



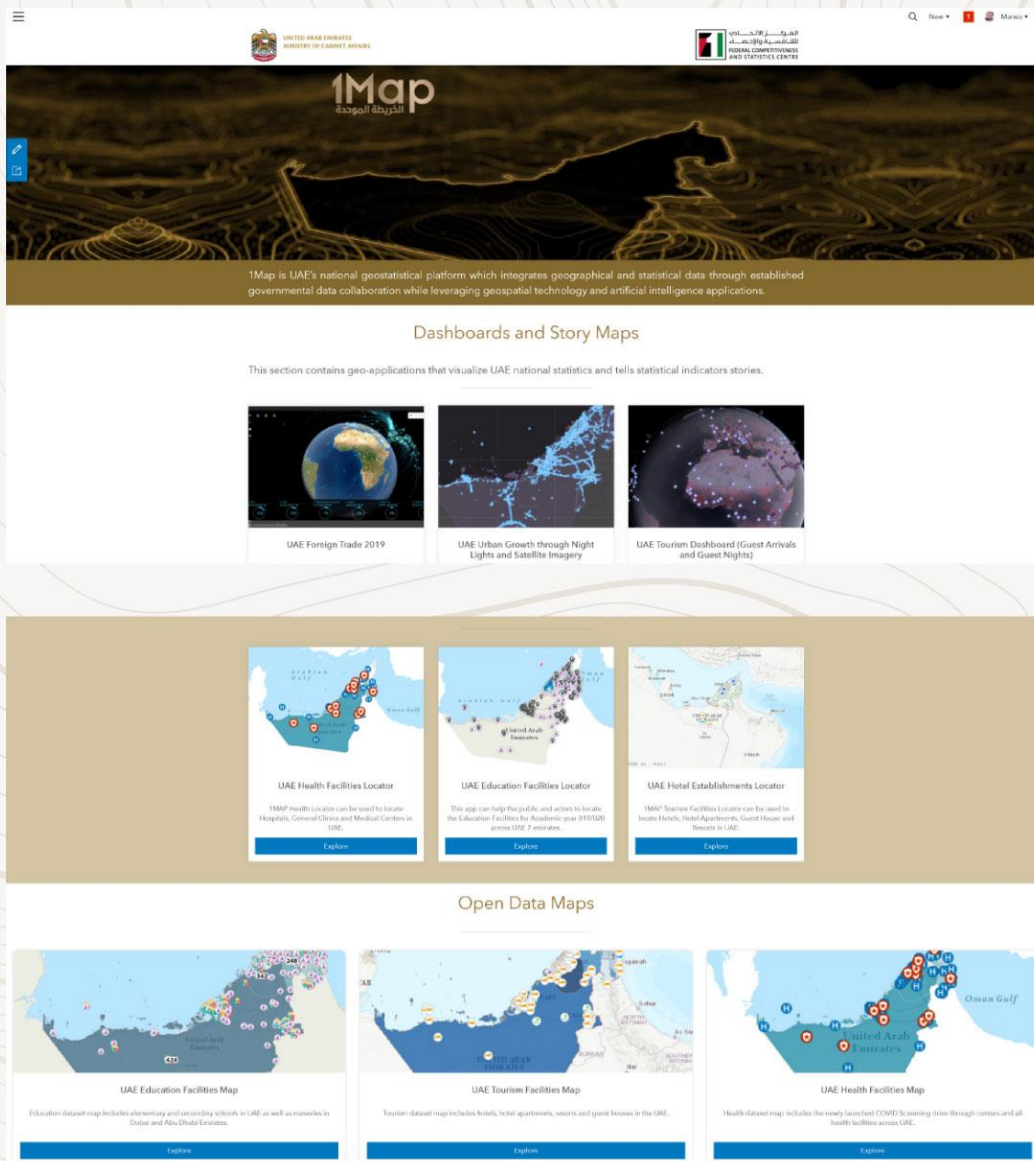
المركز الاتحادي  
للتنافسية والإحصاء  
FEDERAL COMPETITIVENESS  
AND STATISTICS CENTRE



# UAE's National Geostatistical Platform







1Map is the UAE's national geostatistical platform that integrates geographical and statistical data through established governmental data collaborations.

The platform aims to support planners and decision makers as well as provide the community with authoritative maps and official statistics, all while leveraging latest geospatial technology and artificial intelligence to serve in planning, crisis management as well as research purposes.



**25+**  
Federal & local entity



**30+**  
Dashboard & application



Map  
National Indicator **100+  
50+**

 Click to view

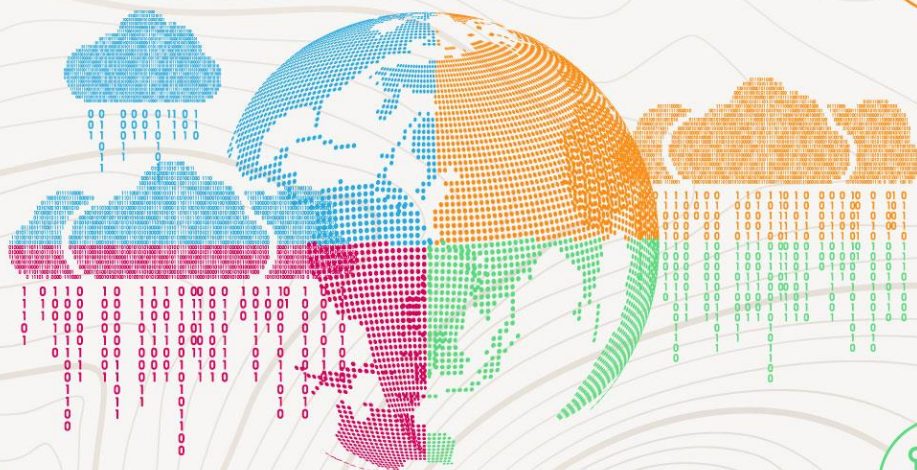


# 1MAP OUTPUT TRACKS

Collaboration with partners  
for platform access and  
data exchange



Dissemination of national  
statistics dashboards  
and storymaps



Provision of  
community facilities  
and services maps



Calculation of indicators  
using geo-analysis and  
artificial intelligence



# 1Map APPLICATIONS

الخريطة الموحدة



**Dissemination of national statistics dashboards and storymaps**

POPULATION ESTIMATES DASHBOARD

HAPPINESS SURVEY RESULTS DASHBOARD

TOURISM DASHBOARD

BILATERAL SOCIO-ECONOMIC DASHBOARD

FOREIGN TRADE DASHBOARD

FOREIGN TRADE IN 50 YEARS

FOREIGN DIRECT INVESTMENT DASHBOARD

FOREIGN AID DASHBOARD



**Calculation of indicators using geo-analysis and artificial intelligence**

EMIRATES CITY MESH DASHBOARD

50 YEARS OF PROSPERITY

GREEN AREAS GROWTH

UAE URBAN GROWTH STORYMAP

LANDUSE DASHBOARD

SMART METERS DASHBOARD FOR HOUSING UNITS

URBAN RURAL AREAS POPULATION DASHBOARD

GEO AI IN PRE ENUMERATION CASE STUDY



**Provision of community facilities and services maps**

FACILITIES AND ESTABLISHMENTS CATALOG PAGE

COMMUNITY FACILITIES CATALOG APP

HEALTH FACILITIES DASHBOARD

HEALTH FACILITY LOCATOR APP

EDUCATION FACILITIES DASHBOARD

EDUCATION FACILITY LOCATOR APP

HOTEL ESTABLISHMENTS DASHBOARD

HOTEL ESTABLISHMENT LOCATOR APP



**Collaboration with partners for platform access and data exchange**

CUSTOMIZED PARTNERS PAGES

CULTURAL & RECREATIONAL FACILITY LOCATOR APP

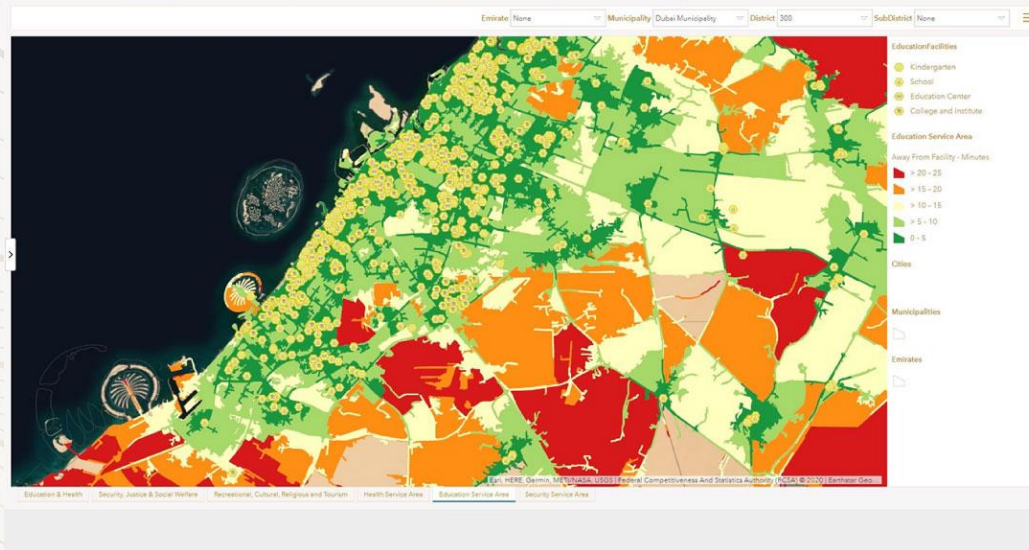
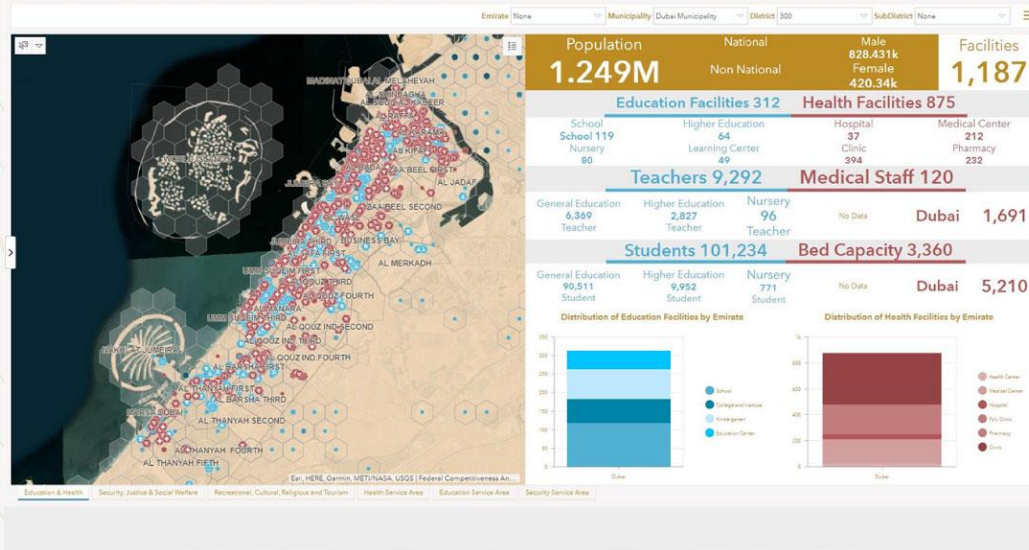
RELIGIOUS FACILITY LOCATOR APP



# EMIRATES CITY MESH DASHBOARD



Calculation of indicators  
using geo-analysis and  
artificial intelligence



UAE consolidated geo-dashboard , combines detailed granular geo-dataset from various sectors on one screen to help planners & decision makers in facilities/services allocation planning, scenario simulation, crisis impact assessment, as well as benchmarking and comparing sub districts services availability “Sub Districts Service Index “. The application also studies the proximity and estimated driving time to main services in minutes.

