

GIS and the Sustainable Development Goals

Presented by Linda Peters

A hand holds a camera lens in the foreground, with a colorful wheel of the 17 Sustainable Development Goals (SDGs) superimposed on its glass element. The background is a blurred cityscape under a blue sky with light clouds. The image is decorated with semi-transparent geometric shapes: hexagons and cubes in various colors (blue, green, yellow, red, purple) scattered across the frame, particularly in the corners.

Vision

GIS

Is Enabling a
Sustainable World

THE SCIENCE OF WHERE

The background of the image is a light blue gradient. Overlaid on this is a stylized representation of the Earth, showing the Americas in shades of green and brown. A complex network of thin white lines connects numerous small white dots, creating a web-like pattern that covers the entire image, including the globe and the background.

Integration of Statistical and Geospatial Data

Geospatial
Framework
(GSGF)



Statistical Process Model (GSBPM)

Planning/
Pre Enumeration

Enumeration

Post Enumeration/
Dissemination

Usable

Interoperable

Common Geographies

Geocoded Units

Fundamental Geospatial Infrastructure

Specify
Needs

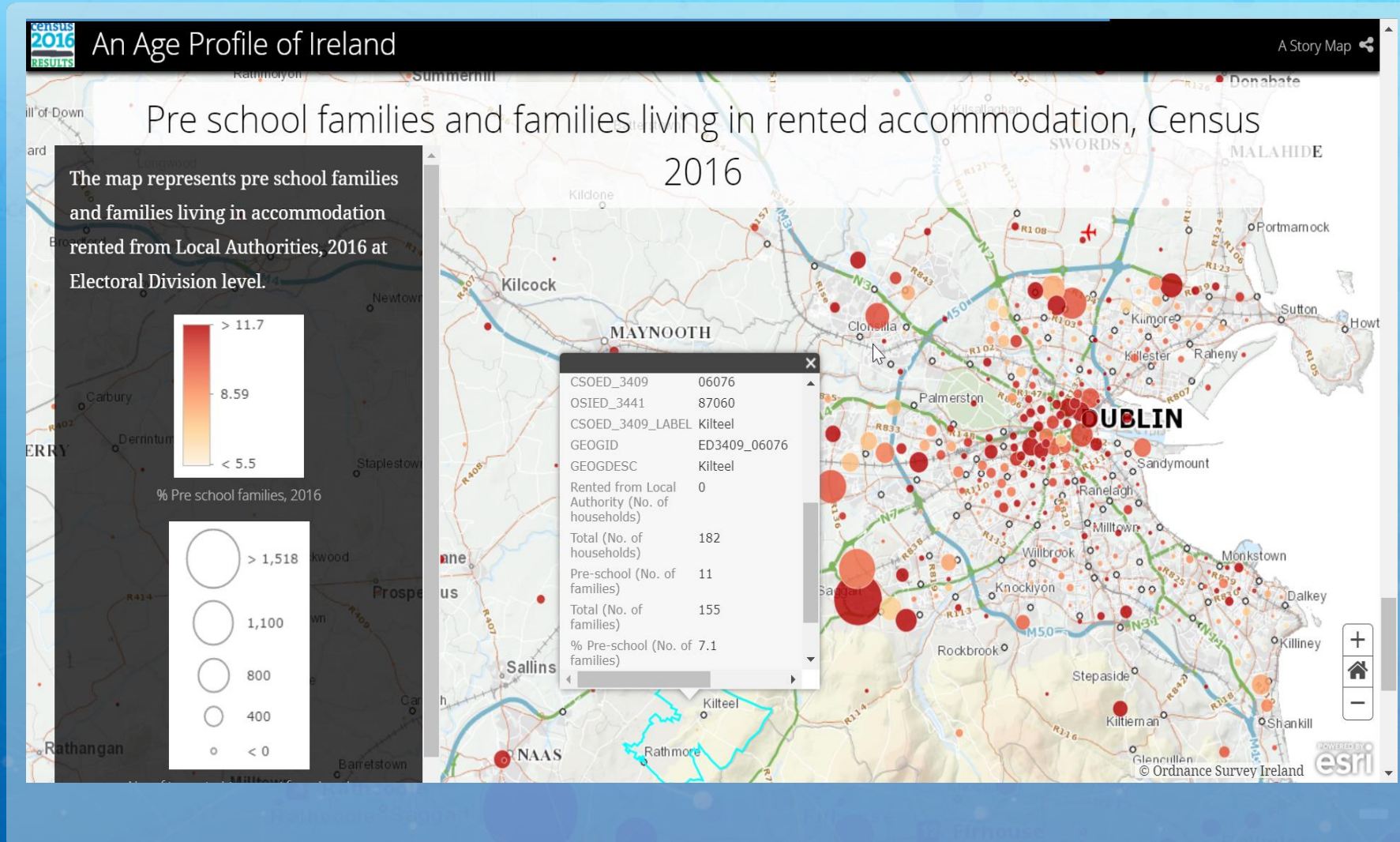
Design
Build

Collect
Process
Analyze

Disseminate
Evaluate

Quality / Metadata Management

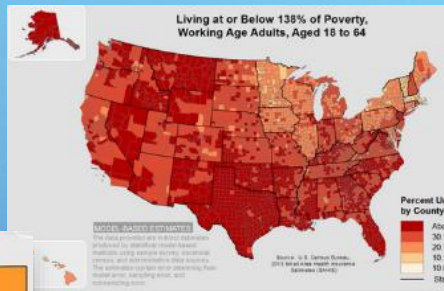
Integrating Geography and Statistics



1 NO POVERTY

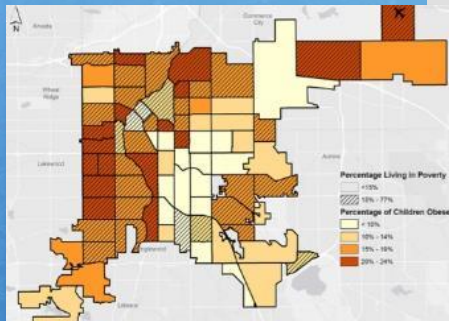


Health Insurance and Poverty



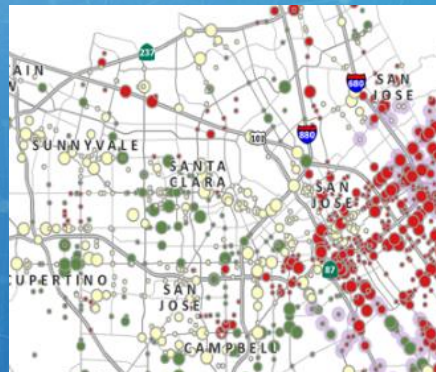
Census Bureau

Childhood Obesity and Poverty



Denver, CO

Vulnerable Populations



Santa Clara

2 ZERO HUNGER

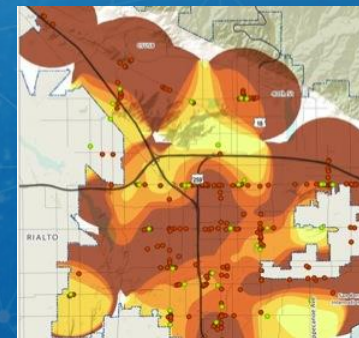


Crop Rotation



USA

Healthy Food Access



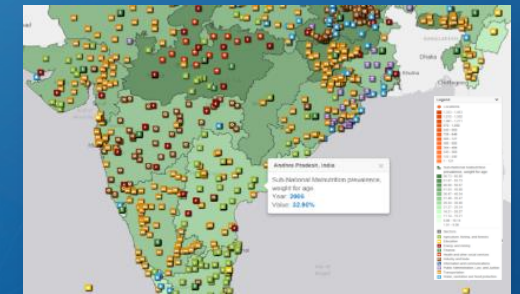
