



Singapore Land Authority

Integrated Geospatial & Statistical Data for Public, Private and People Sectors in Singapore

NG Siau Yong ng_siau_yong@sla.gov.sg
Director, GeoSpatial Division

[More Information](#)

Introduction

Singapore

SLA



- Island city state in South East Asia (E 103° 50' N 1° 17')
- Size: 710 sq km
- Population: 5.18 m (2011)
- GDP: \$59,813 (2010)

- Internet Penetration Rate: 77.8% (3.67 million in 2010)
- Multi-racial (Chinese, Malay, Indian & Eurasian) & Multi-religious
- English is the common language.

Introduction

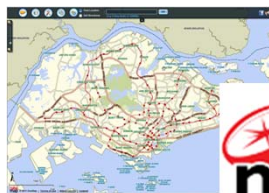
Singapore

SLA

Limited Land . Unlimited Space



Optimise land resources



Spatial information and Drive SDI



National Title Registry
and Survey Systems

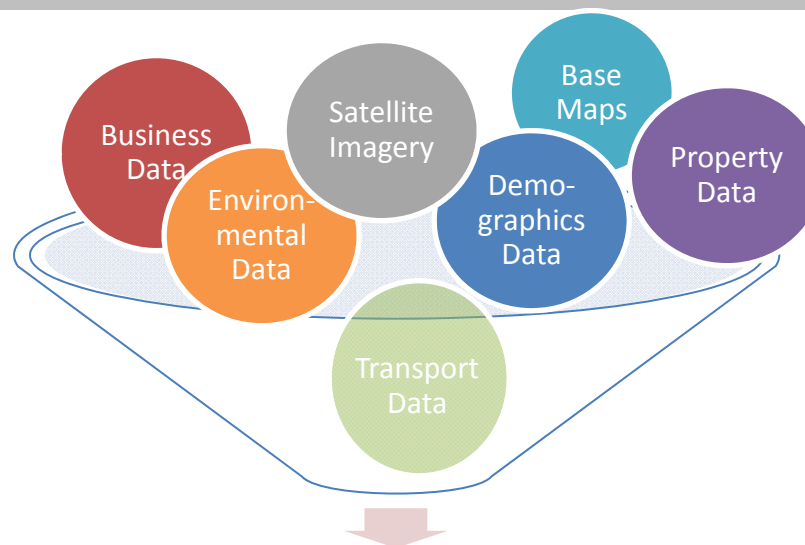
SG-SPACE

Singapore GeoSpatial Collaborative Environment

Synergistic Data

Vision and Goals

Initiatives



People
Blogs, Personal Use

This block shows three screenshots of web applications. The first is 'sgelub', which appears to be a social networking or blogging platform. The other two screenshots show various personal use interfaces with text and images.

Private
Build Value-Added Services

This block shows three screenshots of web applications. The first is a search interface with a magnifying glass icon. The other two screenshots show data visualization and service interfaces, likely for business or government use.

Public
Publish Info & Services

This block shows three screenshots of web applications. The first is a news or information page with a large image. The other two screenshots show service-oriented interfaces with text and images, likely for public information or service delivery.