Example of the geo datasets included :

- Population distribution estimates,
- Landuse and housing maps,
- Community Facilities (health facilities, education facilities, cultural, religious facilities, societal facilities, tourism establishments),
- Air quality readings and green areas



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The statistical indicators presented in the dashboard include:

- Emirate Summary**

Density - 2019 - Districts

CapitaSqKm

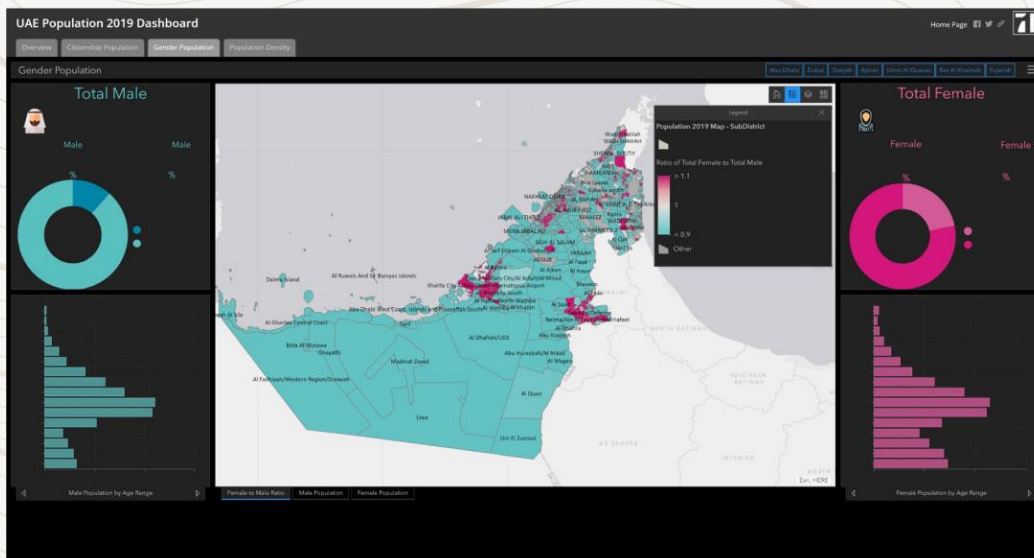
Population 2019 Map - Districts

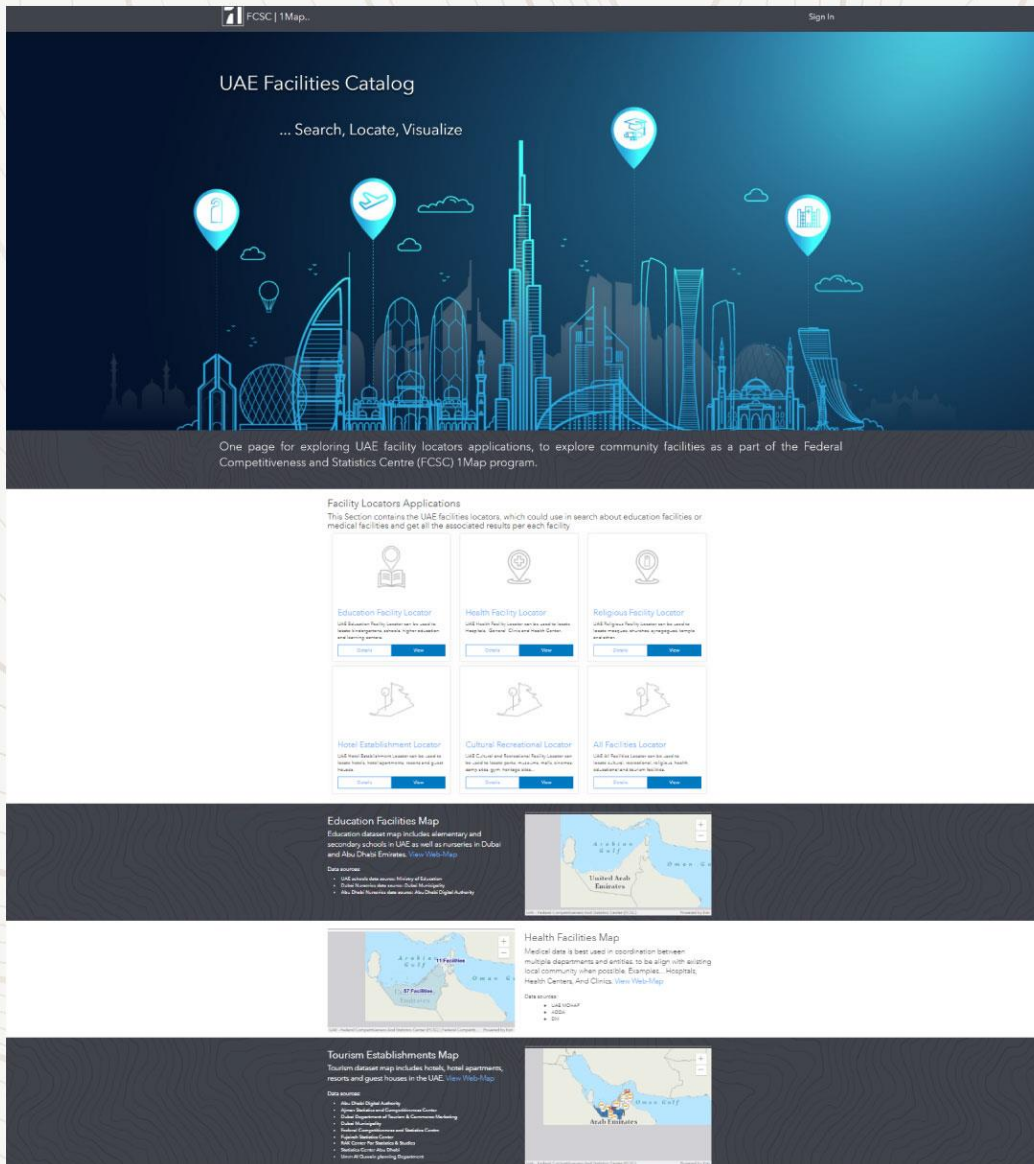
Total

Emirate: Ajman Municipality: Ajman Municipality District: None Sub-District: None

Total Population	
Total	Total
Transient Population (Across UAE)	
Total Male	
Male	Male
Total Female	
Female	Female

Female vs. Male Distribution by Age Range - Nation





# FACILITIES AND ESTABLISHMENTS CATALOG PAGE



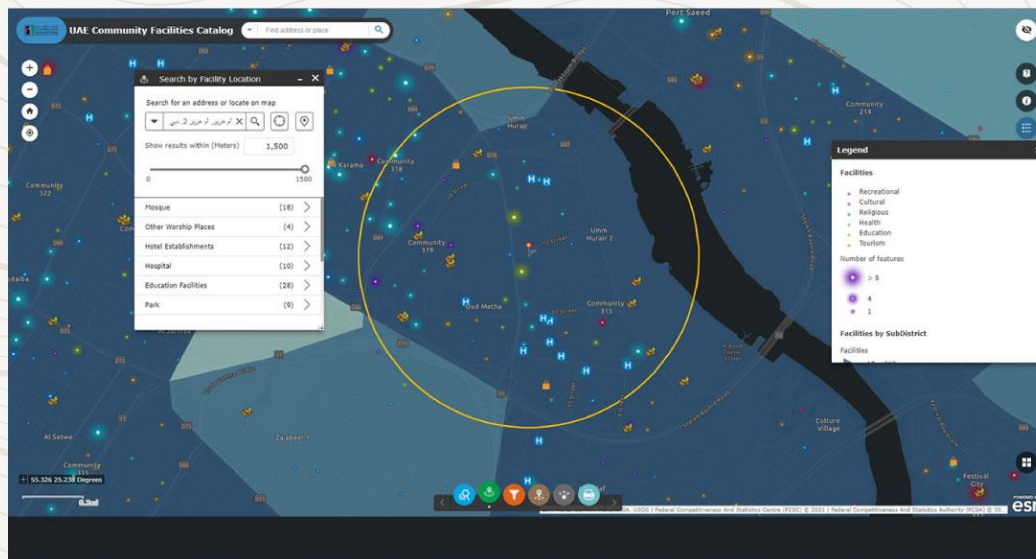
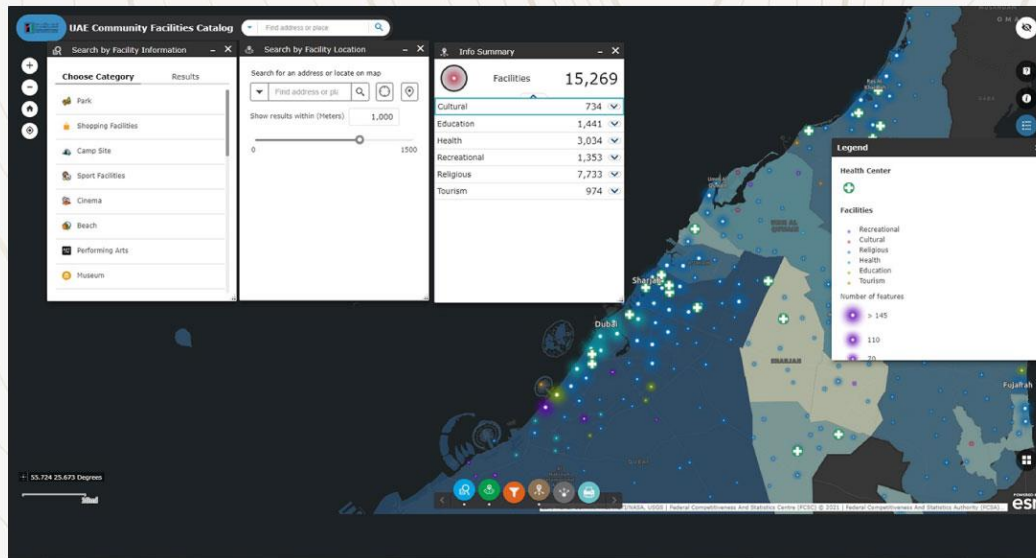
Provision of community facilities and services maps

1MAP National Facilities Catalog provides government, private sectors and individuals with detailed data on community services through interactive maps and applications.

Example of the interactive maps and applications included :

- Health Facilities Locator
- Education Facilities Locator
- Hotel Establishments locator
- Religious Establishments locator
- Cultural Recreational Locator
- Community Facilities Catalog App
- In addition to a gallery of open maps and data for all categories of users





