

The background features a dark blue gradient with a starry space pattern. On the left side, there are several circular gauges or dials with white markings and numbers, including 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, and 260. Some gauges have arrows pointing in different directions, and some have dashed lines around them. The overall aesthetic is technical and futuristic.

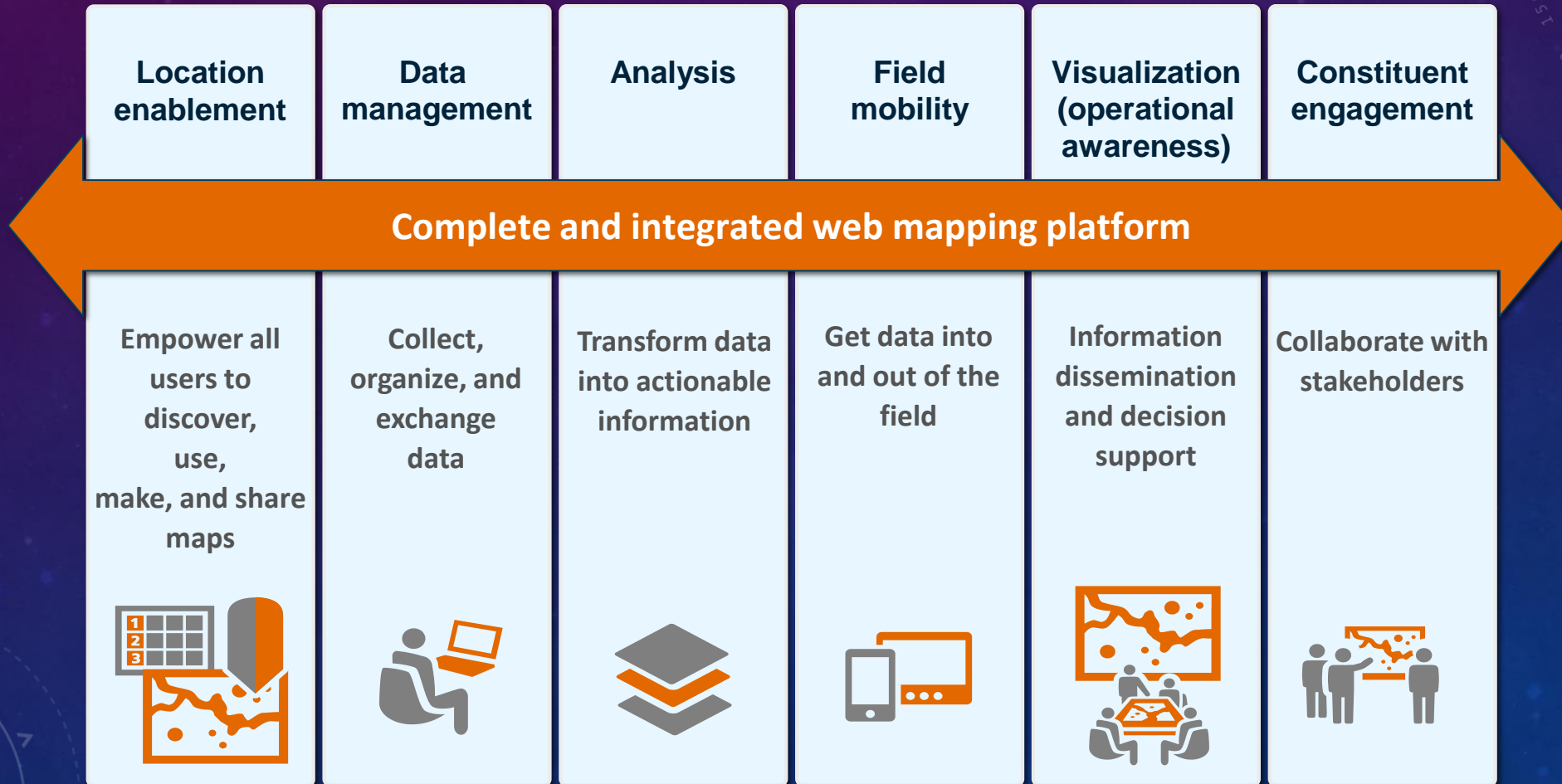
INTERNATIONAL TRANSPORT INFRASTRUCTURE OBSERVATORY

WP5

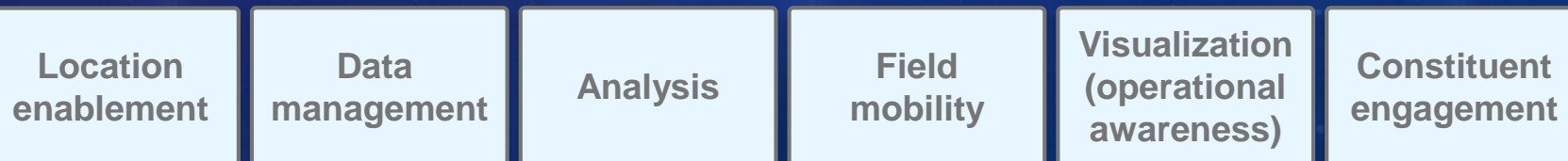
WELCOME TO WP5

- Topics
 - Patterns and Benefits of Geographic Information System (GIS)
 - Web GIS
 - Observatory Overview
 - Associated Applications Overview

COMMON GIS PATTERNS



GIS PATTERNS APPLY TO...



GIS PATTERNS APPLY TO...

Choosing the most efficient route for delivery vehicles

Dispatcher v2 Applications Prototype Lab

3) Specify solver settings and solve.

Order in which steps will be visited:

as specified in the file best order

Impedance: Miles Consider Real Time Traffic Information

Use Hierarchy
 Generate Driving Directions
