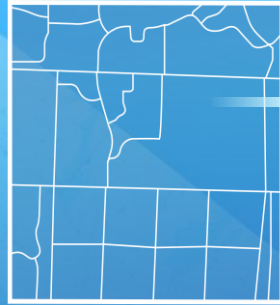


Boundaries



Key

EA Id	Area
1203501750071	42.3
1203501750072	34.8
1203501750073	26.9
1203501750074	51.2

Census Data

EA Id	Population	Male	Female
1203501750071	432	209	223
1203501750072	502	240	262
1203501750073	525	258	267
1203501750074	494	251	243

EA Id	Num HH	Avg HH size
1203501750071	89	4.9
1203501750072	98	5.1
1203501750073	102	5.1
1203501750074	85	5.8

Geography for the 2020 Round of Census

Linda Peters, Esri

lpeters@esri.com

**THE
SCIENCE
OF
WHERE**

Integration of Statistical and Geospatial Data

Global
Statistical
Geospatial
Framework
(GSGF)

Usable

Interoperable

Common Geographies

Geocoded Units

Fundamental Geospatial Infrastructure



Statistical Process Model (GSBPM)

Planning/
Pre Enumeration

Enumeration

Post Enumeration/
Dissemination

Specify
Needs

Design

Build

Collect

Process

Analyze

Disseminate

Evaluate

Quality / Metadata Management

ArcGIS | Common Patterns of Use

Mapping & Visualization



Understand locations and relationships with maps and visual representations

Data Management



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

Field Mobility



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

Monitoring



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

Analytics



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

Design & Planning



Evaluate alternative solutions and create optimal designs

Decision Support



Gain situational awareness, and enable information-driven decision making

Constituent Engagement



Communicate and collaborate with citizens and external communities of interest

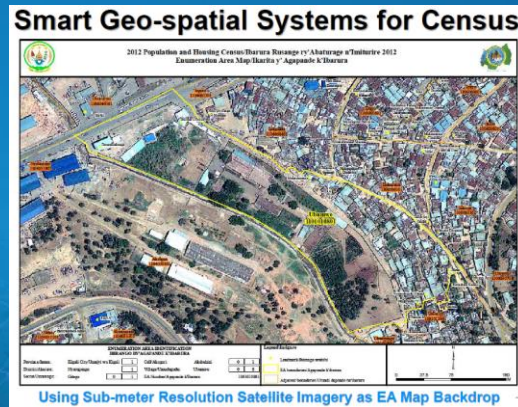
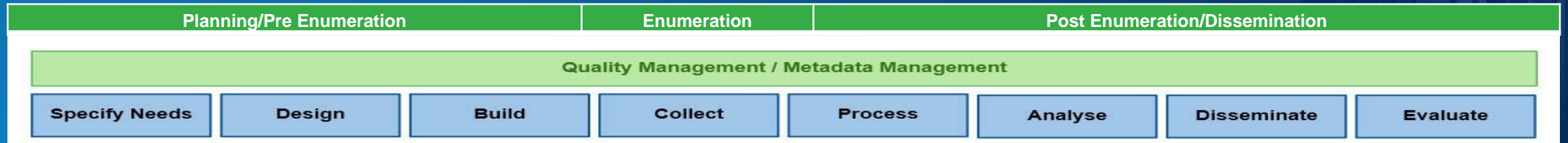
Sharing & Collaboration



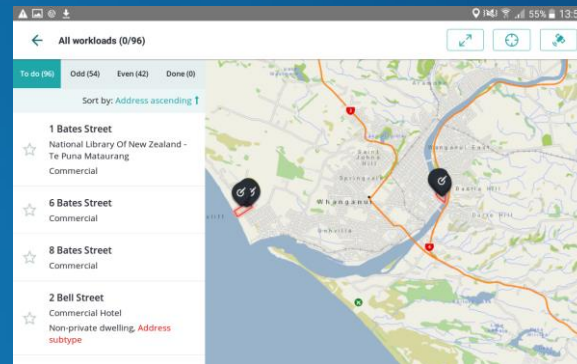
Empower everyone to easily discover, use, make, and share geographic information