# COMMUNITY FACILITIES CATALOG APP



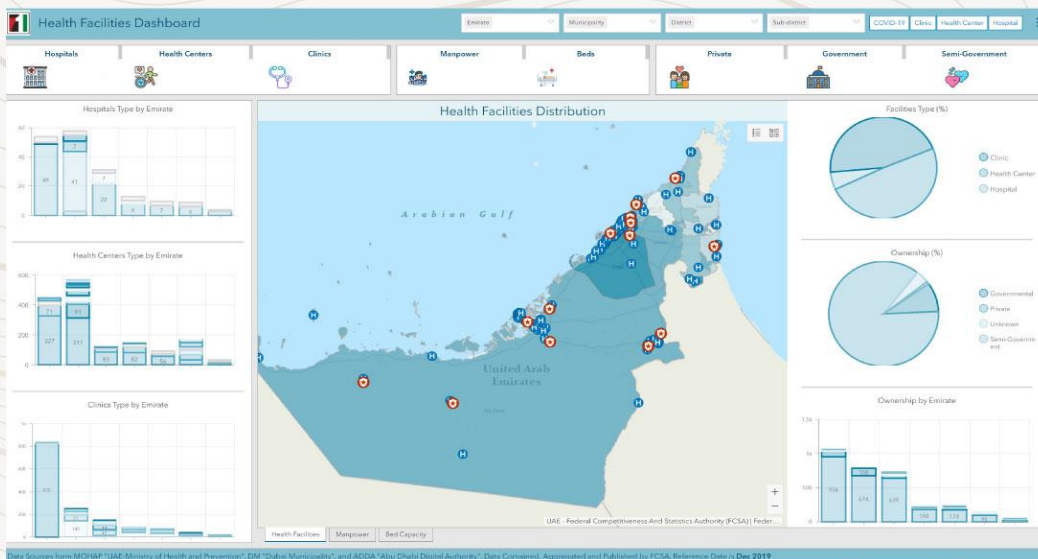
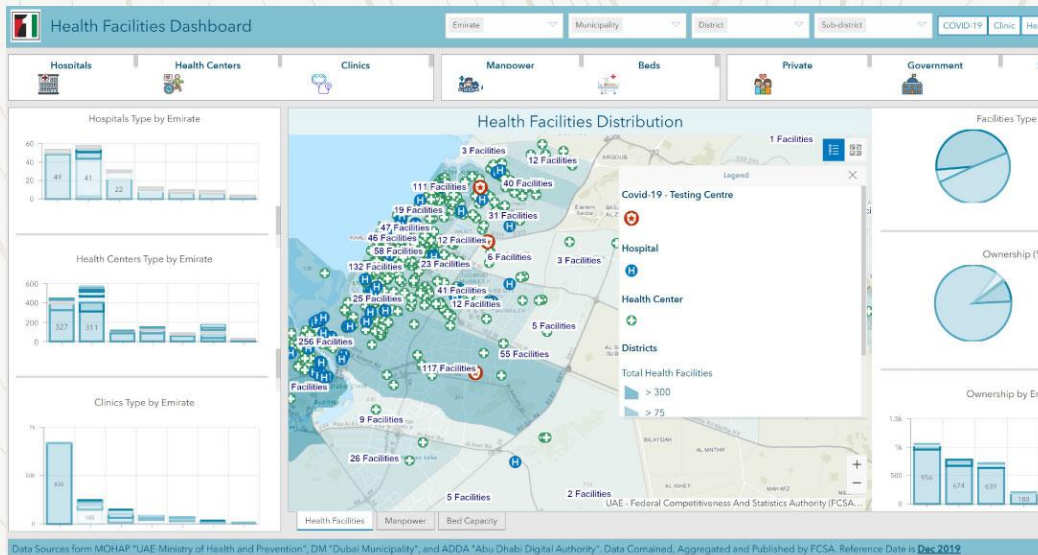
Provision of community facilities and services maps

1MAP Community Facilities Catalog application locates cultural, religious, health, educational, tourism and recreational facilities across UAE such as museums, parks, heritage sites, worship places, mosques, other worship places, hospitals, health centers, schools, higher education institutes and others across the UAE.

The user can:

- Search by facility specifications
- Search by facility location
- Search by distance to facility (1 - 15 km) from current location or any other location.
- Overview of number of facilities within a district or a sub district with a breakdown of type of facilities.





# HEALTH FACILITIES DASHBOARD



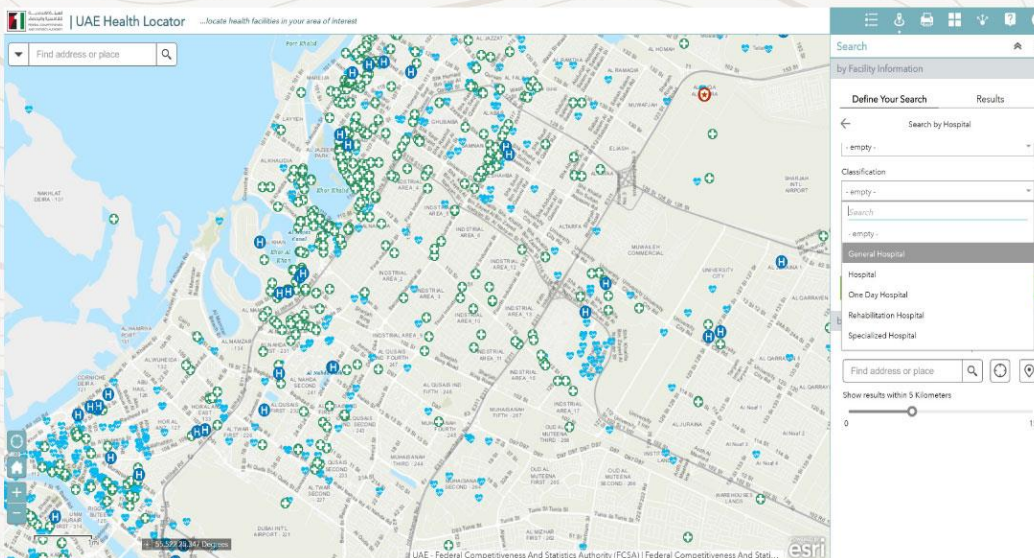
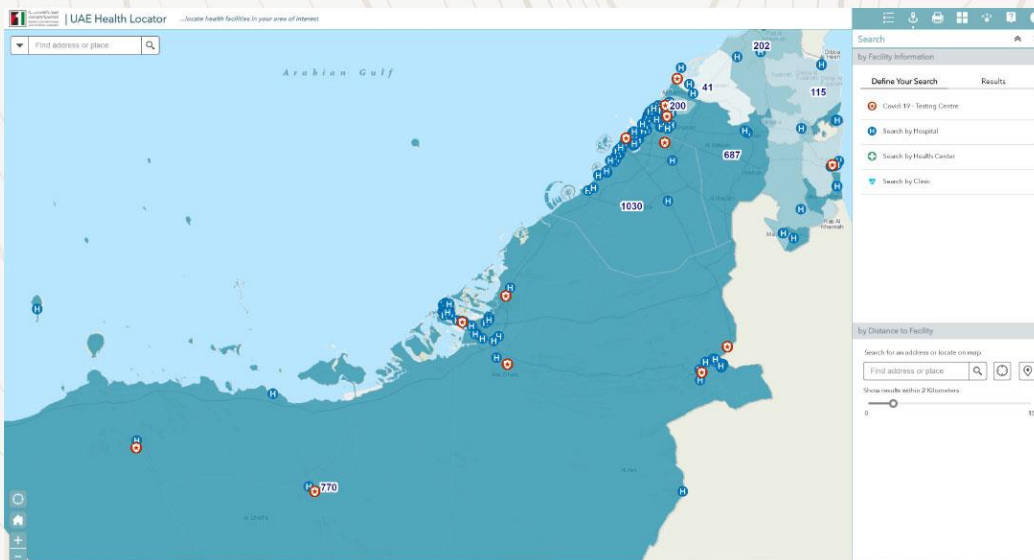
Provision of community facilities and services maps

An interactive geo-dashboard that displays thematic maps summarizing health facilities statistics, bed capacity and manpower and other statistical indicators across UAE.

In addition to combining a view of health facilities and its bed capacities to detailed population maps per sub district.

- Health facility type statistics by emirate, municipality, district, sub district
- Medical manpower statistics by facility type
- Medical manpower statistics by emirate, municipality, district, sub district
- Bed capacity statistics by facility type
- Bed capacity statistics by emirate, municipality, district, sub district
- Facility ownership by facility type
- Facility ownership by emirate, municipality, district, sub district





# HEALTH FACILITY LOCATOR APP



Provision of community facilities and services maps

The 1MAP health facility locator application assists in locating health institutions such as hospitals, health centers, and clinics across the UAE.

The application enables the below functions:

- Search by facility specifications
- Search by facility location
- Search by distance to facility (1 - 15 km) from current location or any other location.
- Overview of number of facilities within a district or a sub district with a breakdown of type of facilities.



# EDUCATION FACILITIES DASHBOARD

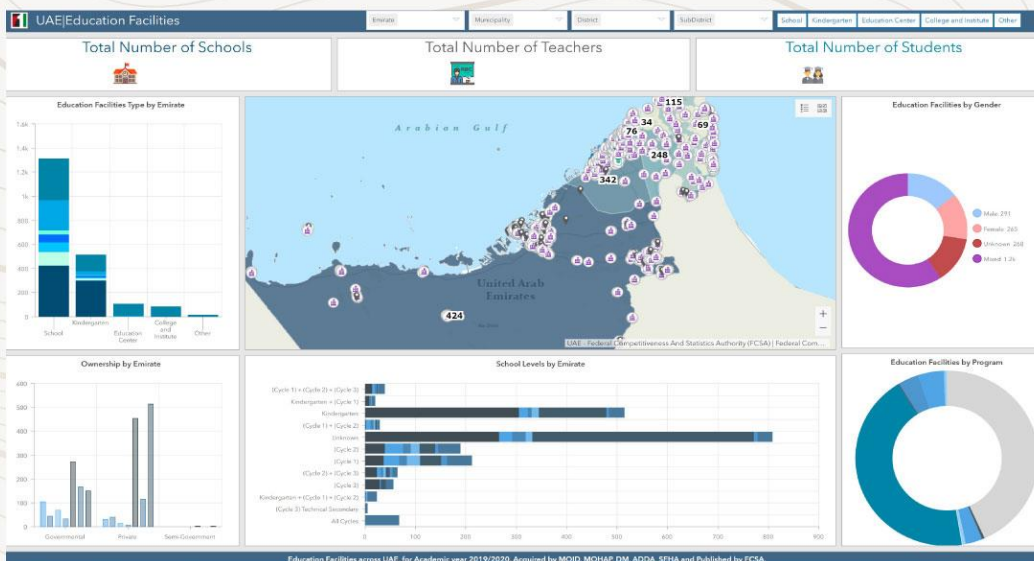
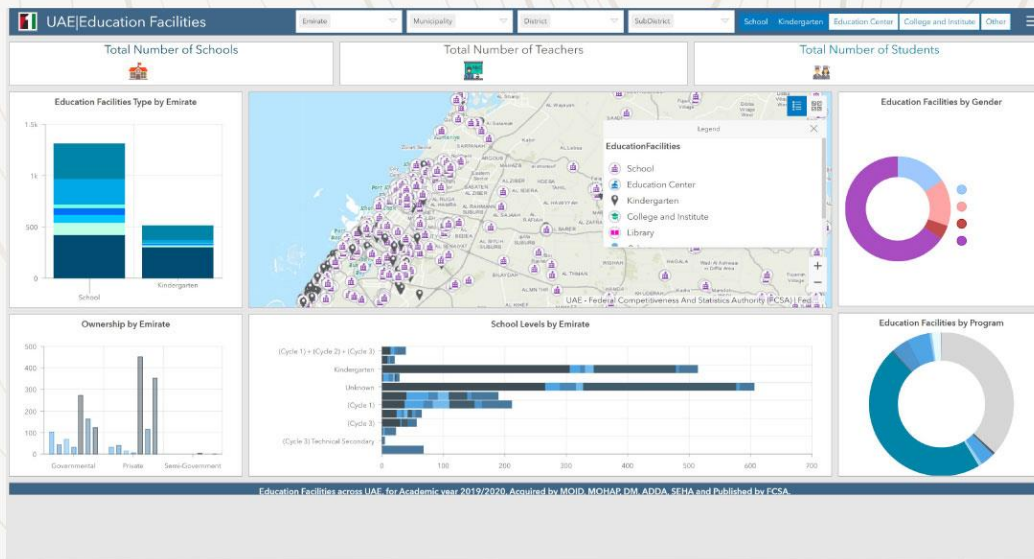