 Zoom to result

Solve

Start Over

ID	Name	Visit From	Visit To	Visit Time	Arrive at	Depart at	Accumulated Time	Violation Time	Wait Time
1	Warehouse #23		0		11:54 AM	11:54 AM	0.0	0.0	0.0
2	1547 Handford St	09:00 AM	12:00 PM	5	12:00 PM	12:05 PM	10.4	0.0	0.0
3	19 Parkwood Dr	12:30 PM	01:30 PM	1	12:09 PM	12:31 PM	36.4	0.0	20.4
4	92 Garden Hill Dr	09:00 AM	04:00 PM	2	12:36 PM	12:38 PM	43.5	0.0	0.0
5	606 W Lugones Ave	05:00 AM	01:30 PM	5	12:44 PM	12:49 PM	55.4	0.0	0.0
6	Flower C	08:00 AM	11:30 AM	25	12:53 PM	01:20 PM	81.6	56.2	0.0
7	1288 Brookside Ave	07:00 AM	01:45 PM	5	01:25 PM	01:30 PM	95.6	0.0	0.0
8	1728 Barton Rd	01:00 AM	01:30 PM	35	01:31 PM	02:06 PM	111.7	1.3	0.0
9	7112 Riverchase Dr	04:00 AM	02:00 PM	2	02:14 PM	02:19 PM	148.4	14.8	0.0

Optimized Fleet Routing
Powered by ArcGIS Server and Network Analyst

Display/Routing Control

Step 1: Review Inputs
 Service Depots
 Service Calls
 Service Zones
 Barriers

Step 2: Review Zone Results
 Routes By Zone
[Cost Report](#)

Step 3: Run Model
 Avoid Traffic
 Follow Zones
[Get Routes](#) [View the model](#)