California

Food Supply



UN-Yemen

Malnutrition



World

Precision Agriculture



New Zealand

3 GOOD HEALTH AND WELL-BEING

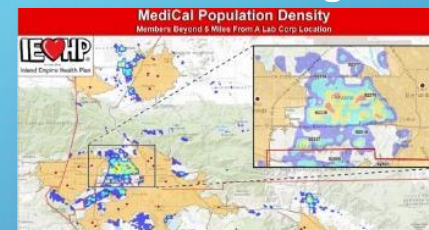


Track Hospital Readmissions



California

Medical Lab Siting

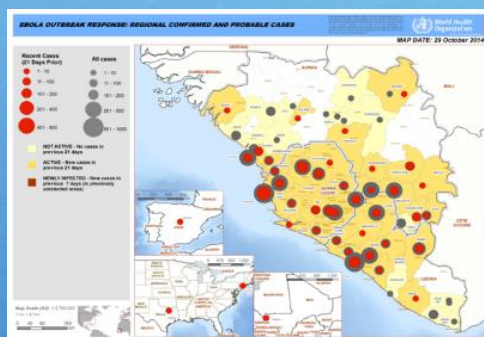


Health Care Accessibility



Sweden

Ebola



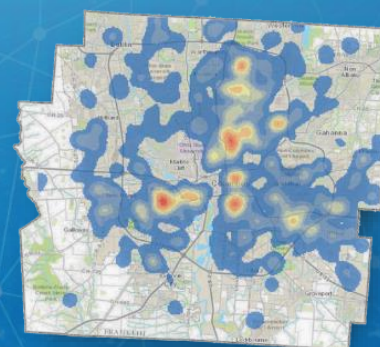
West Africa

Response



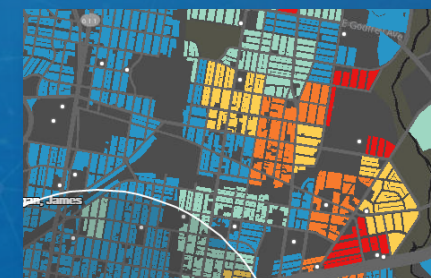
Liberia

Infant Mortality



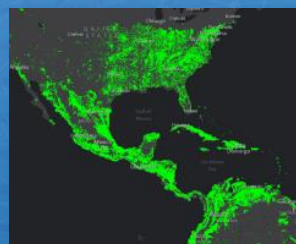
Columbus, OH

Modeling Community Well Being



Philadelphia
OIT

