



## FROM DATA TO INSIGHT

*In today's rapidly changing world, government leaders are responsible for addressing society's most critical and urgent issues, including climate change, land management, and public health delivery. They must make quick decisions on complex issues, with outcomes that profoundly impact the lives of citizens. Effective decision-making in this context requires not just data, but actionable insights. Governments must capture and integrate data, add context and visualization, and deliver it in real-time to decision-makers to achieve the actionable insights needed for sustainable social, economic, and environmental development.*

## THE POWER OF LOCATION DATA

At the heart of today's most urgent challenges lies a common factor: **location**. Whether it's managing natural hazards, optimizing agricultural output, or planning urban development—understanding the location context is crucial.

This geospatial information provides a unique perspective through which government leaders can view and address national priorities and issues. It can take a range of different forms from foundational data such as geological, topographic, cadastral, and hydrographic mapping that provides the critical contextual information, on top of which dynamic near-real-time data such as that provided from satellites, mobile phones, and sensors can be overlaid and understood.

By integrating geospatial information with statistical and other data from across sectors, such as public health, energy, transportation, and more, leaders can gain a comprehensive understanding of the challenges and opportunities facing their communities.



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## THE KEY ROLE OF THE UNITED NATIONS INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK (UN-IGIF)

Recognizing that countries need support in advancing the full potential of geospatial information and its application, the United Nations and the World Bank developed the Integrated Geospatial Information Framework (UN-IGIF). This framework provides a comprehensive and adaptable guide for enhancing geospatial capabilities, which is crucial for addressing national sustainable development priorities.

The UN-IGIF provides tools to support effective land administration, statistical data management, disaster management, climate resilience, digital transformation, and more. It is built upon and implemented through nine strategic pathways across three key areas: Governance, Technology, and People.



**GOVERNANCE**- Assisting countries to develop robust geospatial policies, governance structures, legal frameworks, and approaches to identify sustainable funding mechanisms to enable effective geospatial information management.



**TECHNOLOGY** - Promoting the use of common standards, interoperable systems, and innovative technologies to facilitate seamless data exchange across sectors and organizations, enhancing the efficiency and accuracy of data integration, analysis, and dissemination.



**PEOPLE** - Emphasizing the importance of engaging stakeholders and building the skills and expertise of the workforce, the UN-IGIF provides resources and guidance for effective communication and collaboration with local communities, government agencies, and other stakeholders who have a critical role in managing geospatial data in the collective pursuit of meeting national development goals.



## KEY BENEFITS OF UN-IGIF

The nine strategic pathways provide crucial support for national development. By adopting the UN-IGIF, countries can leverage the full potential of geospatial data, facilitate informed decision-making, foster collaboration, and drive sustainable growth. The benefits of UN-IGIF are wide-ranging, enhancing government, the economy, and society:



**Government:** Improves policy and decision making, planning, innovation, service delivery, emergency response, and efficiencies across multiple agencies. Enhances management of land and water resources, infrastructure, climate, healthcare, transportation, security, and national development, leading to more effective, resilient, and responsive governance.



**Economy:** Boosts productivity, fosters innovative new products and services, improves transport and logistics, enables efficient resource management, drives economic growth, sparks innovation and technology advancements, and enhances profits, leading to a dynamic and thriving economy.



**Society:** Improves access to services, public health outcomes, standards of living, community development, environmental conservation, public safety, education, disaster preparedness, and social equity, fostering a more inclusive and resilient society.

Leaders are encouraged to leverage this powerful tool to navigate national challenges and steer their countries toward a more prosperous future.

## A STRONG RETURN ON INVESTMENT

Investing in geospatial information and infrastructure is an economically wise decision that has significant direct financial benefits. Many studies, including those by the World Bank, have shown significant returns on investment (ROI) of up to 250%. For example, improved disaster preparedness helps to minimize recovery costs, while effective land administration can boost revenues.



Investing in geospatial information and infrastructure also provides many indirect benefits. It enhances the efficiency and effectiveness of citizen services, optimizes resource allocation and deployment, resulting in raised living standards. It improves environmental impact measurement and modeling, and enhances the sustainable use and management of natural resources.

When both direct and indirect economic benefits are considered, the UK Public Sector Geospatial Agreement demonstrated a very impressive 8:1 benefit-cost ratio.

However, without planned and coordinated data capture and sharing, geospatial data can become more costly for governments. Various departments and ministries might already be collecting location data for cadastral, defence, land administration, emergency management, or disaster response. If geospatial data and supporting technologies are not effectively shared between departments, it can lead to cost duplication and the inefficient use of resources.

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*The nine strategic pathways of the UN-IGIF*

## GETTING STARTED

To help you get started, the UN-IGIF provides guidance to build and strengthen geospatial information management through three key components:

**1. Overarching Strategy:** Sets the context for why geospatial information management is critical for sustainable social, economic, and environmental development.

**2. Implementation Guide:** Offers detailed guidance, standards, and recommended actions to implement the UN-IGIF to strengthen national geospatial capabilities.

**3. Country Level Action Plan:** Includes a recommended process and resource materials to help countries evaluate their current situation and develop specific plans tailored to their national priorities.

The early stages require minimal investment and enable the creation of a costed action plan or budget to focus the allocation of future resources. A costed action plan can also attract additional support and funding from philanthropic organizations, the World Bank, and other groups that help nations build geospatial capabilities to support digital transformation, disaster response, land administration, climate resilience, and other critical priorities. Given the broad benefits of the UN-IGIF, implementation can be funded as part of almost any national development program.

Many UN Member States are already using the UN-IGIF to strengthen geospatial capabilities and support national development, making it a tried-and tested approach.

To get started, visit <https://ggim.un.org/UN-IGIF/> to review the UN-IGIF materials and determine how your country can start the process today. By utilizing the UN-IGIF to improve geospatial information management and infrastructure, you will be better positioned to deliver the change your nation needs to improve people's lives, protect the environment for future generations, and deliver sustainable economic prosperity for all.