Refresh

Location
enablement

Data
management

Analysis

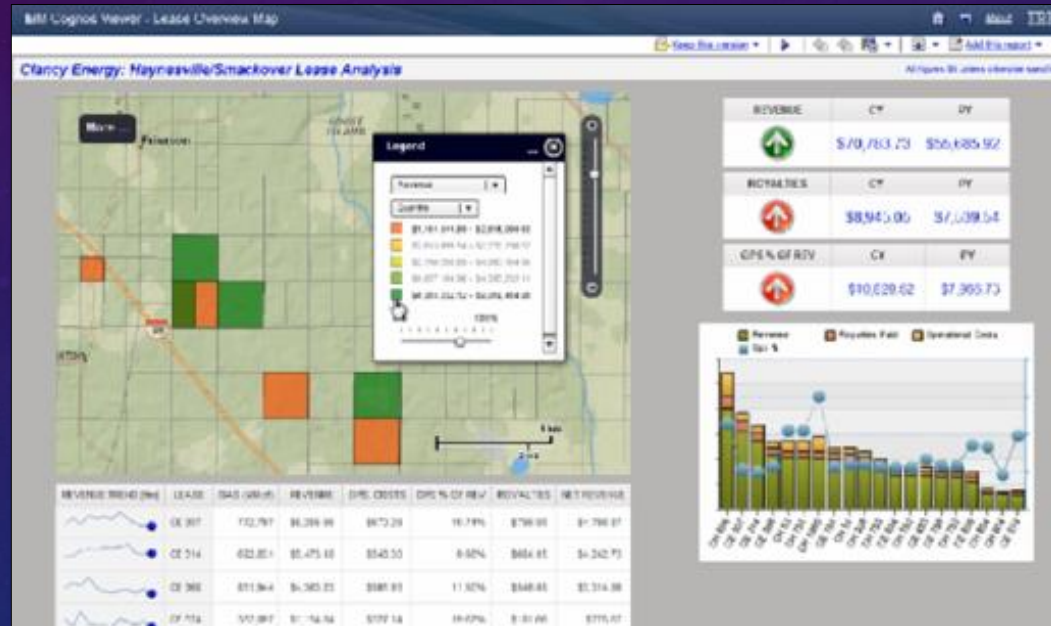
Field
mobility

Visualization
(operational
awareness)

Constituent
engagement

GIS PATTERNS APPLY TO...

Tracking the hours that field crews work by geographic region



Location enablement

Data management

Analysis

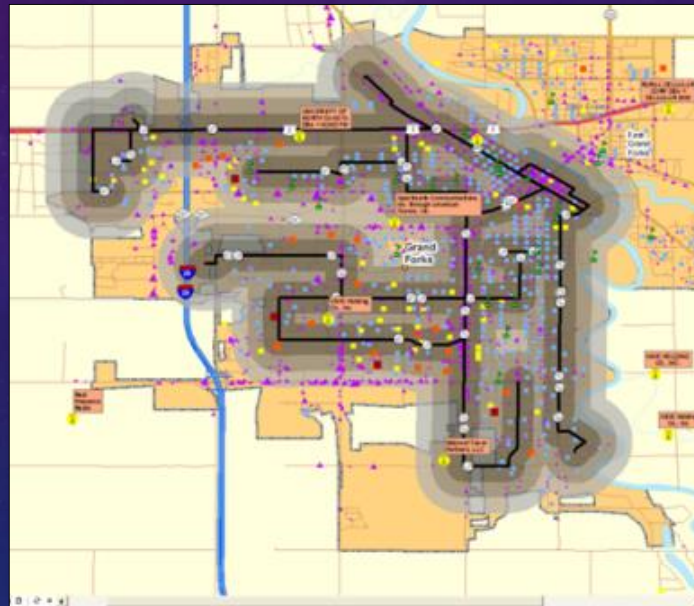
Field mobility

Visualization (operational awareness)

Constituent engagement

GIS PATTERNS APPLY TO...

