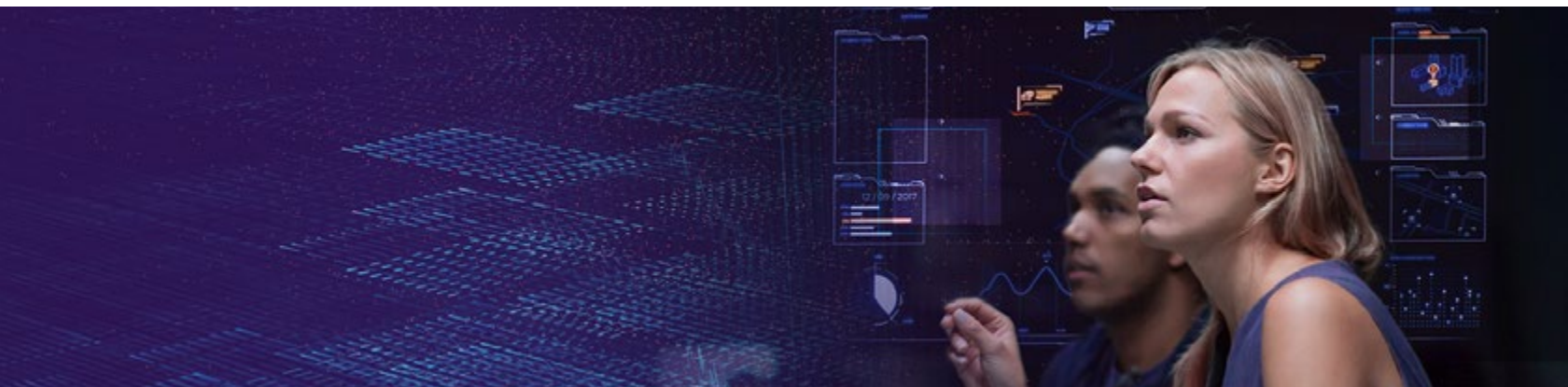
# OPEN UP THE POSSIBILITIES WITH LOCATION

A system of engagement is designed to bring together information from many different business systems and, through location intelligence, help agencies solve unique business challenges. The real advantage comes from providing user-focused applications that enable everyone within an organization to access the information they need to more effectively carry out their daily tasks. Location intelligence helps to deliver the information in context, so users can better understand and analyze the information and expose new insights for better decision-making.

By organizing the information in an easy-to-access location, an SoE helps break down the barriers and establish an environment of collaboration for your entire organization.





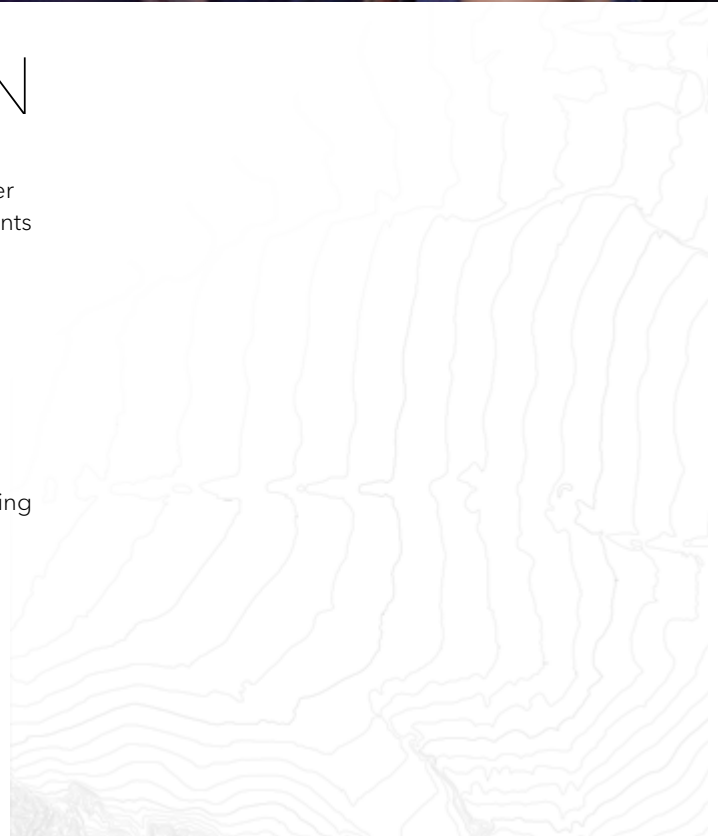


# BEHIND THE DESIGN

Esri's System of Engagement offering was specifically created to center on the user's needs within the organization. This approach complements an organization's investment in its larger business system (system of record) by providing convenient access to data as well as easy-to-use applications that empower collaboration.