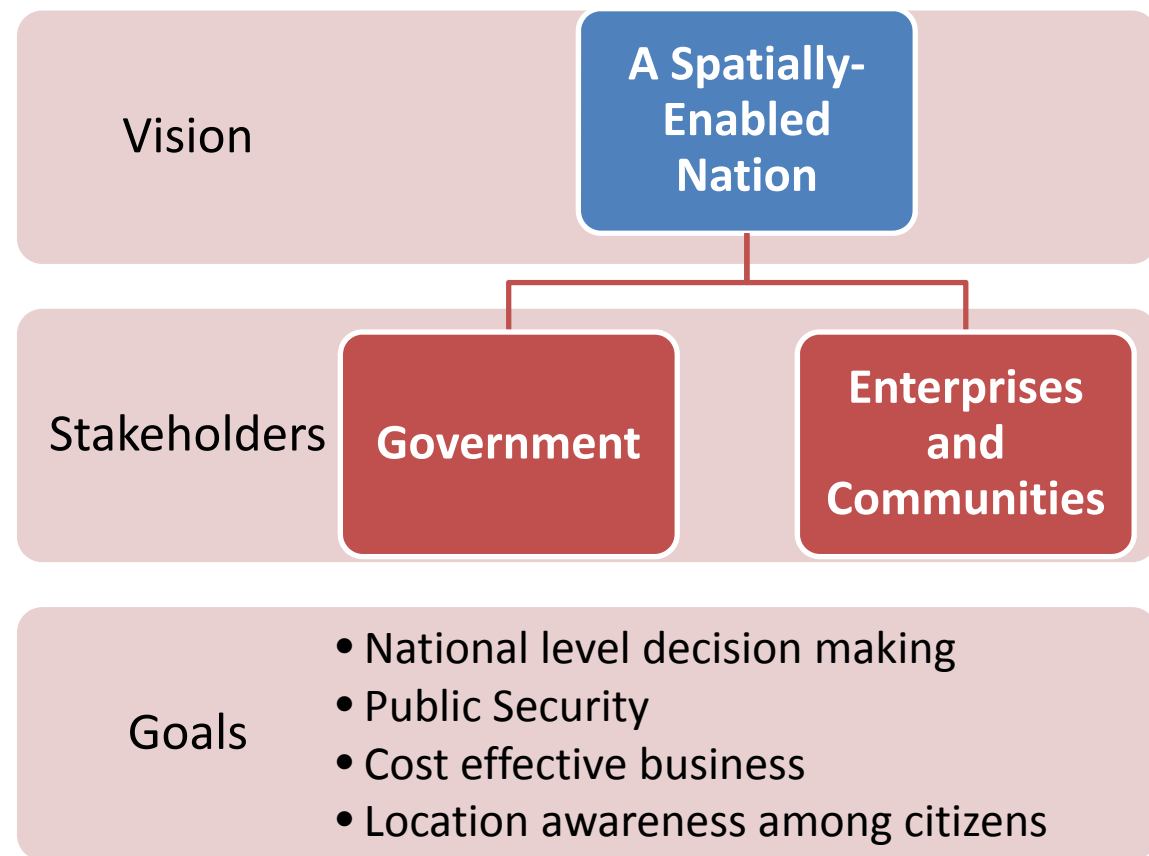
SG-SPACE

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Initiatives



SG-SPACE

Initiatives

GeoSpace



[Read More](#)

OneMap



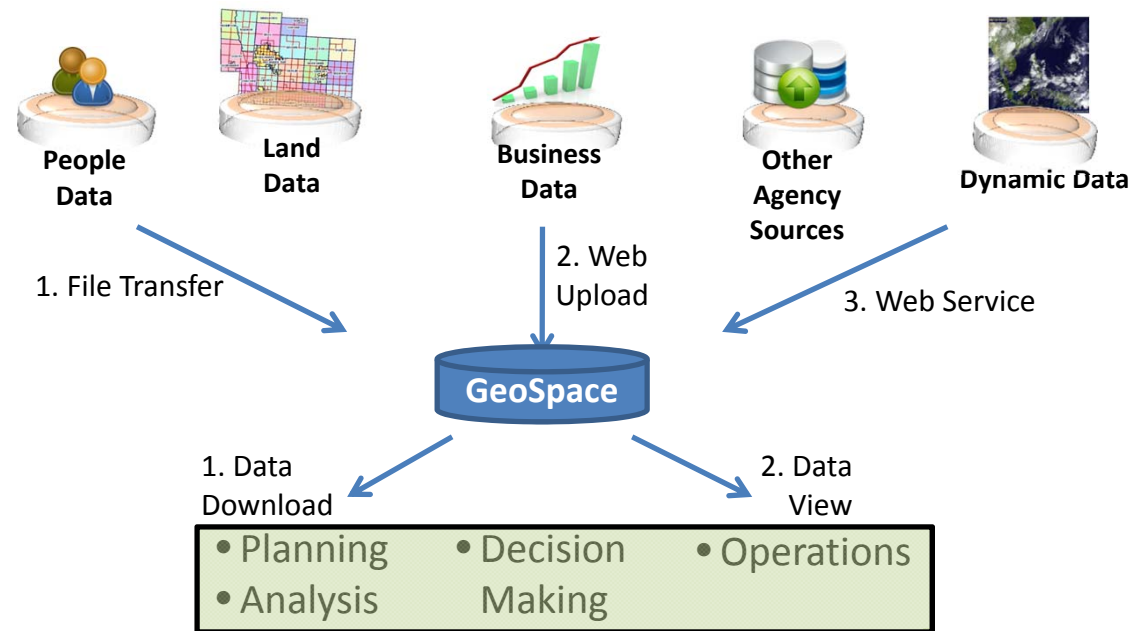
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GeoSpace