Role of GIS in Official Statistics

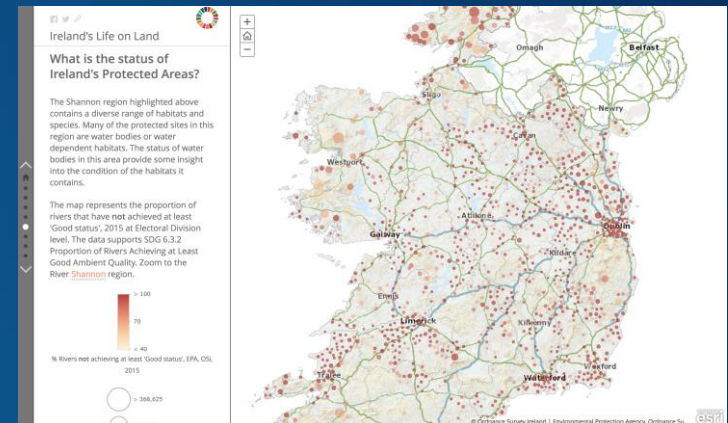
Generic Statistical Business Process Model (GSBPM)



Design and production of enumeration areas



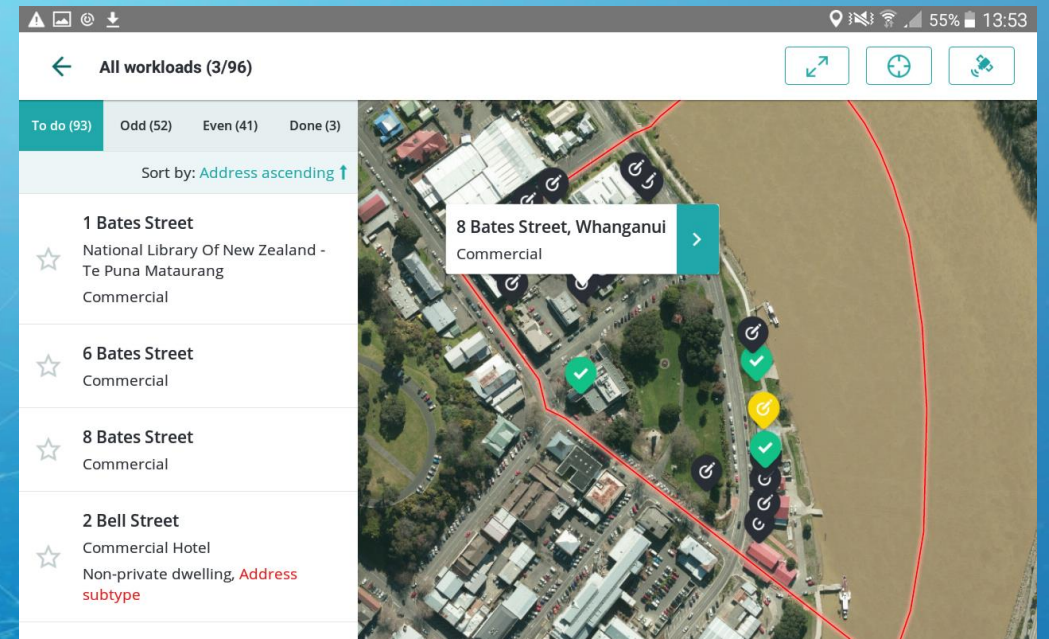
Data collection using Mobile devices, tablets and laptops



Census dissemination
Online thematic maps
Story Maps and more

Integration of GIS

- Create and maintain GeoDatabase
- Create efficient enumeration areas (EAs)
- Validate EA's
- Optimize site placement of field offices
- Optimize asset distribution
- Integrate Administrative Data
- Integrate Big Data
- Leverage EO and sensor data