Provision of community facilities and services maps

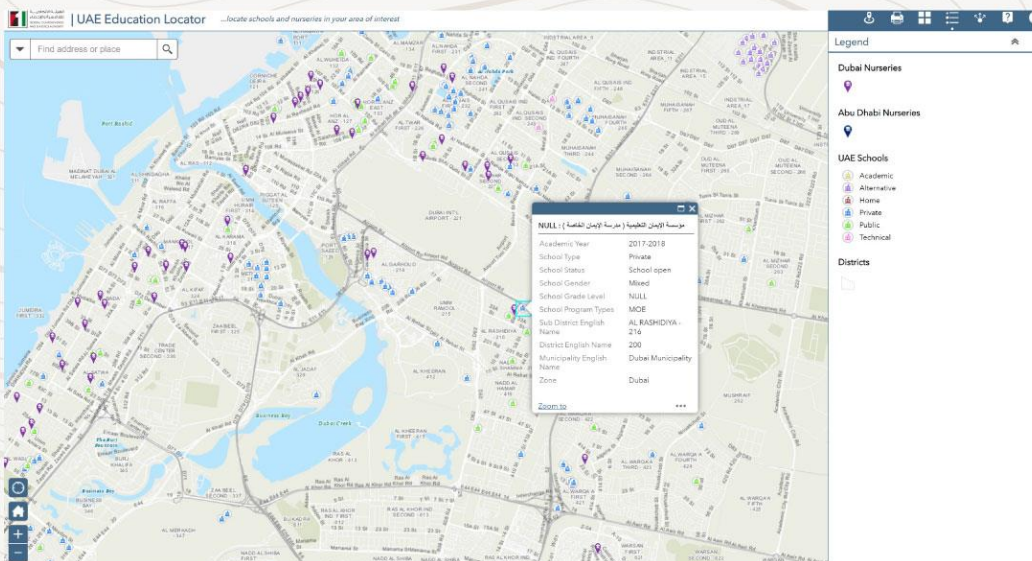
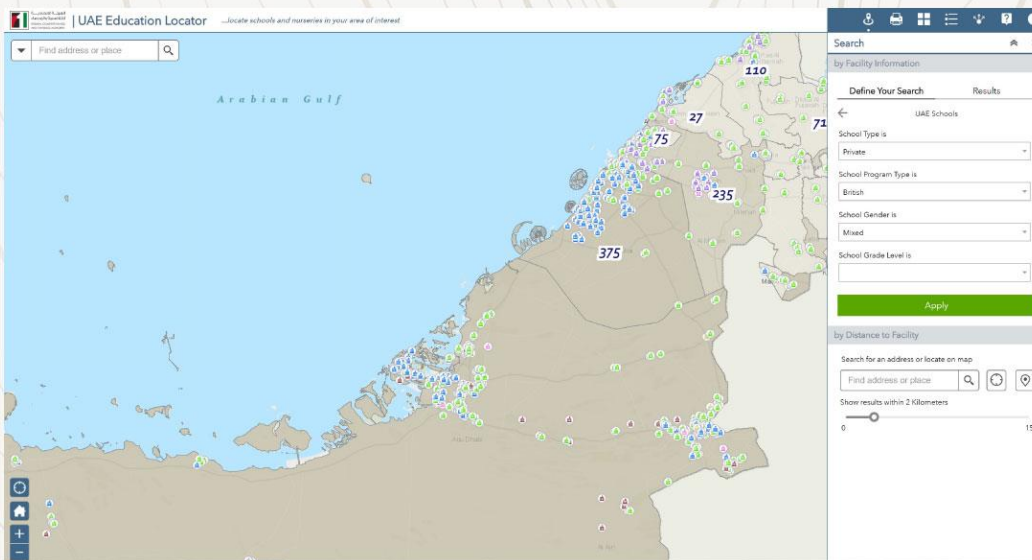
This interactive geo-dashboard summarizes the statistics of education facilities in the United Arab Emirates, including number of teachers, students, ownerships types and other data information.

Indicators are presented by emirate, municipality, district and sub district for:

- Total number of schools
- Total number of teachers
- Total number of students
- Education facilities type
- School levels
- School gender (male, female, mixed)
- School ownership (government, semi government, private)
- Education program (national, american, british, etc.)







# EDUCATION FACILITY LOCATOR APP



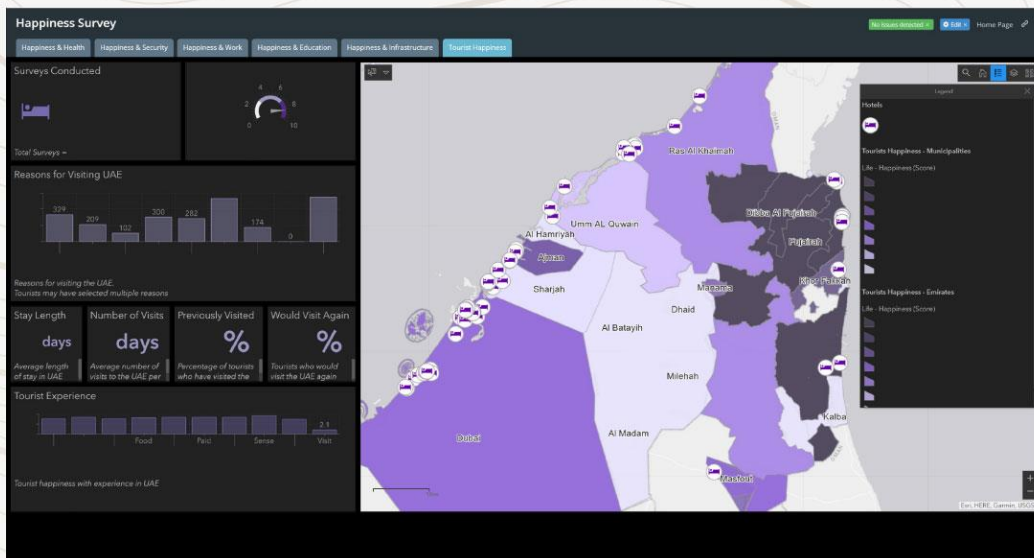
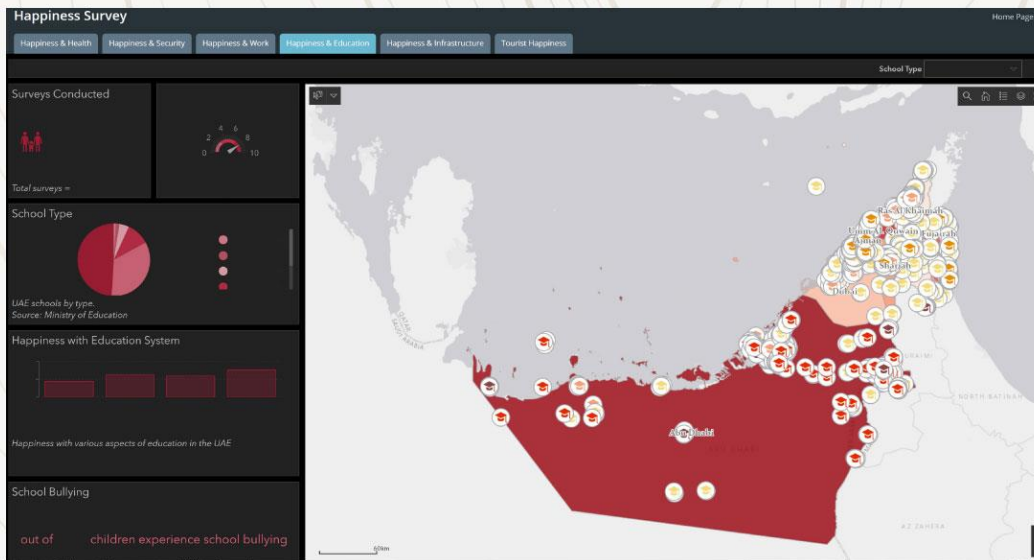
Provision of community  
facilities and services maps

The 1MAP education facility locator application assists in locating education facilities such as schools, nurseries and others across the UAE.

The application enables the below functions:

- Search by facility specification
- Search by facility location
- Search by distance to facility (1 - 15 km) from current location or any other location.
- Overview of number of facilities within a district and sub district with a breakdown of type of facilities.





# HAPPINESS SURVEY RESULTS DASHBOARD



Dissemination of national statistics dashboards and storymaps

This interactive geo-dashboard summarizes the national happiness survey results on multiple maps.

Indicators visualized in the dashboard include:

- Mapping indicators related to happiness with health, security, work, education, infrastructure and tourism
- Aggregating results at several administrative levels, such as emirate, district, and sub-district
- Combining results with distribution and types of community facilities
- Representing the movement of the labor force (where they live and work), the average monthly household income, the workplace, and the employers.



# TOURISM DASHBOARD

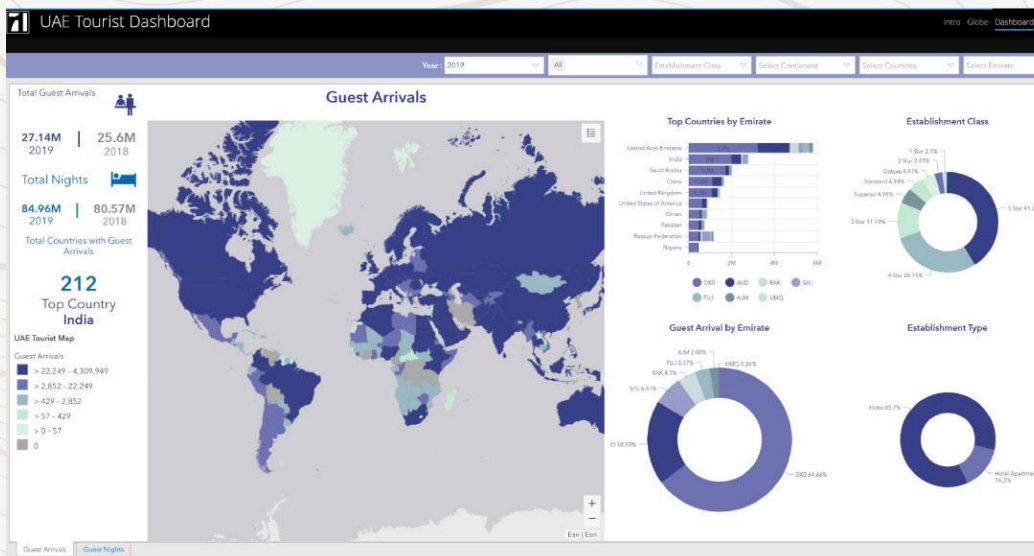
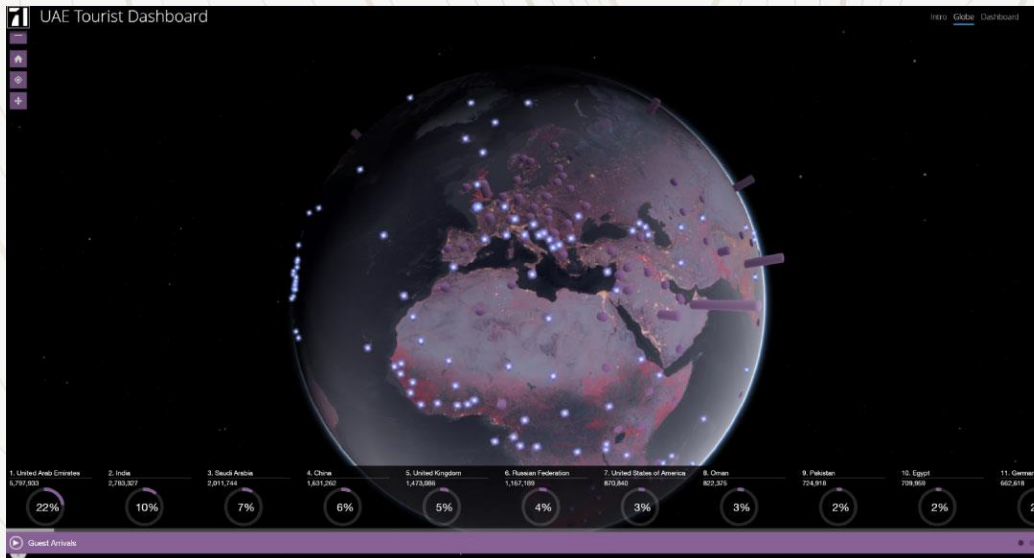


Dissemination of national statistics dashboards and storymaps

The national tourism statistics interactive 2D and 3D geo-dashboards for the UAE summarizes the guest nights and guest arrivals in hotel establishments across all emirates in different years.