## Benefits of Esri's System of Engagement

- Builds on existing IT and GIS systems
- Defines the maps and apps that are needed in your organization
- Allows users to have one access point on any device at any time
- Encourages greater collaboration and enables better decision-making





## USER STORY

# LOUISIANA DOT AND DEVELOPMENT

The system of engagement for the Louisiana Department of Transportation and Development (DOTD) is built on a Web GIS framework that is fueled by business system data. It provides DOTD with a single enterprise destination where workers and partners can consume, analyze, and contribute to enterprise data through a series of configured applications, all part of the SoE platform. By applying the SoE framework, DOTD strives to

- Improve access to technology and data.
- Enhance workflows and decision-making processes.
- Increase transparency.
- Strengthen collaboration.
- Broaden communication.

The DOTD's SoE platform leverages the currently deployed enterprise GIS environment and existing business systems to deliver powerful applications designed to make everyone in the organization be more productive and effective. A system of engagement is designed to help an agency make a smooth transition to a more information-enabled environment, one where innovation is a continuous process and better decision-making is the rule.

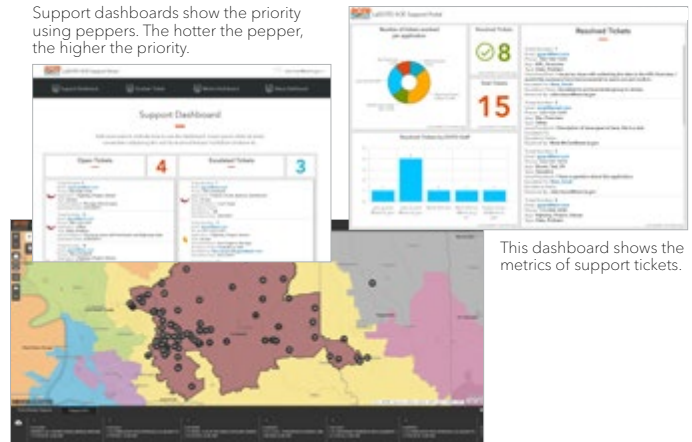
## USER STORY

# DEFINING SUCCESS AT DOTD

*"In less than a year into the System of Engagement project, the DOTD and Esri team produced vast enhancements to the infrastructure required to support our operations. We have already placed over 15 apps into production and are on track to place over 15 additional apps into production before the end of year one. It's been a real partnership, and DOTD is excited about what the future holds for the System of Engagement Louisiana."*

**Brad Doucet, Director of Enterprise Support Services,  
Louisiana Department of Transportation and Development**

Support dashboards show the priority using peppers. The hotter the pepper, the higher the priority.

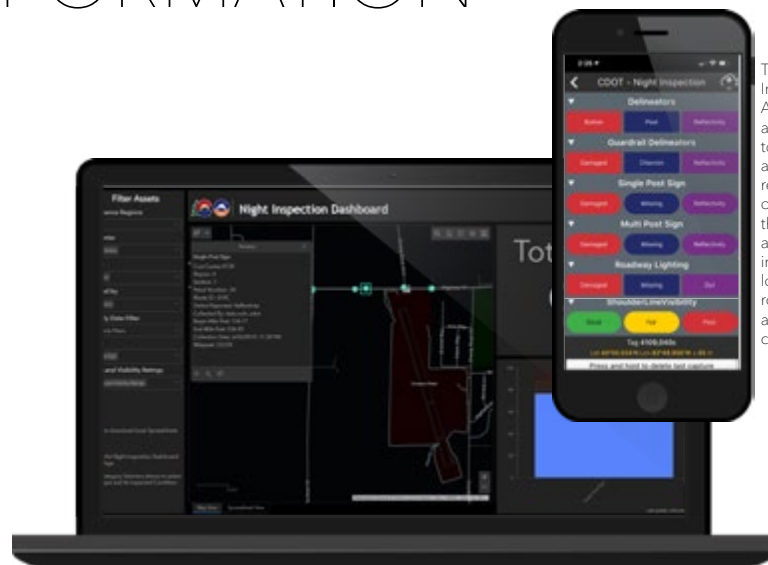


This dashboard shows the metrics of support tickets.