Overview

- Basic Statistic
- Search Tool
- Geocoding Tool
- Scenario Demo

Sharing by Agencies



Access by Agencies



GeoSpace

Overview

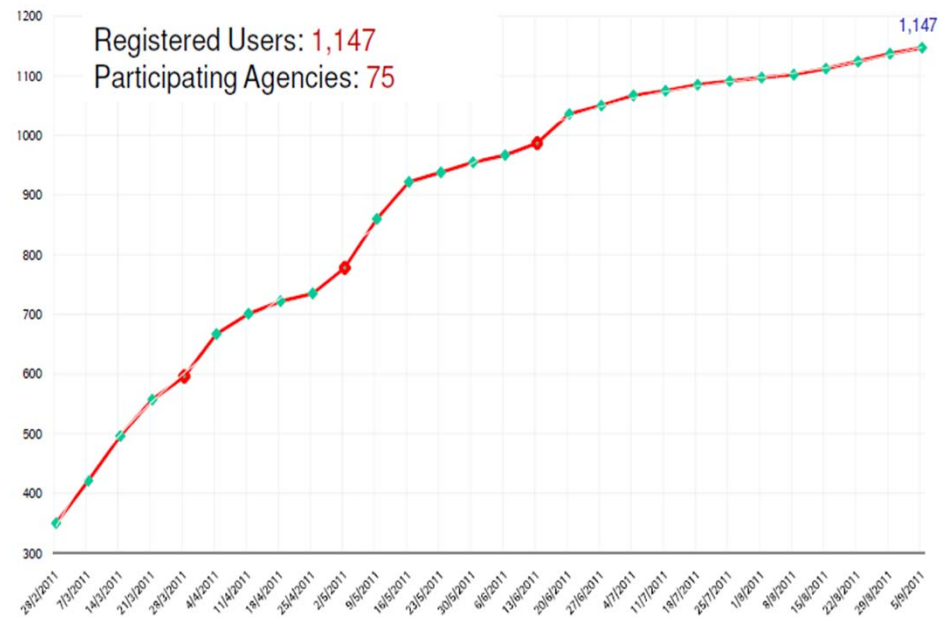
Basic Statistic

Search Tool

Geocoding Tool

Scenario Demo

- Launched on the 1st of April 2011
- Over 360 layers contributed by over 33 agencies
- Over 1000 registered users