Determining the best location for a new dry port



**Location
enablement**

**Data
management**

Analysis

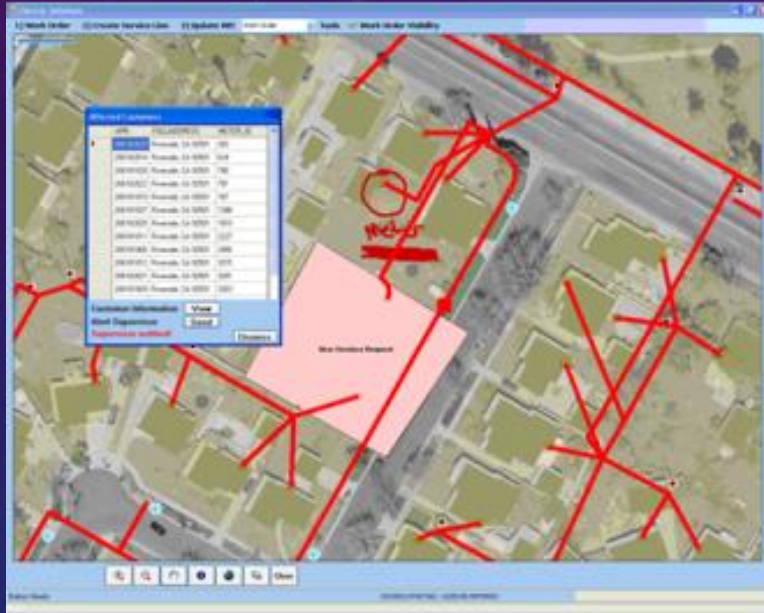
**Field
mobility**

**Visualization
(operational
awareness)**

**Constituent
engagement**

GIS PATTERNS APPLY TO...