Zika Risk



Americas

Access to Health Facilities



Queensland, Australia

4 QUALITY EDUCATION

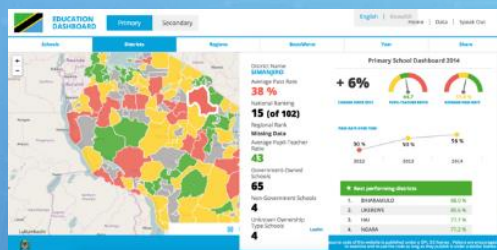


Disparity of School Access

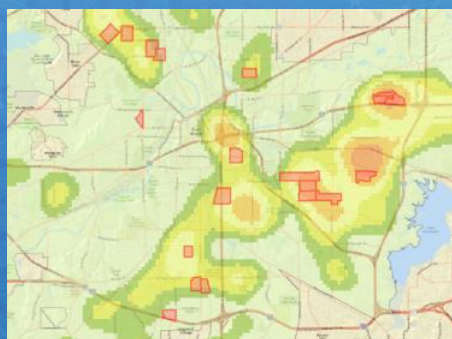


Washington, DC

School Performance



Child Maltreatment Prediction



Texas

Tanzania Traffic Accidents and Schools

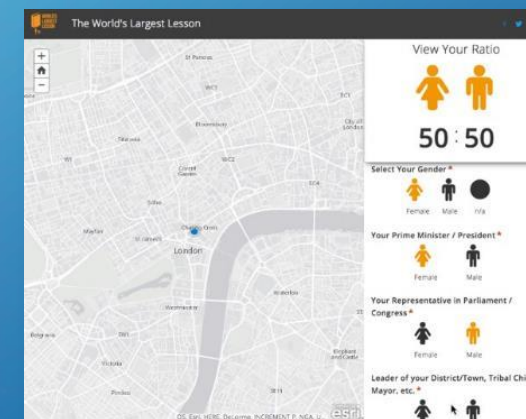


Japan

5 GENDER EQUALITY

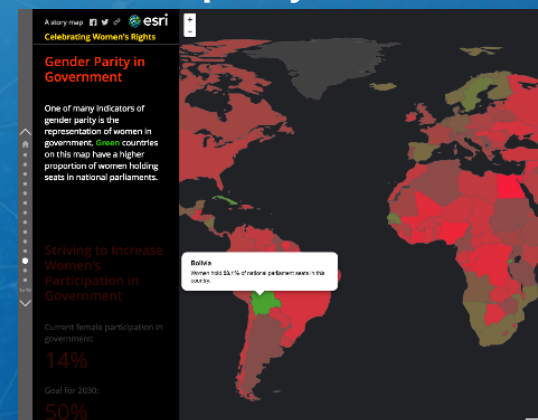


Gender Ratio

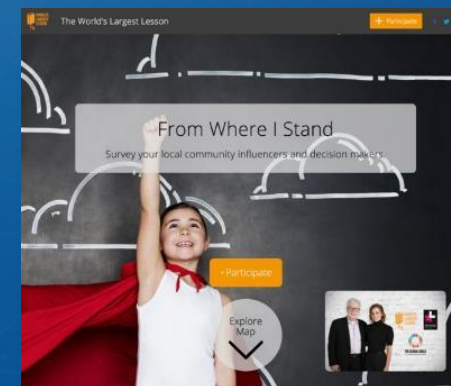


London

Gender Equality



Global



Web GIS Supports A Federated System for the SDGs