Integration of GIS – Earth Observation Data

Update maps and EAs using imagery, change detection and more

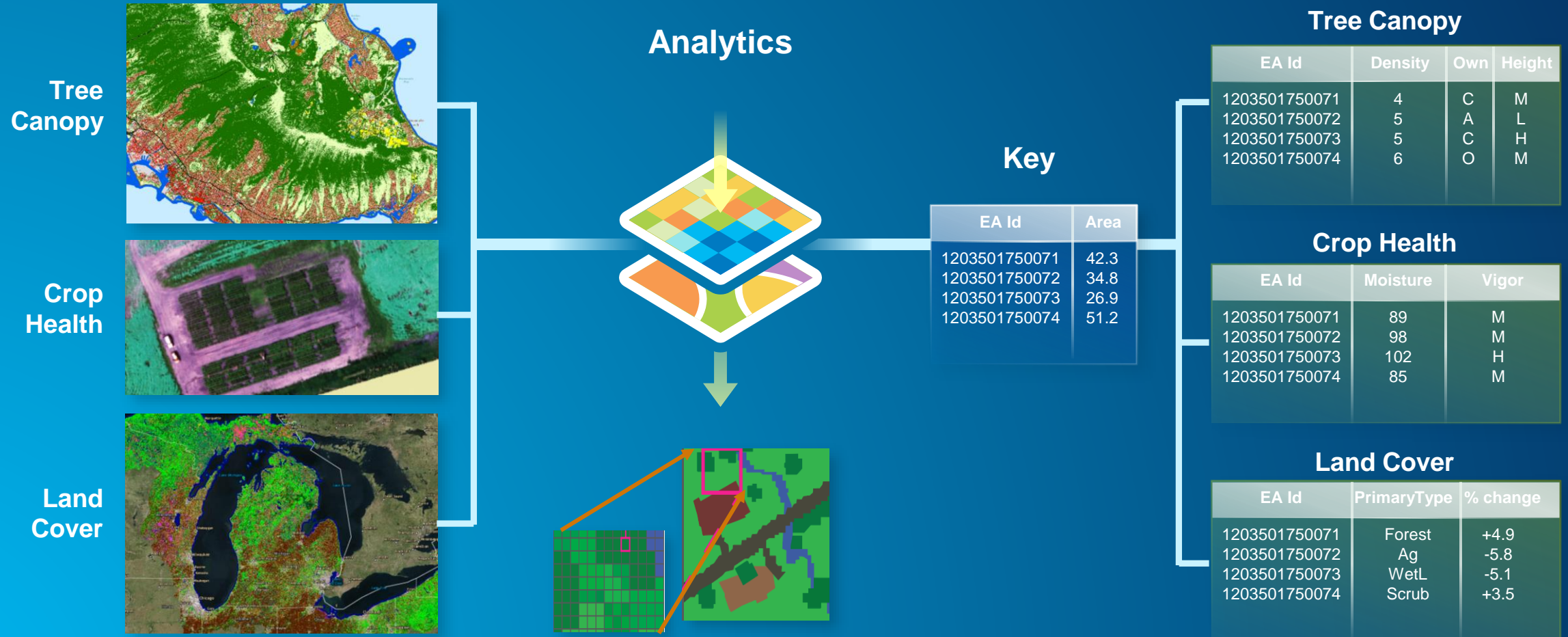


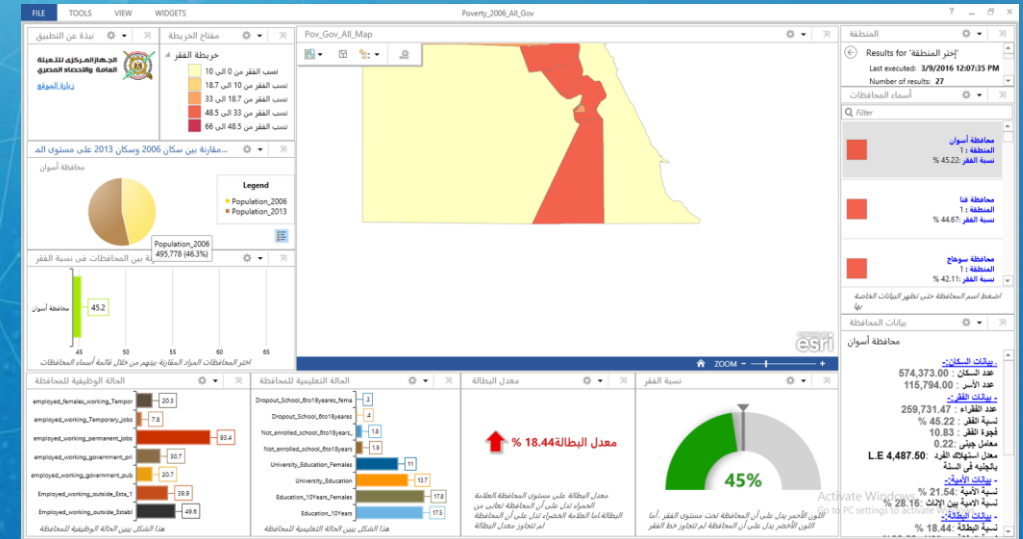
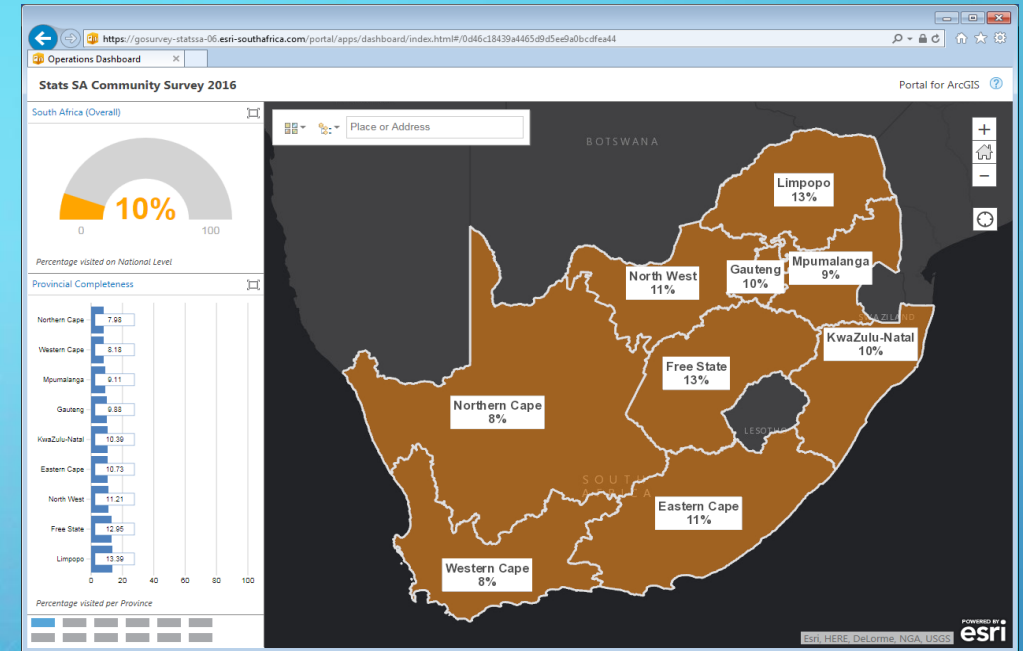