Streamlining data collection with mobile apps



**Location
enablement**

**Data
management**

Analysis

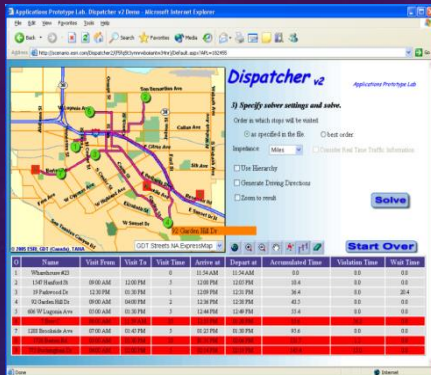
**Field
mobility**

**Visualization
(operational
awareness)**

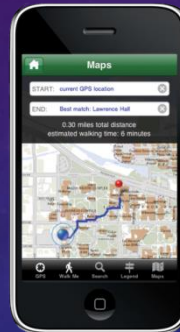
**Constituent
engagement**

GIS BENEFITS

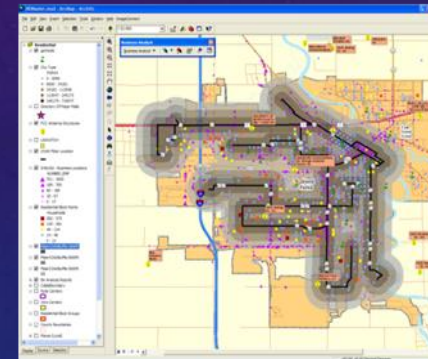
Cost savings



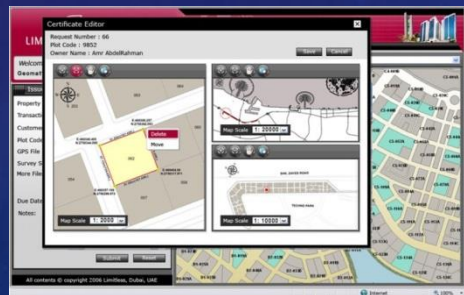
Improved communication



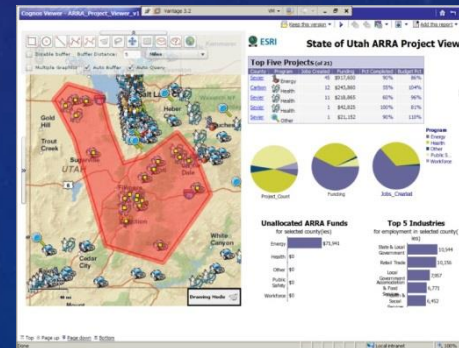
Better decision making



Better record keeping



Geographical management



WEB GIS



ONE WEB MAP, MANY USES



Web map



Browser
Web apps



Mobile devices



Desktop



Dashboards
BI applications

WEB GIS FUNCTIONS



Discover



Use



Make



Share

GIS specialist

Uses GIS

Analyzes data

Creates map layers



Field worker

Uses GIS on a mobile device
and in a browser

Edits map layers

Collects data



Contractor

Not a member
of the organization

Uses a browser to access maps
and map layers for projects
data



DIFFERENT USERS AND GROUPS, DIFFERENT PRIVILEGES



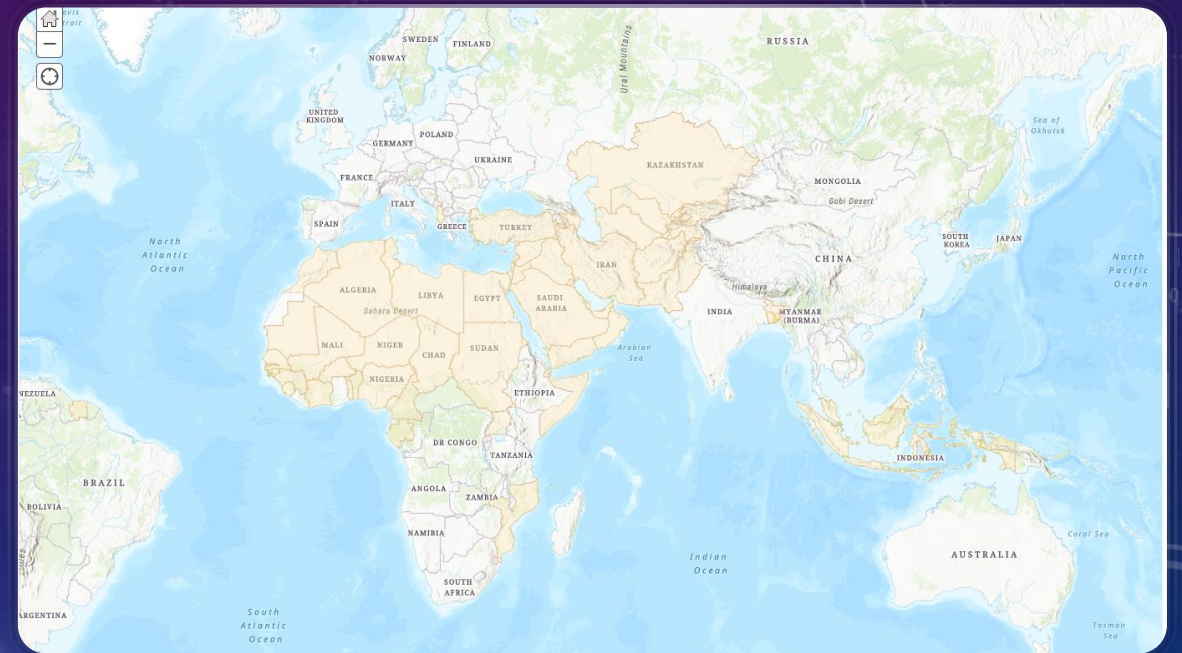
DIFFERENT USERS AND GROUPS, DIFFERENT PRIVILEGES



TRANSPORT INFRASTRUCTURE OBSERVATORY PHASE ONE

- Transport Infrastructure Data Viewers
 - General Public
 - International Financial Institution (IFI)
 - Governments' users
 - Regional Cooperation Organization (RCO) users
- Define Data Collection Techniques

OBSERVATORY OVERVIEW





PUBLIC
VIEWER

Legend

- International Transport Infrastructure - Road Network
- International Transport Infrastructure - Road Network Projects
- International Transport Infrastructure - Border Crossings
- International Transport Infrastructure - ISD Member Countries