# DIGITAL TRANSFORMATION

By engaging your non-technical users and understanding their individual needs, you create the building blocks for creating an enterprise system of engagement that provides users with modern, useful, and personalized applications. In return, the organization establishes a sustainable framework for effective data governance, security, and knowledge sharing across organizational boundaries.



The Night Inspection Mobile App interface allows inspectors to collect any assets that are not reflecting or giving off light at night that should. This application allows inspectors to mark location, direction, route, cost center, and time of collection.

The Night Time Inspection Dashboard provides the ability to see a specific asset along a route and the information collected.





## USER SUCCESS

# COLORADO DEPARTMENT OF TRANSPORTATION

*"The Esri System of Engagement is breaking down data silos and providing a holistic view of the transportation network. Having the opportunity to look at all data is inspiring new, creative, and cooperative problem solving. By using the common language of geography, we're really getting down to the what, how, and where. And because we're continually enhancing content and bringing in additional data, we're enjoying unprecedented accuracy. Our solutions are far more dynamic and interactive, allowing personnel to drill right down to the granular level."*

**Barbara Cohn, Chief Data Officer, Colorado Department of Transportation**



CDOT's Traffic Operations Dashboard pulls in data from the National Weather Service. This was reporting fire weather watch for Eastern Utah and Western Colorado. The conditions were critical for forest fires started by man-made sources or weather events.



The Avalanche Mitigation solution is looking at a road closure at Loveland Pass in Colorado, which was closed for 16 1/2 hours due to an avalanche that was triggered by explosives.



Bridges can be filtered by Maintenance Supervisor area 1-J-1 and also filtered by the condition.



# THE ESRI APPROACH

A successful approach to implementing an SoE requires preparation and intention. Esri's proven System of Engagement offering leads organizations through a process of understanding, planning, and action to achieve success.

## **Understand**

SoE analysis consists of two tracks: a business track and a technical track. The business track is designed to understand what tools and information individuals need to do their job better. These tools are translated into apps that form the foundation of the system of engagement design.

The purpose of the technical track is to understand current and future technology goals, identify existing systems in place, detect integration patterns, assess data availability, and determine any infrastructure constraints.

## **Plan–Prioritize and Design**

With the apps defined and the existing technology ecosystem understood, a systematic road map is built to deploy the apps. Each app is rated based on two criteria: the value of the app to the organization and the level of effort required to deploy each app. By prioritizing the apps that have high value and require a low level of effort, useful tools are put into the hands of users early in the process.

## **Act**

The SoE approach keeps end users involved throughout the deployment process. User representatives are part of the “app teams,” which are formed for each individual app. An agile or iterative approach is utilized to deploy each app.



# EMBRACE FUTURE-READY TRENDS

## **Approach—Define Priorities and Needs**

Drawing from your goals and objectives—whether they are about improving operational effectiveness, establishing a more resilient and sustainable community, or promoting health and safety—you must build consensus on your priorities.

## **System—Adopt Technology, Data, and Repeatable Patterns**

Your system of engagement platform is designed with Esri's geoenabled solutions, spatial data, apps, and core technology that will be customized for your organization's needs. We will take you on a guided journey to explore the possibilities for your data with our technology.

## **Process—Leverage Proven Methods for Implementation and Success**

Let Esri guide you through an assessment of internal readiness, gaps in resources, and training needs to establish milestones and timelines for your smart deliverables. By working together, Esri can provide insight into the best practices through our geospatial approach.





# FUTURE SUCCESS STARTS WITH YOU

Esri's geospatial approach can help you understand your data through information-driven maps and applications. See where you excel and discover where you can improve performance and efficiency to lead your organization to a sustainable future.

To learn more about Esri's System of Engagement offering,

visit [go.esri.com/SoE](https://go.esri.com/SoE).





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