Image Integration and Machine Learning are Becoming a Fundamental Part of a Modern GIS

Integration of GIS in Field Operations



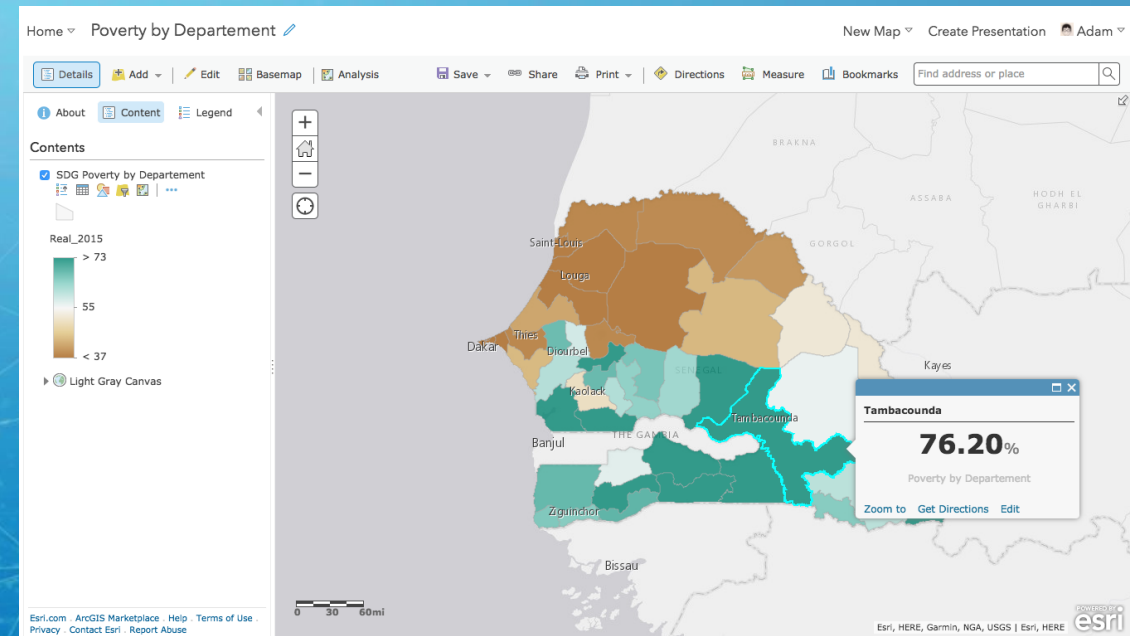
Integration of GIS in Field Operations Management