Smart Editor

Select a template to create features

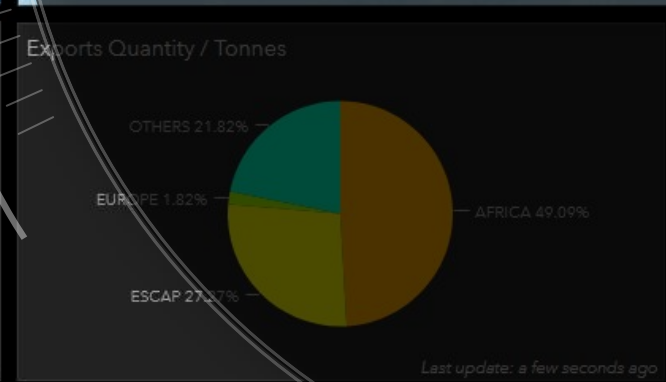
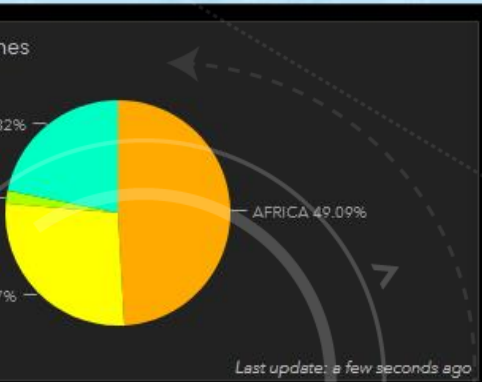
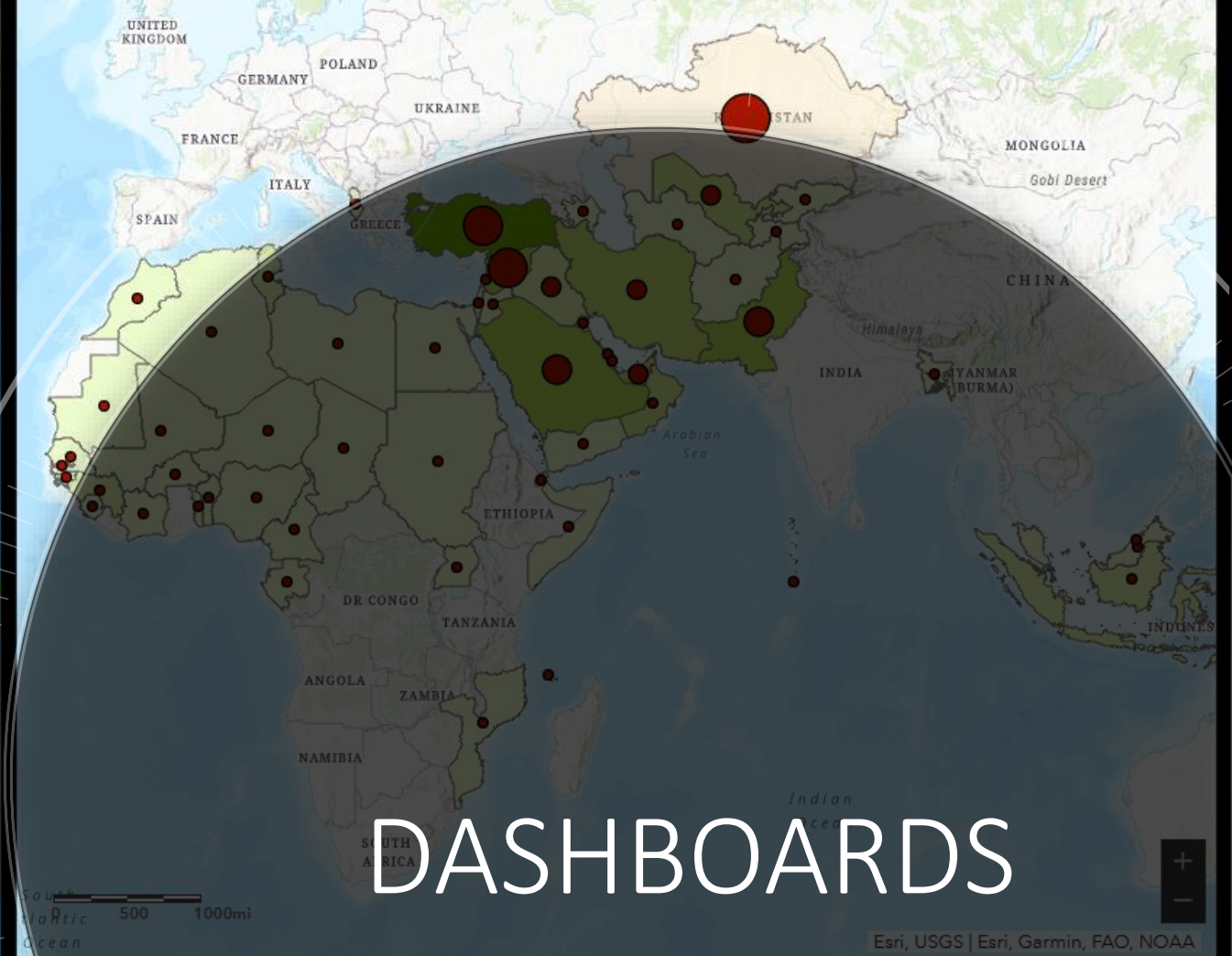