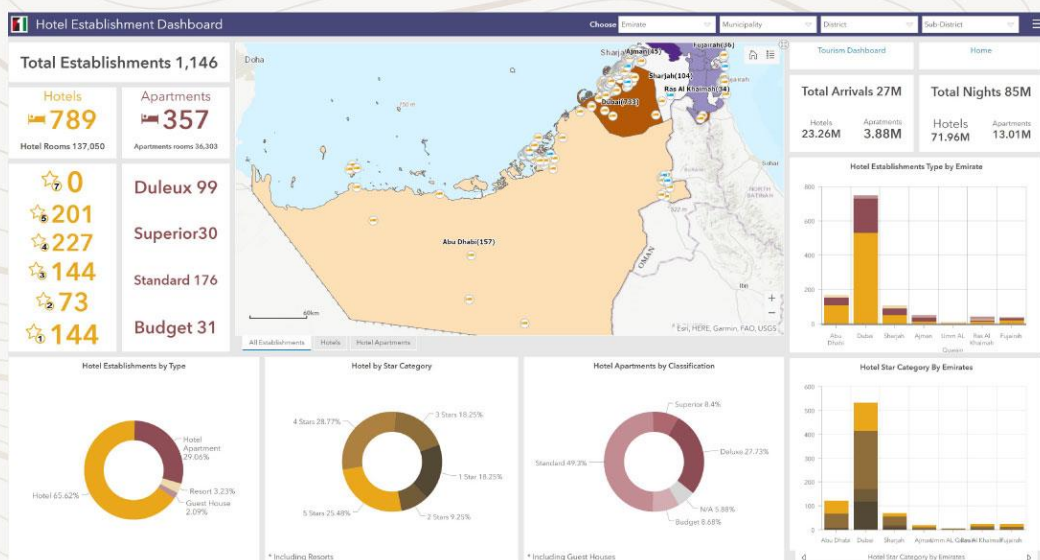
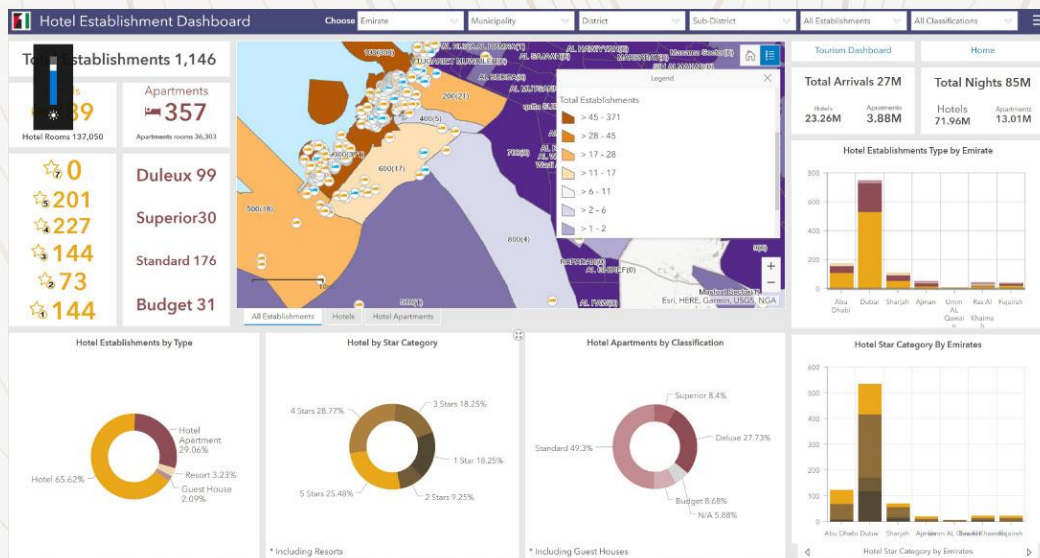
Statistical indicators presented in the dashboard include:

- Guest nights and guest arrivals by origin country and continent
- Guest nights and guest arrivals by establishment type (hotel or hotel apartment)
- Guest nights and guest arrivals by establishment class
- Guest nights and guest arrivals by destination emirate
- 3D globe providing a brief overview of countries ranking according to total guest arrivals to UAE



[Click to view](#)





# HOTEL ESTABLISHMENTS DASHBOARD

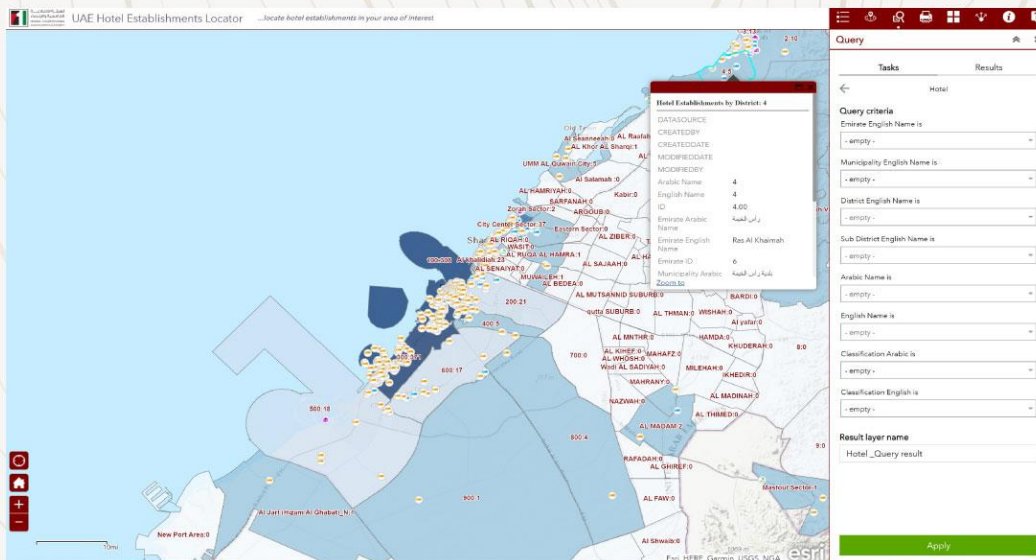


Provision of community facilities and services maps

An interactive geo-dashboard that summarizes national tourism establishments locations, specifications and statistics

- Statistics of hotels establishment type by emirate, municipality, district and sub district
- Statistics of hotel establishments type and star Classification
- Statistics of hotels establishment classification by emirate, municipality, district and sub district
- Number of guests arrival by emirate, municipality, district and sub district
- Number of guests nights by emirate, municipality, district and sub district





# HOTEL ESTABLISHMENT LOCATOR APP

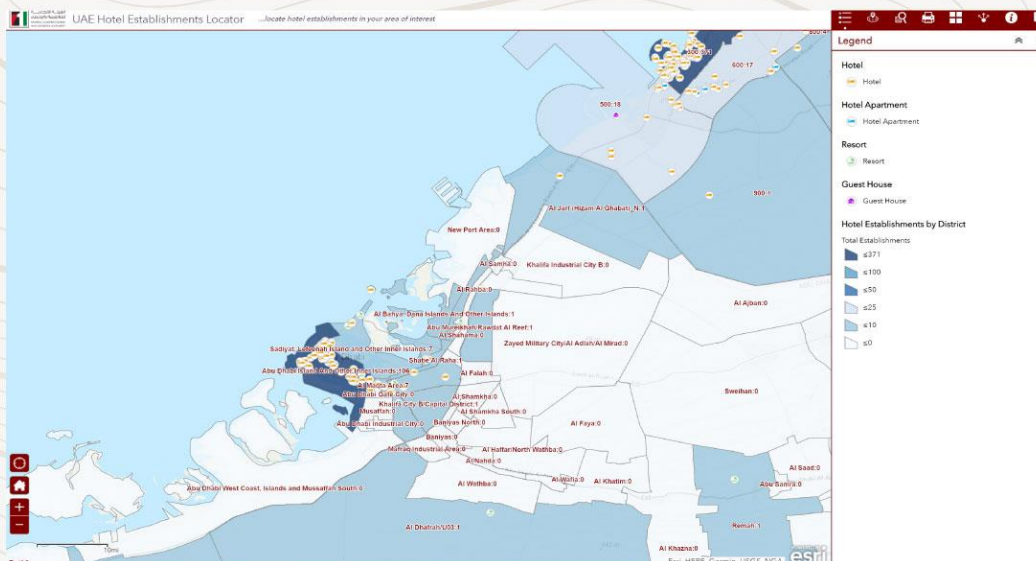


Provision of community facilities and services maps

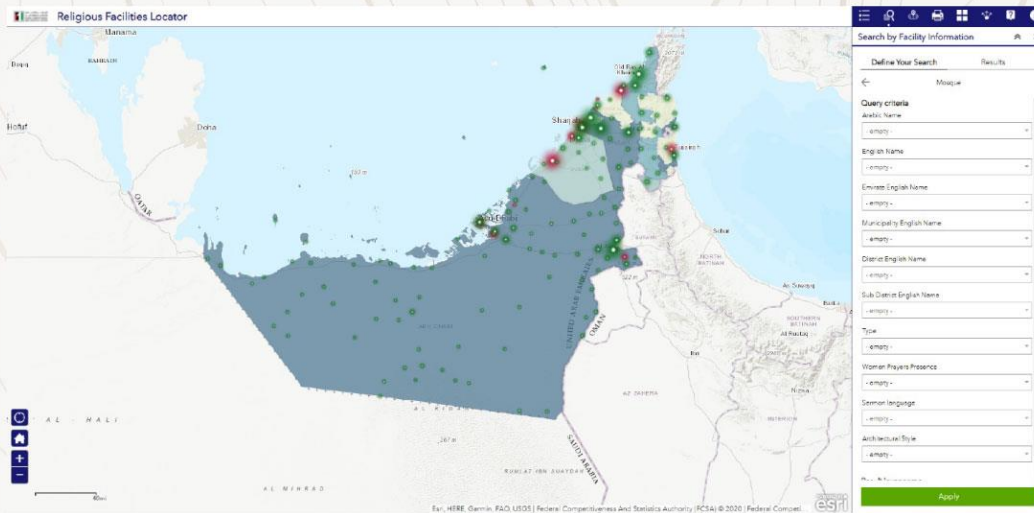
The 1MAP hotel establishment locator application assists in locating hotel establishments including hotels, resorts, hotel apartments and others across the UAE.

The application enables the below functions:

- Search by establishment specifications
- Search by establishment location
- Search by distance to establishment (1 - 15 km) from current location or any other location.
- Overview of number of establishments within a district or a sub district with a breakdown of type of establishments







# RELIGIOUS FACILITY LOCATOR APP



Provision of community facilities and services maps

The 1MAP religious facility locator application assists in locating mosques and other worship places across the UAE.

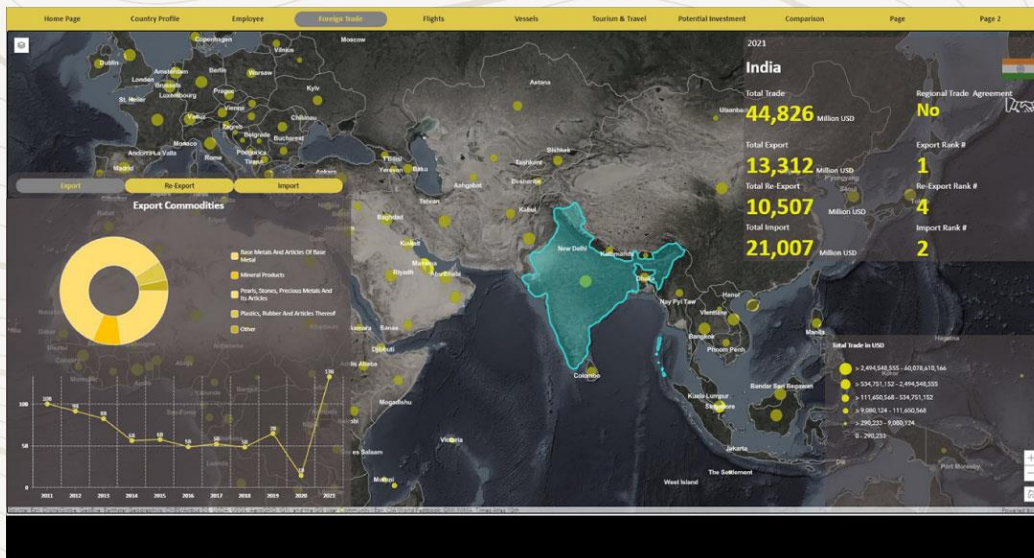
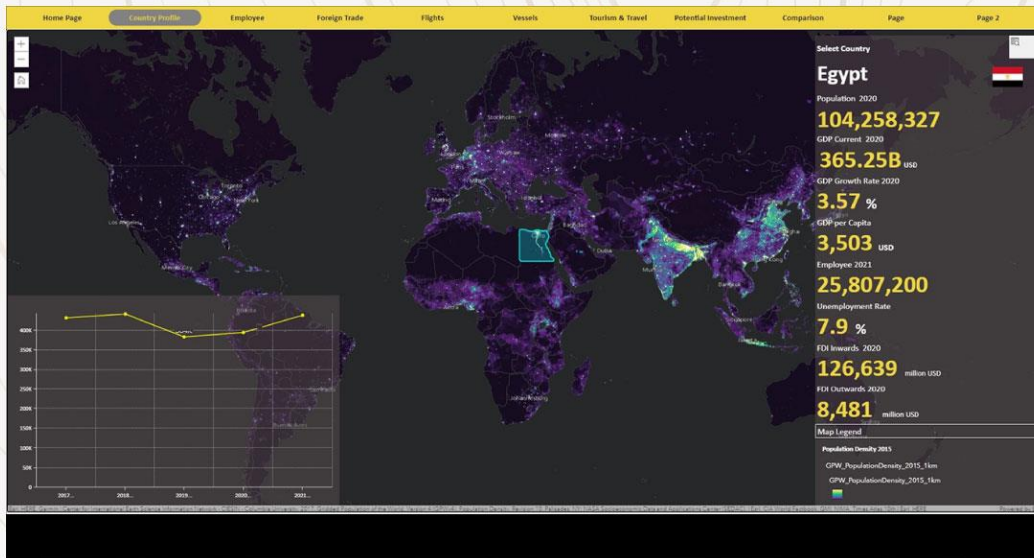
The application enables the below functions:

- Search by facility specifications
- Search by facility location
- Search by distance to facility (1 - 15 km) from current location or any other location.
- Overview of number of facilities within a district or a sub district with a breakdown of type of facilities.









# BILATERAL SOCIO-ECONOMIC DASHBOARD



Dissemination of national statistics dashboards and storymaps

The dashboard showcase for each country bilateral socio-economic indicators related to different sectors with UAE. It allows comparison between multiple countries indicators values and helps spot on potential export investment opportunities by showing top 10 imported commodities for selected countries and UAE rank and contribution in this import trade.

Example of indicators included with yearly trend lines are:

- Country's population & residents in UAE
- GDP
- Country's employment and employees in UAE
- Foreign trade with UAE
- Foreign direct Investment with UAE
- Flights & vessels with UAE
- Arrivals and tourists from country to UAE
- Hotel establishment and guest arrivals
- Foreign aid disbursements





# FOREIGN TRADE DASHBOARD



Dissemination of national statistics dashboards and storymaps

A interactive mapping application for UAE foreign trade (UAE Foreign Trade Statistics and Trend) .

The application visualizes

- UAE Foreign import, export and re-export statistics for year 2020 sorting the countries according to the value of total import/export and re-export.
- Top commodities for each across 21 trade sectors
- An overview of the trade details with each country (import, export, re-export) in the latest year
- A brief understanding on the import, export and re-export trend with each country through analyzing its trade statistics across from year 2001 onwards with each country individually

In addition to 3D Globe Overview Dashboard that gives a brief understanding on countries total import- export or reexports with UAE and total values in an 3D animation



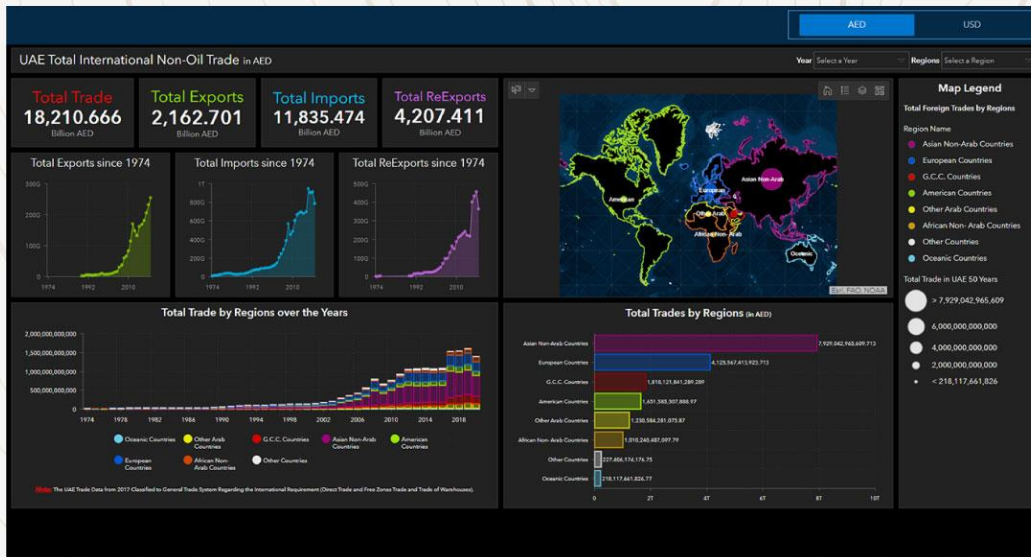
# FOREIGN TRADE IN 50 YEARS



Dissemination of national  
statistics dashboards  
and storymaps

This dashboard represents the total international non-oil trade in UAE over the regions since 1974.

The total values in USD and AED of exports, imports and reexports with UAE are shown and graphed to summarize development by region.





# FOREIGN DIRECT INVESTMENT DASHBOARD



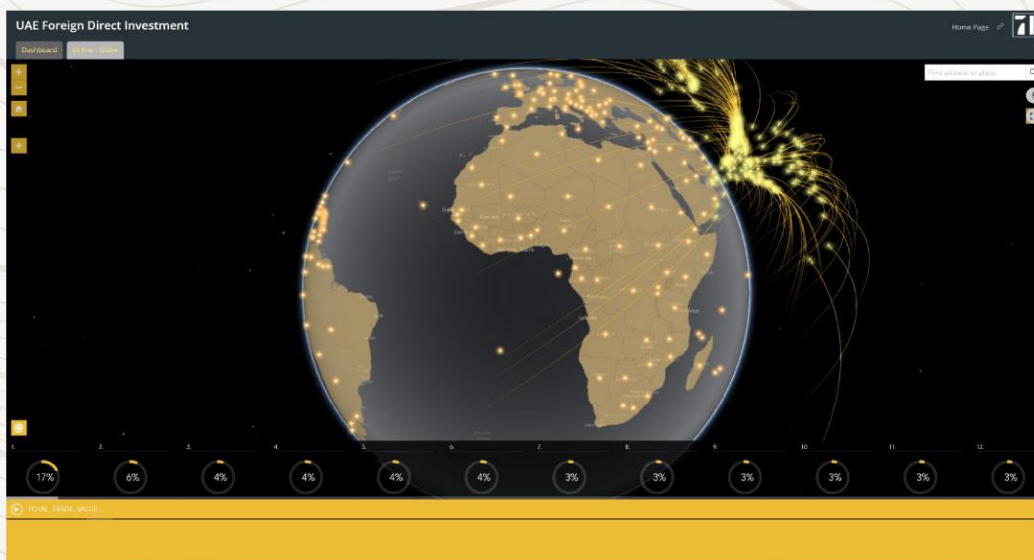
Dissemination of national statistics dashboards and storymaps

The interactive geo-dashboard visualizes the Foreign Direct Investment (FDI) into the UAE.

The FDI data is accessible by country and economic activity (2012 onwards)

Interactive dashboard features include:

- Statistics on FDI into the UAE (value and %) and distribution by activity, emirate, and country ranking
- Data filtration by economic activity, country, year, and emirate
- FDI trend line from 2012 onwards
- 3D globe providing a brief overview of countries' FDI inwards rankings and total values to the UAE





# FOREIGN AID DASHBOARD

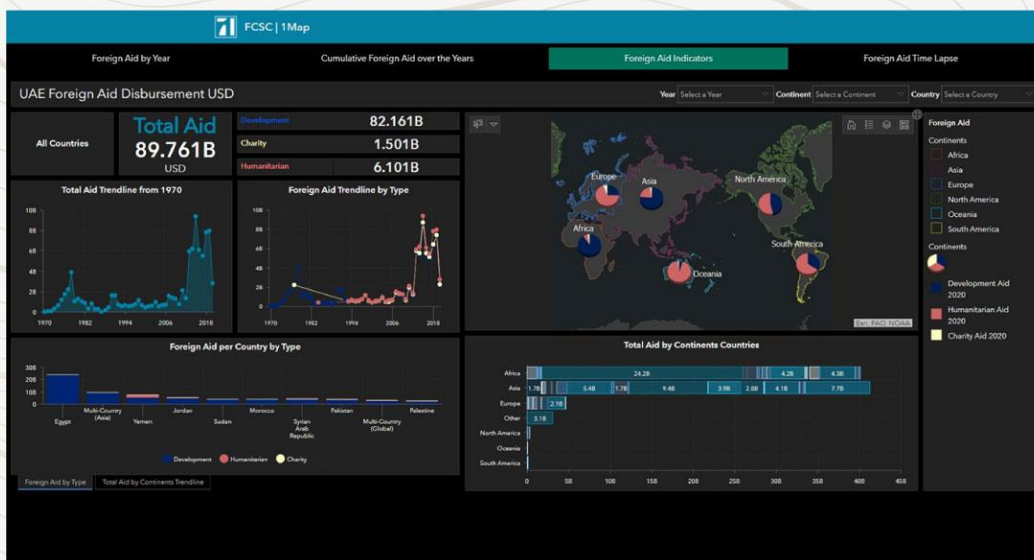


Dissemination of national statistics dashboards and storymaps

This geospatial dashboard summarizes UAE foreign aid disbursements to various nations, regions, and continents.

The application includes:

- Dashboard for total aid statistics which maps and sorts countries, regions and continents by the value of aid disbursed
- Time aware 3D scene displaying total aid value for each country per year from 1970 onwards
- 3D scene displaying accumulated value of aid disbursement per country from 1970 onwards



[Click to view](#)



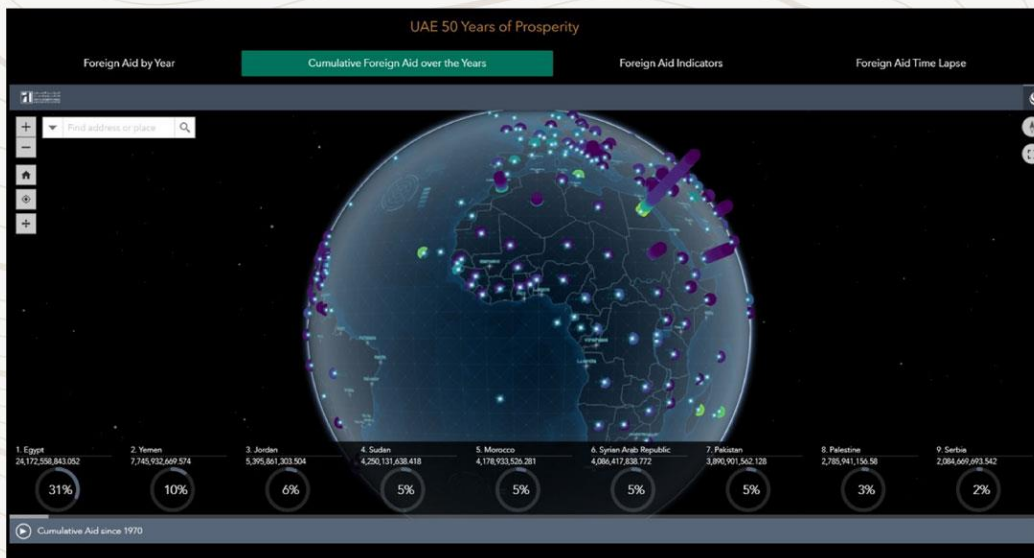
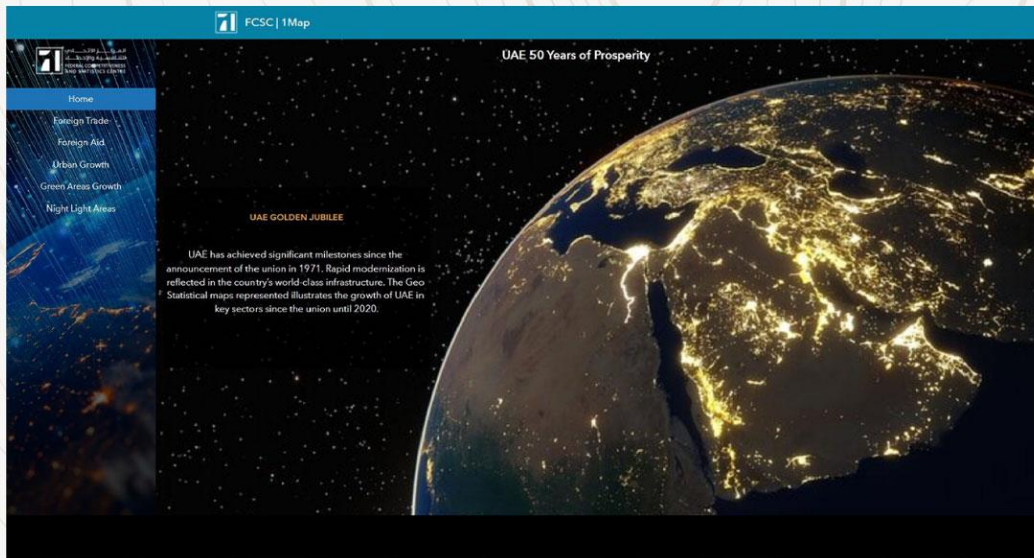
# 50 YEARS OF PROSPERITY