- Optimized workloads and routes
- Operational dashboards
- Monitoring of progress
- Real Time awareness of project status
- Real Time awareness of work/workers
- Project management oversight and identification of trouble spots
- Quality control and quality improvements throughout the process



Integration of GIS in Post Enumeration

- Incorporation of updates/changes
- Aggregation of data
- Tabulation of data
- Database archiving
- Creation of information products used to communicate census findings to other agencies and the public
- Dissemination of geographic census products including maps, reports, atlases, and interactive websites
- Marketing of geographic census products
- Outreach and education



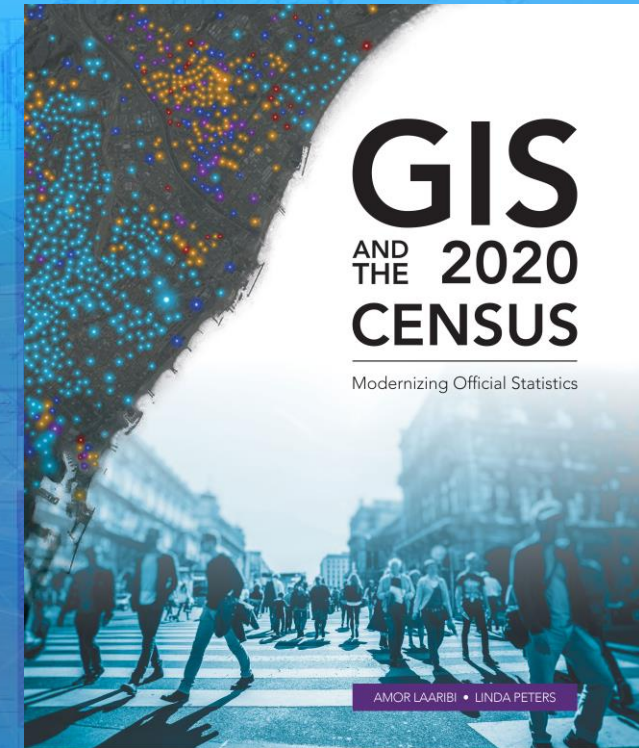
ArcGIS Platform for Official Statistics:



- Geodatabase
- Base map updates
- Map of enumeration areas
- Optimize, edit and validate EAs
- EO data integration
- Optimize assignments
- Census data model and web apps
- Survey design and testing
- Integration of Admin and Big Data
- Field data collection
- Field editing
- Workforce management
- Operations management
- Project management
- Data dissemination
- Thematic maps
- Online atlas
- OpenData
- Story maps
- Smart maps
- Other map information products
- SDG alignment and reporting

Esri's commitment to your success

- **Method** – new book to be published by Esri Press
 - GIS and the 2020 Census: Modernizing Official Statistics
- **Hands on**
 - Learn.ArcGIS.com lessons to help you with capacity building
- **Technology**
 - **Statistics Modernization Program**