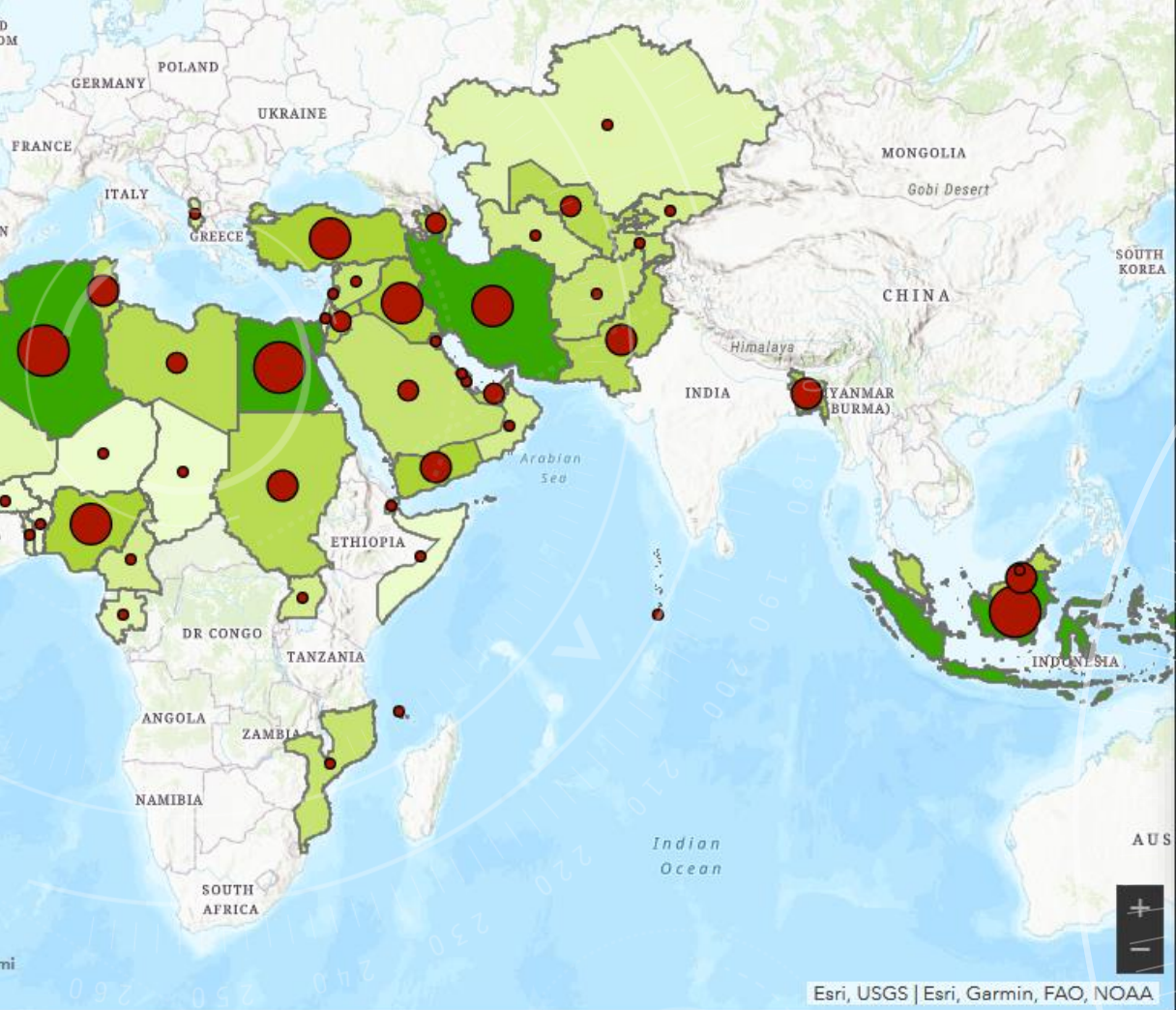
- International Transport Infrastructure - Road Network
- International Transport Infrastructure - Road Network Projects

