

# Location intelligence for government

Make evidence-informed policy and administrative decisions using location-based data





Improve governmental effectiveness



Incorporate location intelligence into decision making processes



Enable real-time collaboration among your teams

### The Issue

Government agencies rely on accurate, data-based insights to improve decisions and policies. Such insights strengthen their ability to serve by guiding decisions that affect the public in virtually every area of government - national defense, public safety, social welfare and equity, public finance and tax, and the environment. While there are many opportunities to include location in analyses to help shape decisions and policies, this type of data is underutilized at many agencies due to a lack of geographic analysis knowledge and perceived complexity.

Fortunately, location (or geospatial) data is increasingly available in the public domain, in enterprise data repositories and from real-time sensor data. When public sector leaders and staff know **where** things are happening, they find it easier to understand **why** they might be happening. With location-based data, for example, governments can more rapidly:

- Identify underserved neighborhoods.
- Uncover the location of fraudulent or criminal activities.
- Optimize services in flood-prone areas.
- Expedite getting resources to the right place in an emergency.

## The Challenge

**Limited understanding and privacy concerns.** Senior government leaders don't fully recognize the advantages of integrating location-based intelligence with traditional data decisions. And without a transparent, explainable analytics solution, public privacy concerns are likely to overshadow the potential benefits of using geospatial data.

**Diverse, inconsistent data quality and formats.** If agencies lack appropriate analytics tools, they may need to hire people with specialized data preparation and geographic information system (GIS) skills to access, assess and integrate diverse location data with existing data formats and systems.

**Disjointed teams and lack of planning.** Analytical and GIS teams often react to ad hoc queries from business users rather than using location data to improve overall decision making. A self-service solution designed for team collaboration across skill levels helps solve this problem.

## Our Approach

Combining location intelligence with traditional data - and data visualization techniques - gives governments a broader view of issues to make evidence-informed decisions. SAS helps you:

- Integrate location data with traditional sources. Data management capabilities from SAS rapidly combine traditional data with geospatial data to add geographic context and unique insights.
- Empower users with analytics, data visualization and selfservice reporting. SAS® is explainable, repeatable and fast - for all types of users. With our visual interface, augmented analytics and embedded insights, anyone can delve into the data and share meaningful results.
- Quickly identify and address location-specific issues. Models
  that incorporate location information, such as the nearest
  emergency service or pollution statistics, highlight the "where"
  dimension to provide a broader context of situations. In turn,
  governments can respond faster and more effectively when
  deploying resources, siting emergency services, assessing
  staffing and educational needs, etc.
- Foster collaboration. Through flexible, shared workspaces and interactive reports and dashboards, everyone from business analysts to data scientists can collaborate in real time to solve problems.
- Ensure data privacy and transparency. Increase public trust using advanced analytics in an open, transparent platform.

#### The SAS® Difference

Combining location data with predictive analytics helps government agencies improve effectiveness by making better use of their data and resources. SAS provides:

- Better preparedness through predictive analytics. SAS evaluates demographics and other metrics for geo regions (cities, neighborhoods, water bodies, etc.), then determines the likelihood of similar outcomes in other regions so you're ready to respond to all types of situations.
- Improved effectiveness and efficiency with automation.

  Low-code/no-code functionality and Al-based automation get teams up and running quickly to build machine learning models.

  Beginners can get insights from location data with just a click.
- Integrated support across the analytics life cycle. From a secure, governed platform, you can access data to prepare it for analytics; explore the data; build, train, deploy and monitor models; then share insights via easy-to-understand reports.
- A real-time, integrated view across the enterprise. Use SAS to combine all types of data and sources for analysis, then publish insights using live data or with embedded data snapshots for data storytelling. Scale to as many users as needed.
- New insights from location data. SAS partners with ESRI to help you uncover hidden patterns, trends and relationships in the data, solve problems in the context of location, and make better predictions about outcomes.



Incorporating location intelligence into decisions helps government agencies plan with "where" in mind and respond quickly in times of disruption and uncertainty.

