Planning in Singapore

URA, as Singapore’s urban planning authority, balances a multitude of needs in a small space.
Harnessing Data and Analytics – 3 Desired Outcomes

1. Data-driven insights for better planning decisions
   • Access and analyse data, and build internal analytics capabilities

2. Integrated, Whole-of-Government planning
   • Collaborate, share insights and enhance public sector service delivery

3. Enhance industry productivity
   • Provide information and services more effectively

Enabled by Digital Technologies

Think Big, Start Small, Act Fast
Data-Driven Insights
Using Demographic Data to Plan Healthcare Facilities for Seniors

Context
As the population ages, planners face growing challenges in right-siting, right-sizing and right-timing healthcare facilities.

Data-Driven Insight
Demographic information showed where larger numbers of senior citizens were concentrated. Taken together with locations of existing and upcoming polyclinics, it was found that most seniors live within 1.5km (<1 mile) from the closest polyclinic.

Planning Implication
More healthcare facilities will be needed in areas where more seniors reside further away from existing services, and where the population of seniors is expected to grow.

Data source:
Department of Statistics, Ministry of Health
Data-Driven Insights

The “Park Score”: Using Data Analytics to Plan Parks

Context
To achieve Singapore’s “City in a Garden” vision, a planning target of 8sqm of park space per person/having 90% of households within 10 minutes’ walk of a park has been set. How can the siting of new parks be optimised?

Date-Driven Insight
A Park Score was created to measure park service levels across the island. The score takes into account both accessibility to parks and size of parks, giving more insight into how well areas are currently served.

Planning Implication
The Park Score provided a standardized way to understand the distribution of parks and prioritize new parks for implementation.

Above: Plan showing varying Park Scores in the eastern part of Singapore; Left: Park Score service banding
Data-Driven Insights

Supported by Digital Planning Tools

Suite of tools built in-house to support access to, and analysis of, data for planning.

**ePlanner**
Provides planners with rich planning data for quick visualisation and analyses

**GEMMA**
Brings planners from across agencies on a common platform to study land use scenarios together

**Urban Systems Dashboard**
Allows planners to track the implementation progress of development and infrastructure
Integrated, Whole-of-Government Planning

Formulating Targeted Interventions for Seniors

Working together with the Ministry of Health, an analysis of the needs of seniors down to the individual housing block level was carried out.

The resultant Community Networks for Seniors layer on ePlanner enables:

- Better planning and programming of facilities based on the community’s needs
- Sharing of insights with grassroots and community groups
GEMMA serves as a common platform for agencies to plan for social and community facilities (e.g. childcare centers, libraries, community clubs).

By accessing the platform, agencies are able to:
- View existing and planned facilities
- Understand the demography of towns
- Use the in-built map editing tool to propose scenarios
- Jointly evaluate scenarios and agree on locations for facilities.
Enhance Industry Productivity

Allowing hassle-free access to planning data and mapping services.

Online portals enable members of the public and industry professionals to search and view information more easily.
Five Final Points on Digitalization

Build strong data foundations
Policies and infrastructure for sharing, accessing and analyzing data

Adopt a systems approach
Not piecemeal IT projects, but a systematic digitalization of processes

Drive adoption
Data analytics must always have a purpose; seek to turn insights into actions

Experiment Fast
Test assumptions, prototype, try things out

Learn from Each Other
Keep exploring with agencies and industry partners