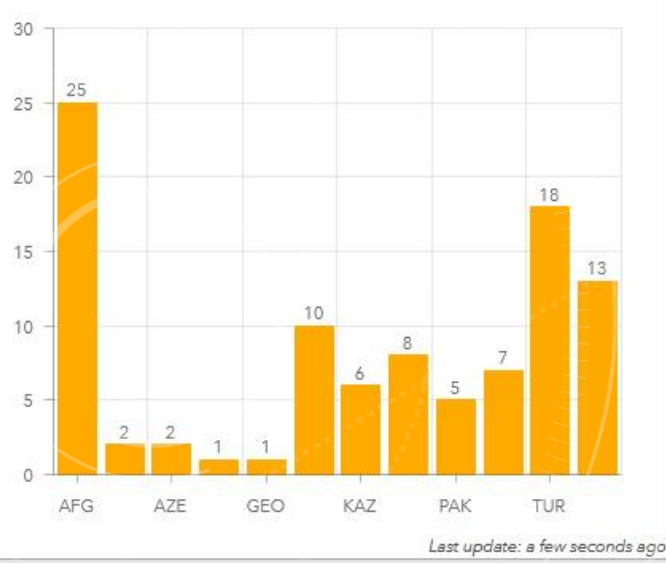
Polyline

PROFESSIONAL APPLICATION

74.011 48.433 Degrees

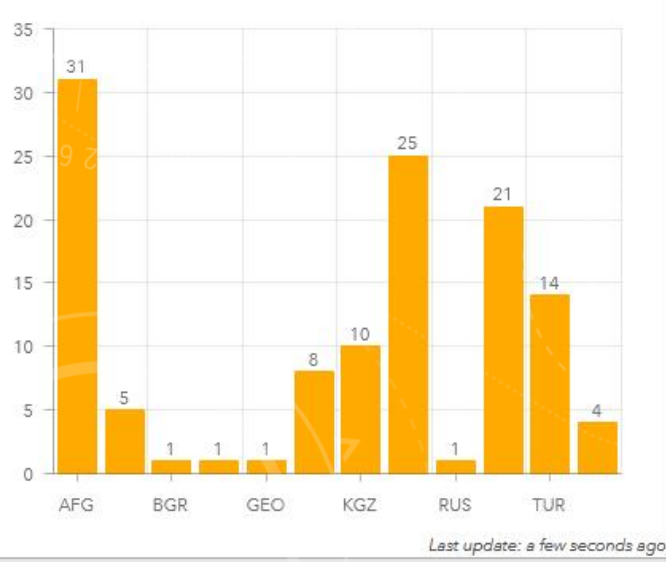
0 500 1000km





Road Projects

122



International Transport Infrastructure - Data Collection

1. Enter Information

Rolls Exchange per Day

Rolls Type

Working Hours

Rolls Exchange Cost per Wagon

Waiting Time

2. Select Location

Specify the location for this entry by clicking/tapping the map or by using one of the following options.



3. Complete Form

Add this information to the map.

DATA COLLECTION APPLICATION

THANK YOU