Calculation of indicators using geo-analysis and artificial intelligence

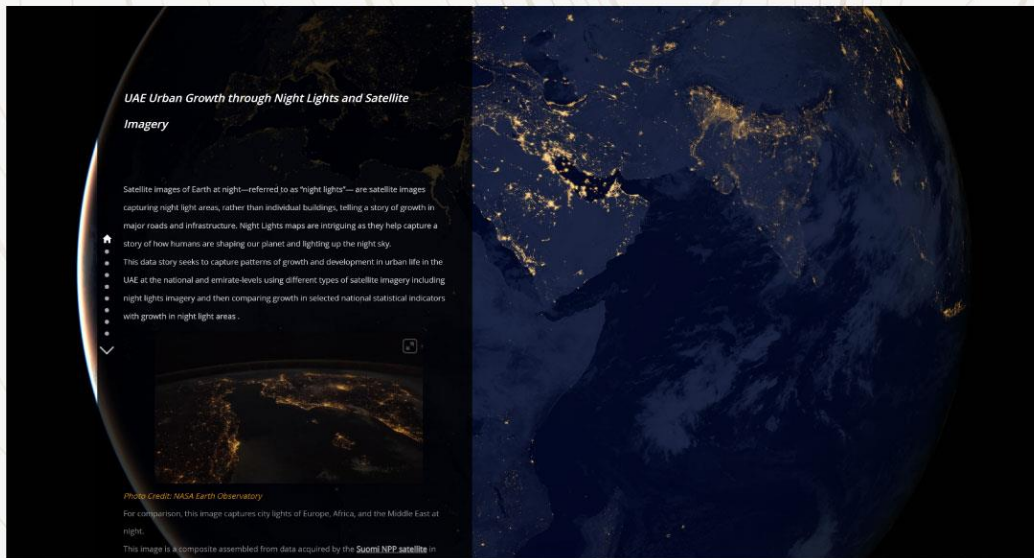
UAE has achieved significant milestones since the announcement of the union in 1971. Rapid modernization is reflected in the country's world-class infrastructure. The Geo Statistical maps represented illustrates the growth of UAE in key sectors since the union until 2020 including:

- Foreign Trade
- Foreign Aid
- Urban Growth
- Green Areas Growth
- Night Light Areas



Click to view





# UAE URBAN GROWTH STORYMAP



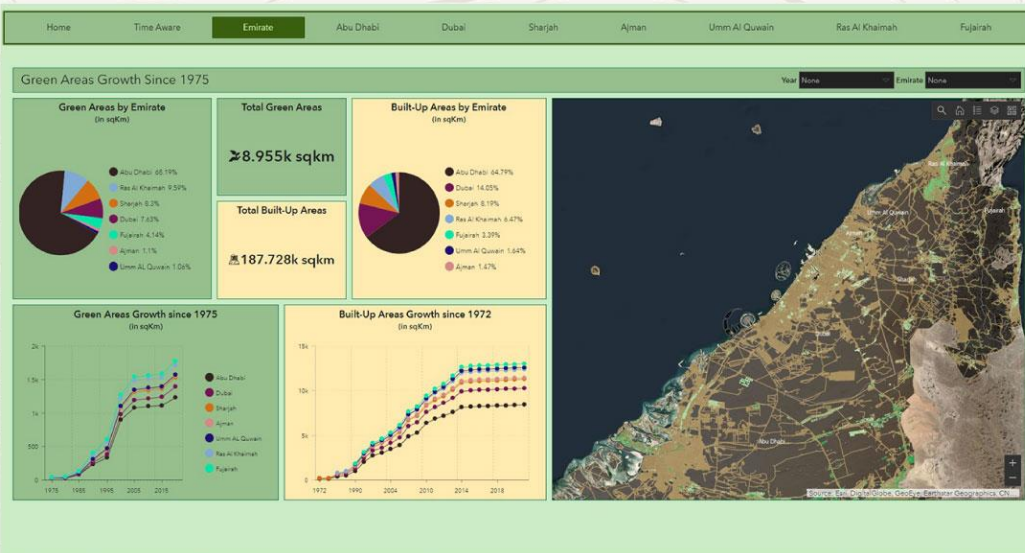
Calculation of indicators using geo-analysis and artificial intelligence

Through the utilization of artificial intelligence applications, satellite imagery ,and open data -this storymap illustrates the captured patterns of growth and development in urban life in the UAE at the national and emirate-levels using different types of satellite imagery

- NASA night lights imagery (2010 -onwards)
- Daylight imagery showing urban (1972 - onwards)

Following that, growth rates in selected national statistical indicators were compared to growth in both night light and built-up areas.





# GREEN AREAS GROWTH



Calculation of indicators using geo-analysis and artificial intelligence

Through the utilization of artificial intelligence applications on satellite imagery, this data story seeks to capture patterns of growth in UAE green areas at the national and emirate-levels using since 1975 and then showing growth trends in green areas and built up areas per emirate on a dashboard and a time animated map.

Indicators on dashboard includes :

- Green areas by emirate in sqkm
- Built up areas by emirate in sqkm
- Green areas growth since 1975 in sqkm
- Built up areas growth since 1975 in sqkm



# LANDUSE DASHBOARD



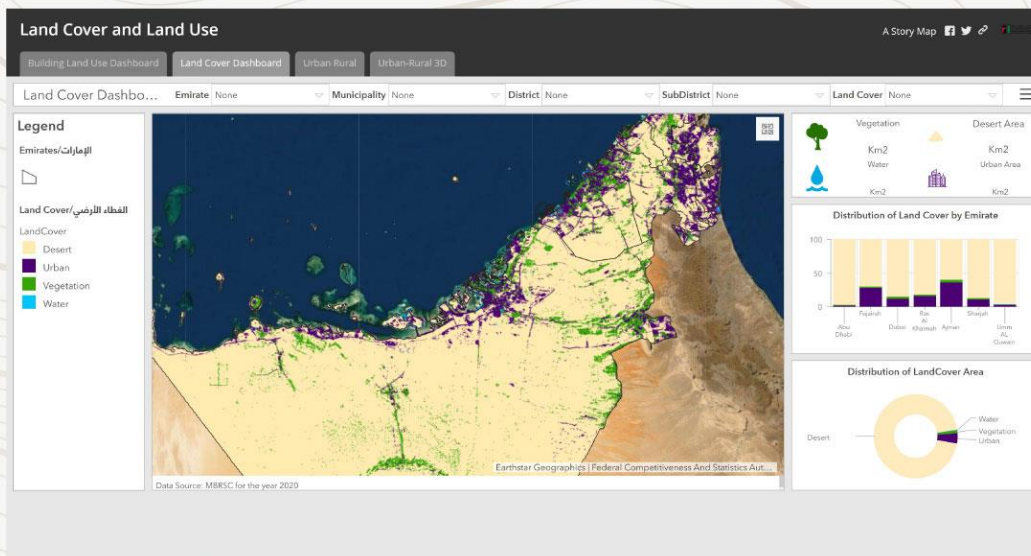
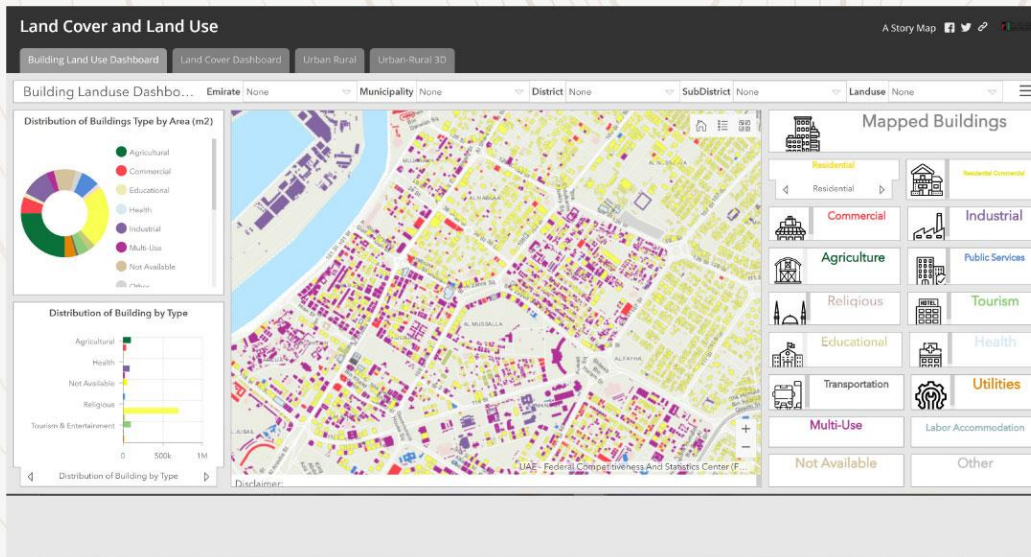
Calculation of indicators using geo-analysis and artificial intelligence

This application maps buildings and landuse parcels, showing the geographic distribution and summary statistics of various land uses across UAE.