For Integrating, Analyzing, and Applying Statistical
and Geographic Information

Integrating People,
Processes, Things,
and Data About Them

*To Empower Citizens
and Society*

*Systems of
Engagement*

Using the Power of Location
to Understand, Monitor
and Report on the SDGs

*Leveraging
Country-level data*

*Systems of
Record...*

GIS Portal

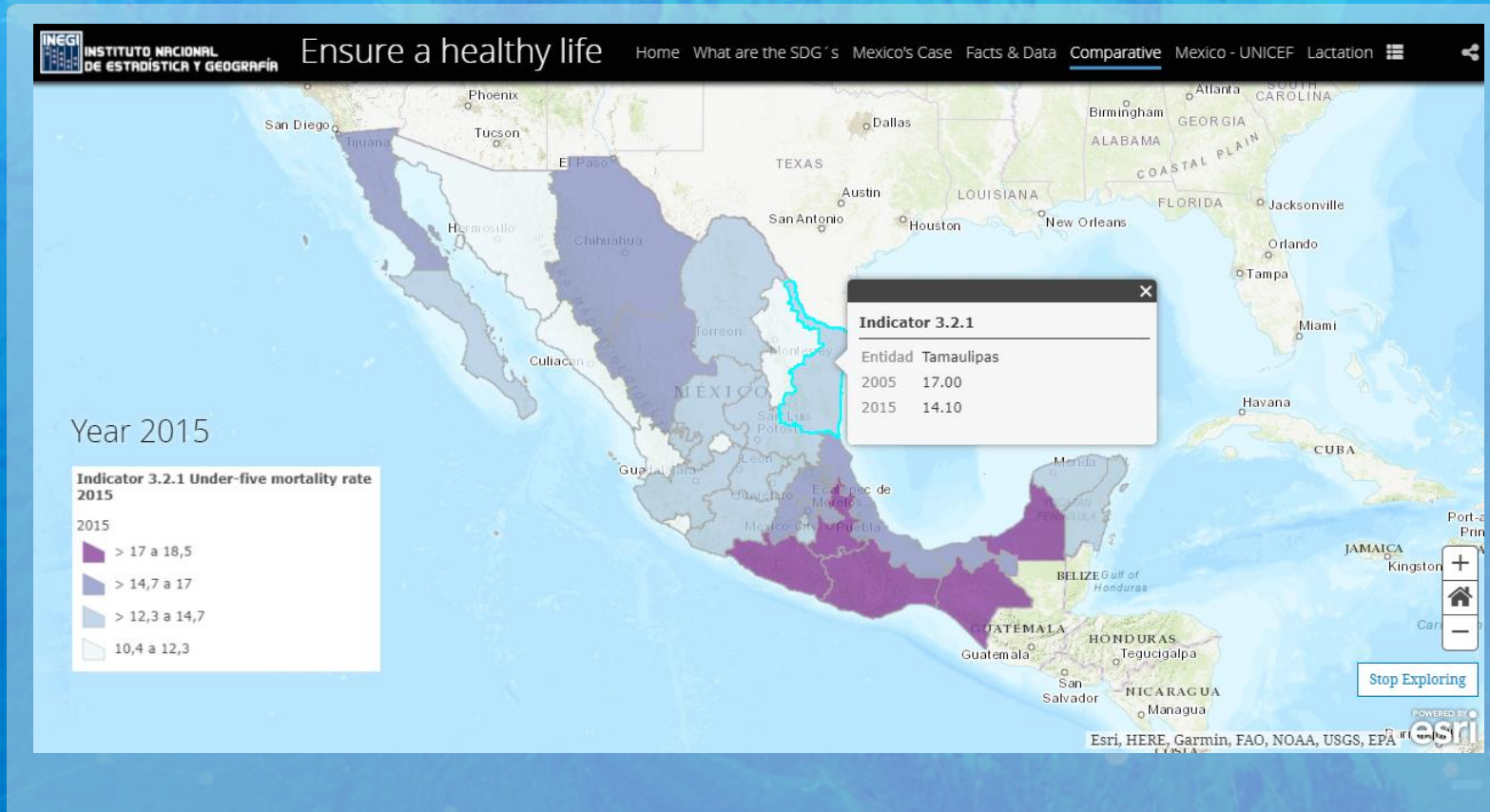
*To Create a
Federated System*

*System of
Insight*

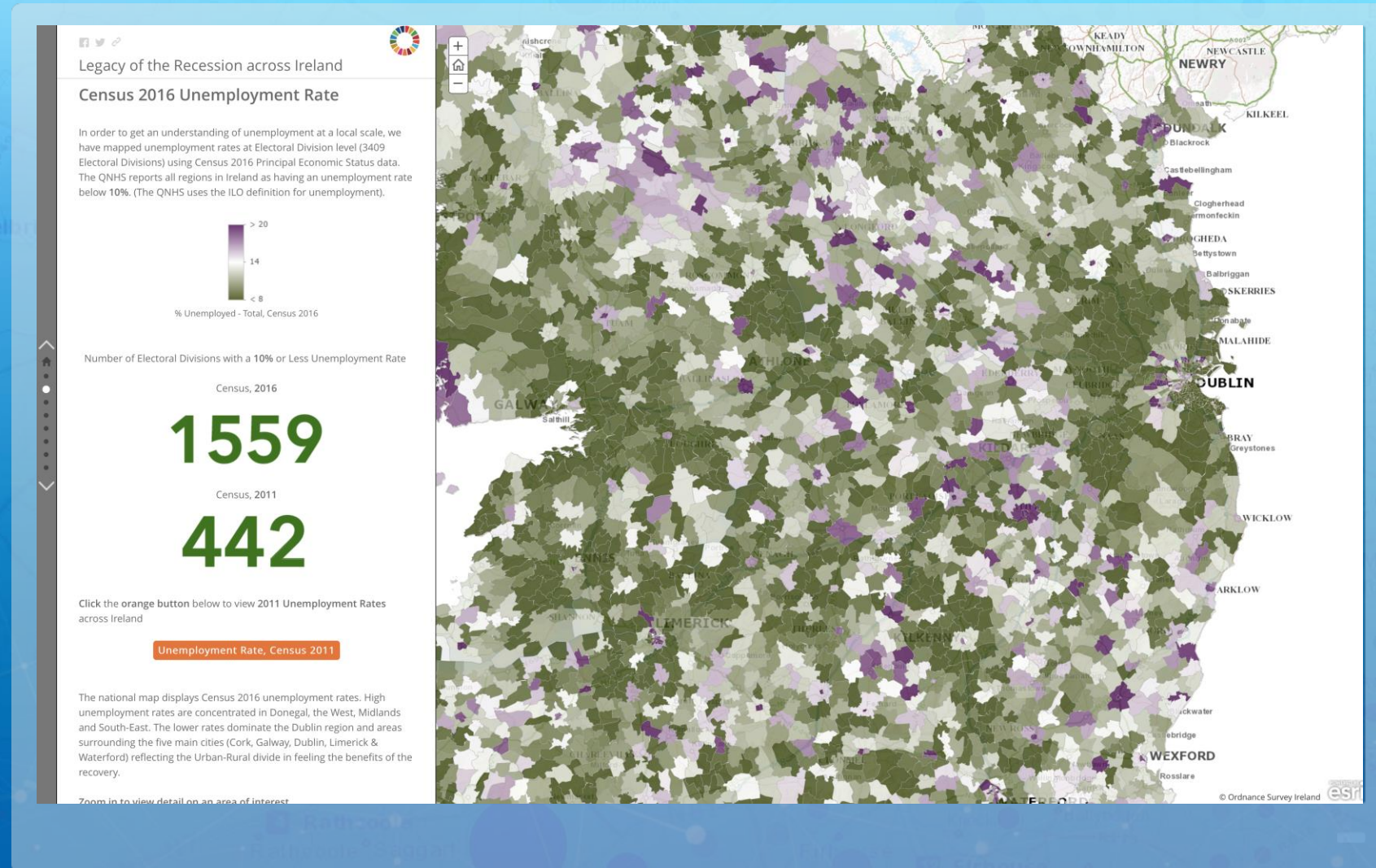
SDG 11



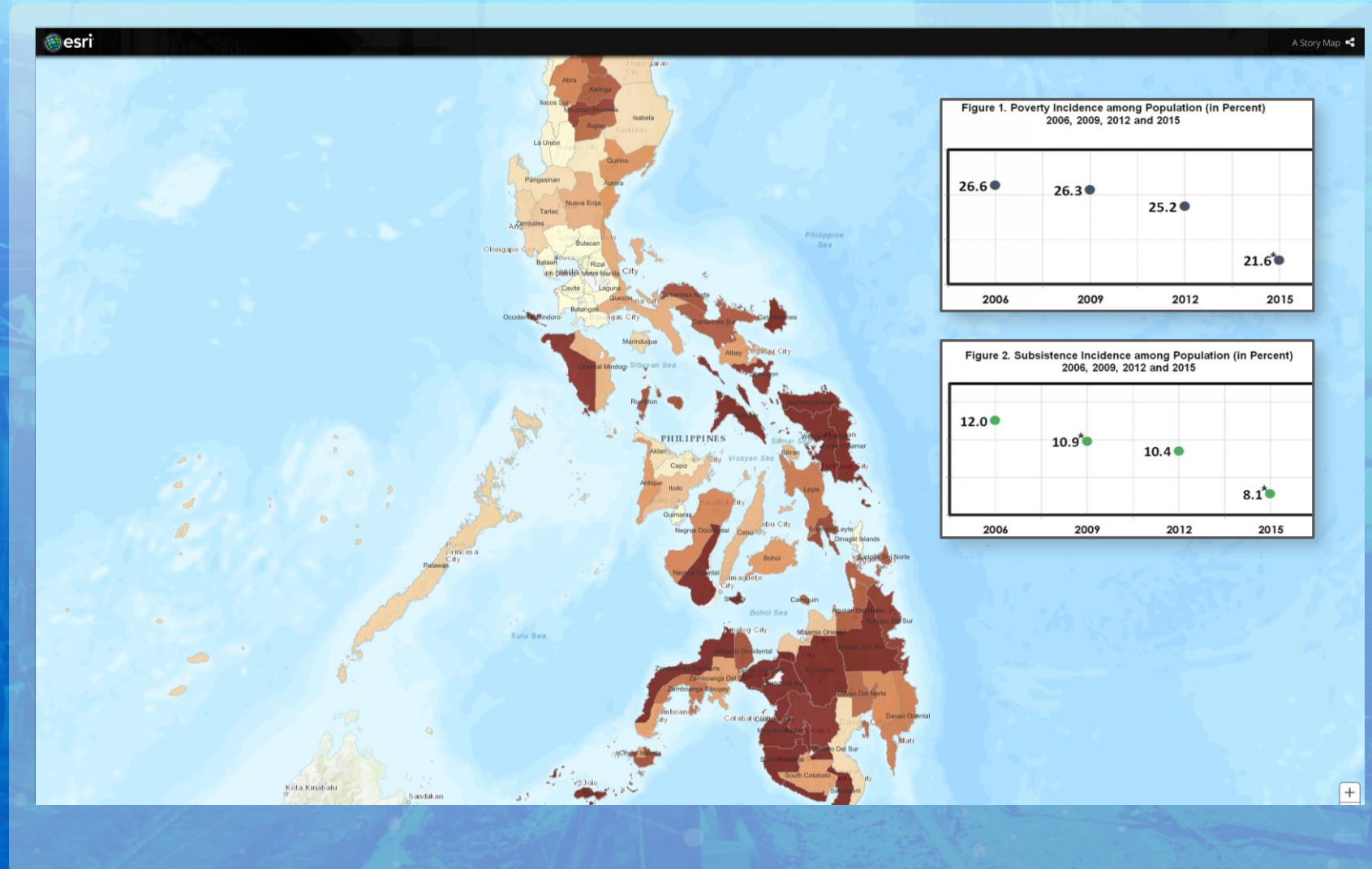
Tools Like This Help Mexico's Development Agendas