ArcGIS

Industries

About

Support



Sign In

Official Statistics Modernization Program

Overview

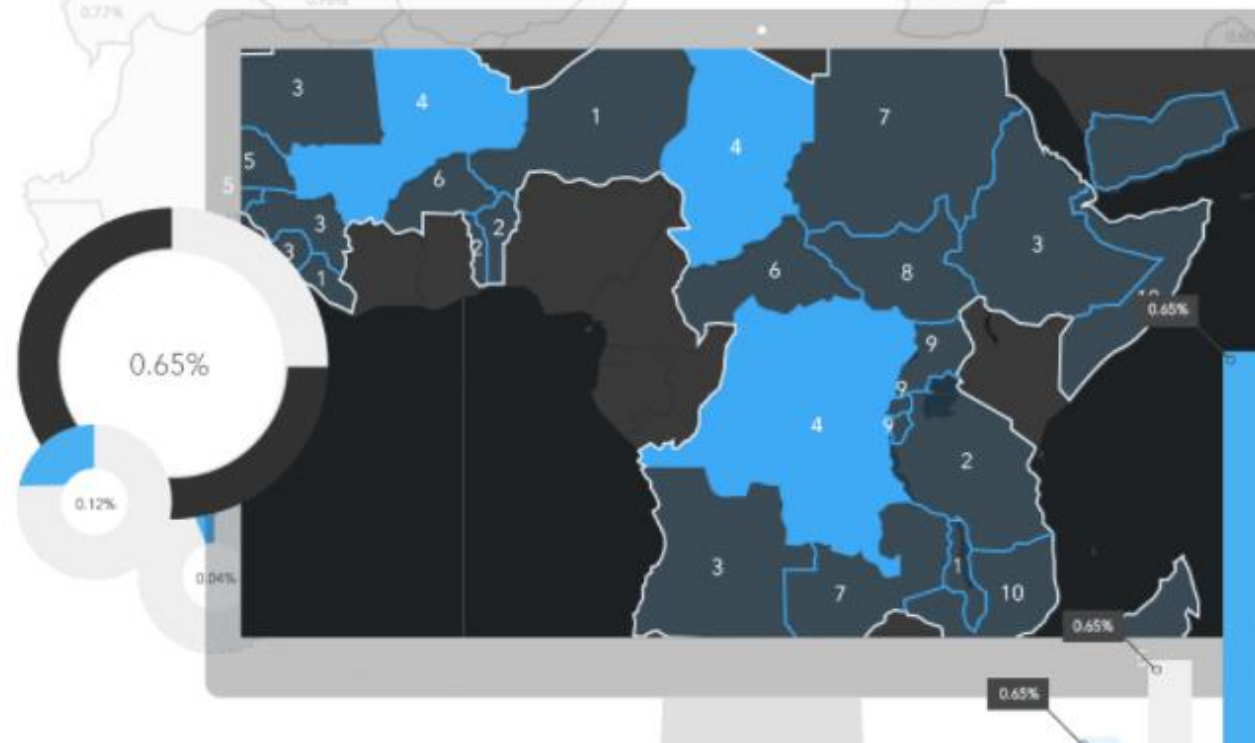
Eligibility

Apply Now

Official Statistics Modernization Program

Providing GIS tools & training for resource constrained countries

Apply Now 



Esri Modernization Program for Official Statistics

- Qualified agencies can use Esri ArcGIS technology for their census, surveys and statistical operations
- Esri will donate the same technology that is used in more than 350,000 organizations worldwide to help you meet your mission
- go.esri.com/officialstatisticsprogram

The screenshot displays the 'Official Statistics Modernization Program' website. At the top, it asks 'Are you a qualifying country?' and provides navigation links for Africa, Asia Pacific, Oceania, Caribbean, and Middle East/West Asia. The Caribbean region is selected, showing a list of 15 countries: Anguilla, Antigua and Barbuda, Aruba, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Montserrat (Lesser Antilles), Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Suriname. To the right, an interactive map shows the Caribbean region highlighted in blue, with a 'Caribbean' label at the bottom. A sidebar on the right lists the regions: Africa, Asia Pacific, Oceania, Caribbean (selected), and Middle East/West Asia. Below the sidebar, there is a section titled 'Qualified countries' with a small text block explaining the program's scope and requirements.

Official Statistics Modernization Program

Overview Eligibility

Are you a qualifying country?

Africa Asia Pacific Oceania Caribbean Middle East/West Asia

- Anguilla
- Antigua and Barbuda
- Aruba
- The Bahamas
- Barbados
- Belize
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Montserrat (Lesser Antilles)
- Netherlands Antilles
- St. Kitts and Nevis
- St. Lucia
- St. Vincent and the Grenadines
- Suriname

Qualified countries

This program is available to statistical agencies in the countries listed on the interactive map to find out if your country is eligible to apply. The program includes perpetual licenses for the Esri products. The software is donated for four years from date of order. The program includes maintenance updates as well as community and self-help support. For more information, visit the Esri Support Services website. The program requires a small annual administrative fee.

Africa Asia Pacific Oceania Caribbean Middle East/West Asia



Vision

GIS

Is Enabling a
Sustainable World



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