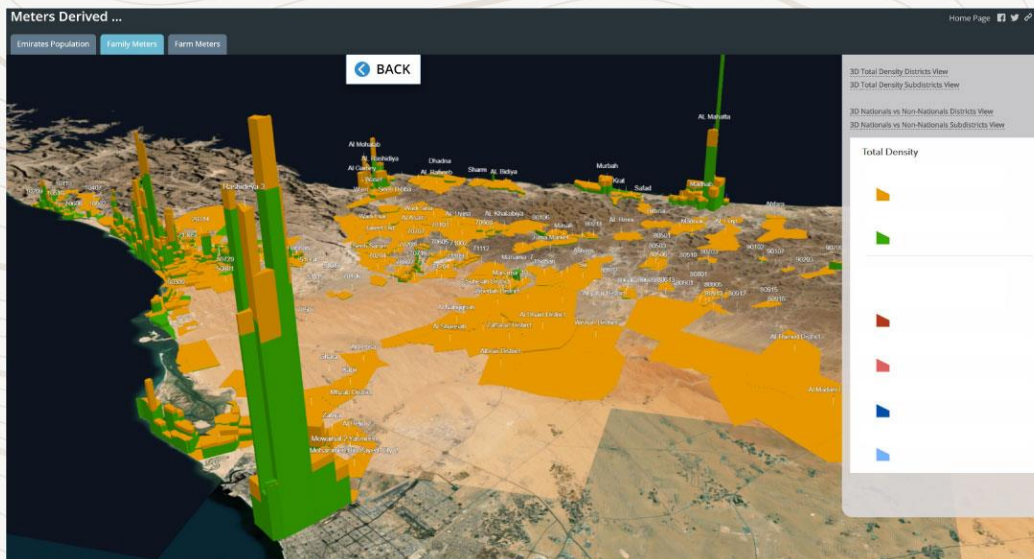
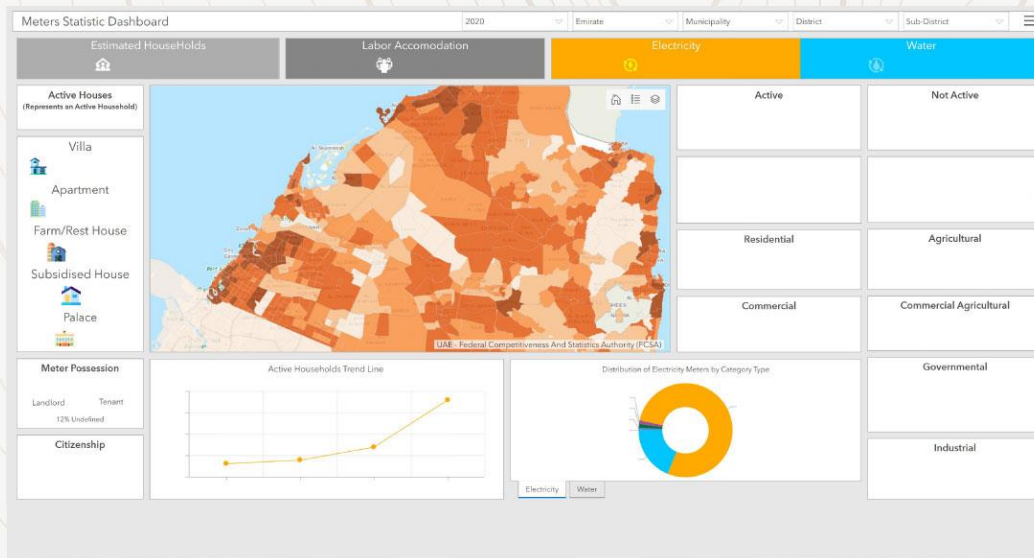
Landcover is also incorporated on this dashboard to show the distribution of builtup, desert, water and vegetations areas.

Statistical indicators displays

- Statistics based on the type of landuse (residential, industrial, commercial, agricultural, public services, facilities & infrastructure) from emirate to sub district level
- Statistics on the sub type of landuse & other specifications from emirate to sub district level
- Statistics on type of landcover







# SMART METERS DASHBOARD FOR HOUSING UNITS



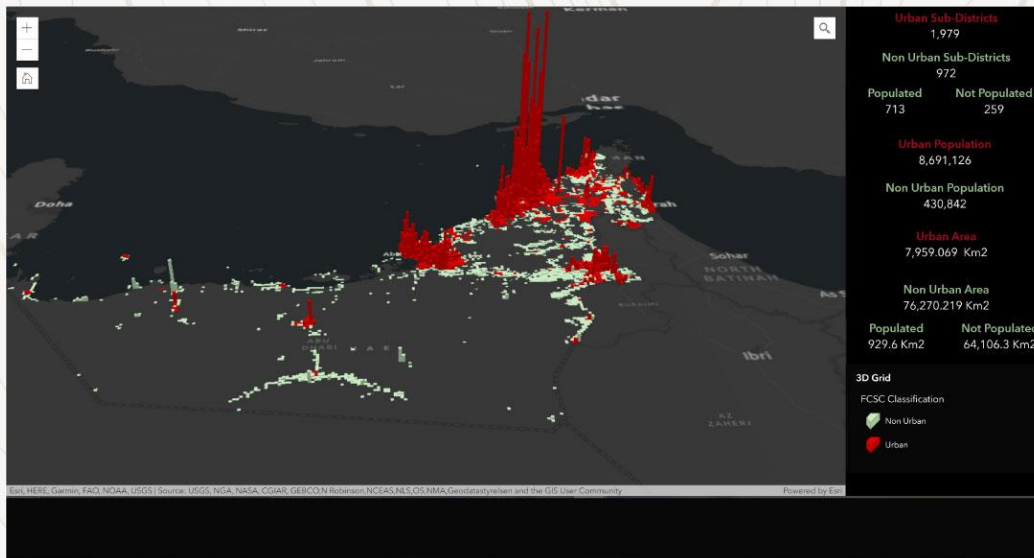
Calculation of indicators using geo-analysis and artificial intelligence

This applications represents the output of a smart approach to extract household units density through deriving active residential utility meters from water and electricity meters data showing the growth from 2013 onwards.

Information depicted include:

- Statistics at the levels of the emirate, municipality, district, and sub-district
- Statistics based on the type of building: villa, apartment, or other
- Statistics by type of unit: residential, farm, and commercial
- Statistics by citizenship of meter owners
- A summary of the growth pattern since 2013
- Maps for meters distribution density





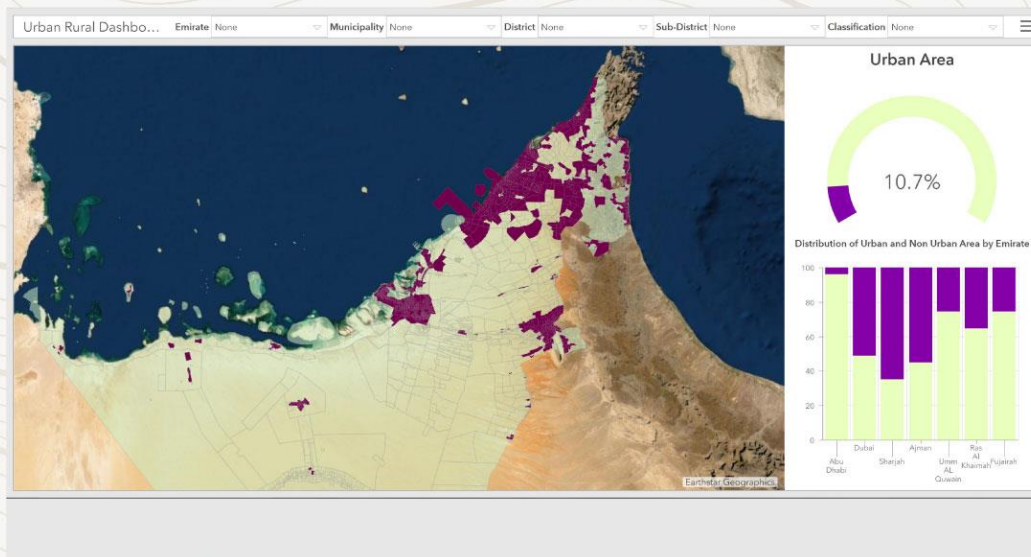
# URBAN RURAL AREAS POPULATION DASHBOARD



Calculation of indicators using geo-analysis and artificial intelligence

This application displays urban and rural subdistricts across UAE. It includes:

- Population distribution on urban and non urban grid cells
- Classification of administrative geographies from emirate to sub districts as Urban or non urban areas
- 3D scene showing Population Grid 2 km with Urban Rural Subdistricts and summary statistics including:
- number of urban and non-urban subdistricts
- number of populated and non populated urban and non-urban subdistricts
- total area of urban and non-urban subdistricts
- total area of populated and non populated urban and non-urban subdistricts



[Click to view](#)



# GEO AI IN PRE ENUMERATION CASE STUDY

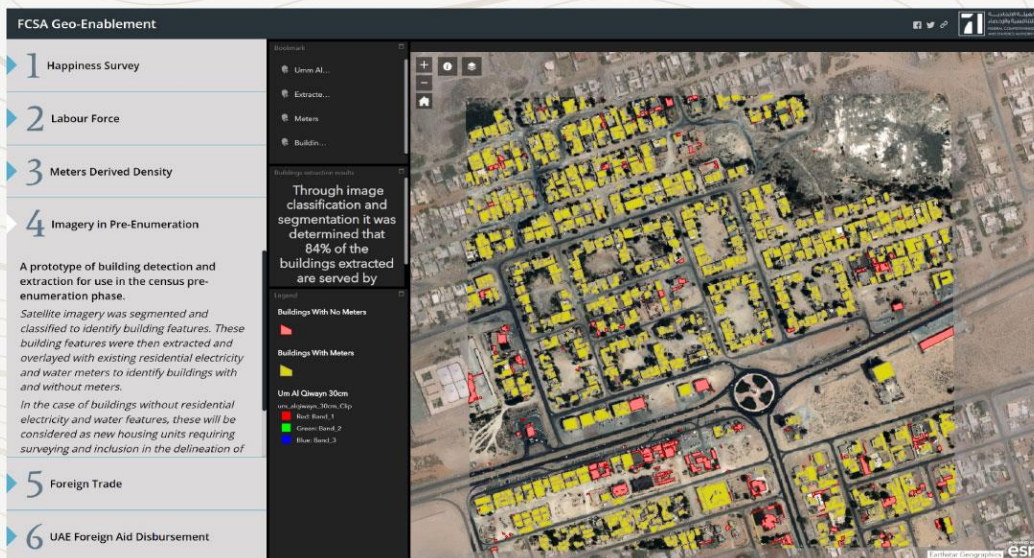
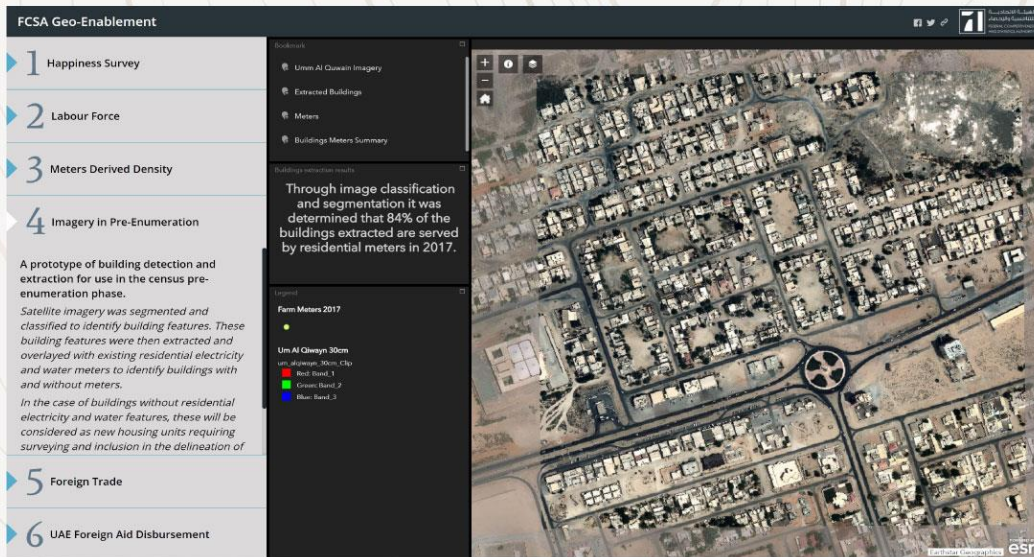


Calculation of indicators  
using geo-analysis and  
artificial intelligence

A building detection and extraction prototype  
for use in the census pre-enumeration phase

The workflow includes

- Segmentation and classification of satellite imagery to identify building features
- Comparison to household electricity and water meters to identify new housing units that needed to be surveyed and included in the enumeration area definition







## CUSTOMIZED PARTNERS PAGES



Collaboration with partners for platform access and data exchange

Implementing customized user-friendly pages for governmental partners to explore 1MAP applications safely

- "1MAP for Executives Page" is an example of this which enables stakeholders to access all 1MAP-approved applications and dashboards from this single page
- Another example is "1MAP for Health Page", which was made available to partners during the COVID pandemic

While the execution of geo-data exchange is implemented securely and automatically on the geo-platform's infrastructure with partnering entities to be used in related application.





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