They help Ireland understand Where to Apply Resources



And the Philippines to Understand Poverty



Web GIS Enables Community Engagement

Organizing and Managing Community Interactions

Providing Citizens Information . . .
. . . And Leaders Input



Community
GIS Hub

Citizen Communication

Citizen Surveys
(Crowdsourcing)

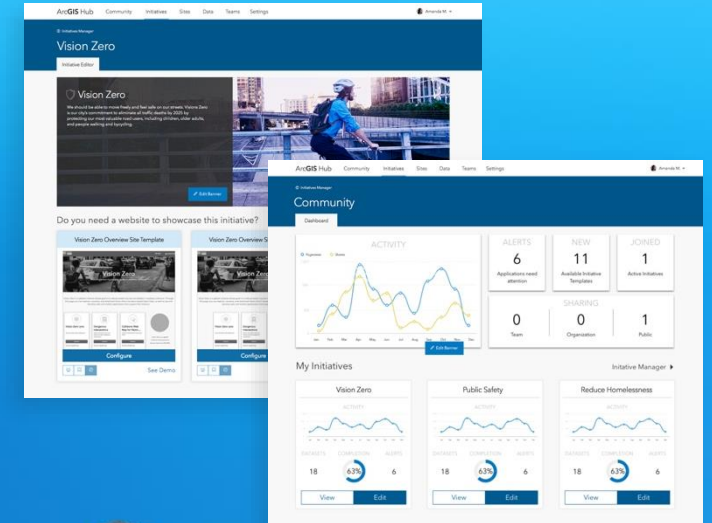
Status Reporting

Open Data

Storytelling

Demographic
Information

Policy Initiative Based



DEMONSTRATION

Humans Are More Capable Than Ever

... of Sharing and Applying
Geographic Knowledge
... of Understanding
and Acting