GeoSpace

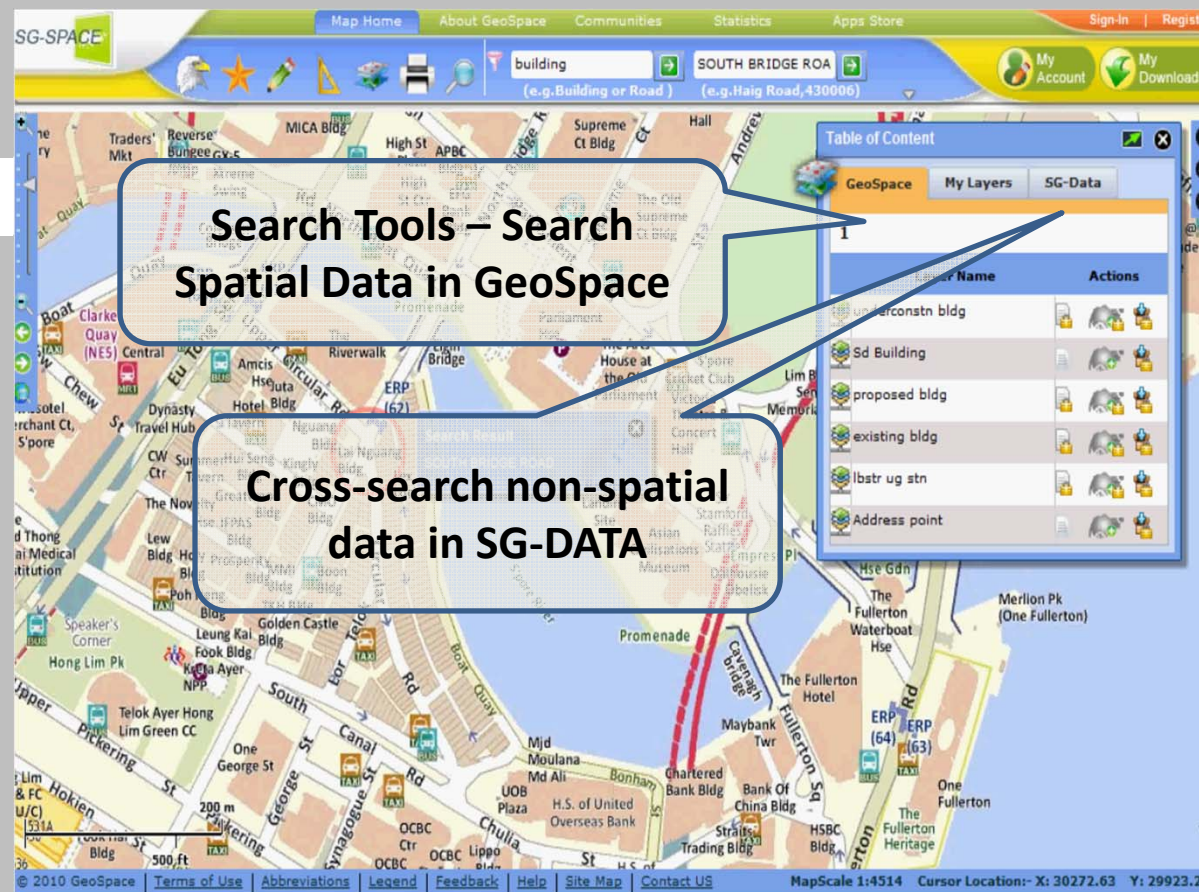
Overview

Basic Statistic

Search Tool

Geocoding Tool

Scenario Demo



GeoSpace

Overview

Basic Statistic

Search Tool

Geocoding Tool

Scenario Demo

GeoTools – Spatially-enabling Agencies' Data

Search Result: SOUTH BRIDGE ROAD

Layer List	Actions
Address point pgdb(2306)	<input checked="" type="checkbox"/>

From this...

- 36B SOUTH BRIDGE ROAD,058670.
- 51 BOAT QUAY CONSERVATION AREA SOUTH BRIDGE ROAD,058281.
- 274 KRETA AYER CONSERVATION AREA SOUTH BRIDGE ROAD,058823.
- 271 TELOK AYER CONSERVATION AREA SOUTH BRIDGE ROAD,058820.
- 12 TELOK AYER CONSERVATION AREA SMITH STREET,058926.
- 16 KRETA AYER CONSERVATION AREA SAGO STREET,059016.
- 8 TELOK AYER CONSERVATION AREA ANN SIANG HILL,069788

SG-SPACE

Initiatives

GeoSpace



[Read More](#)

OneMap

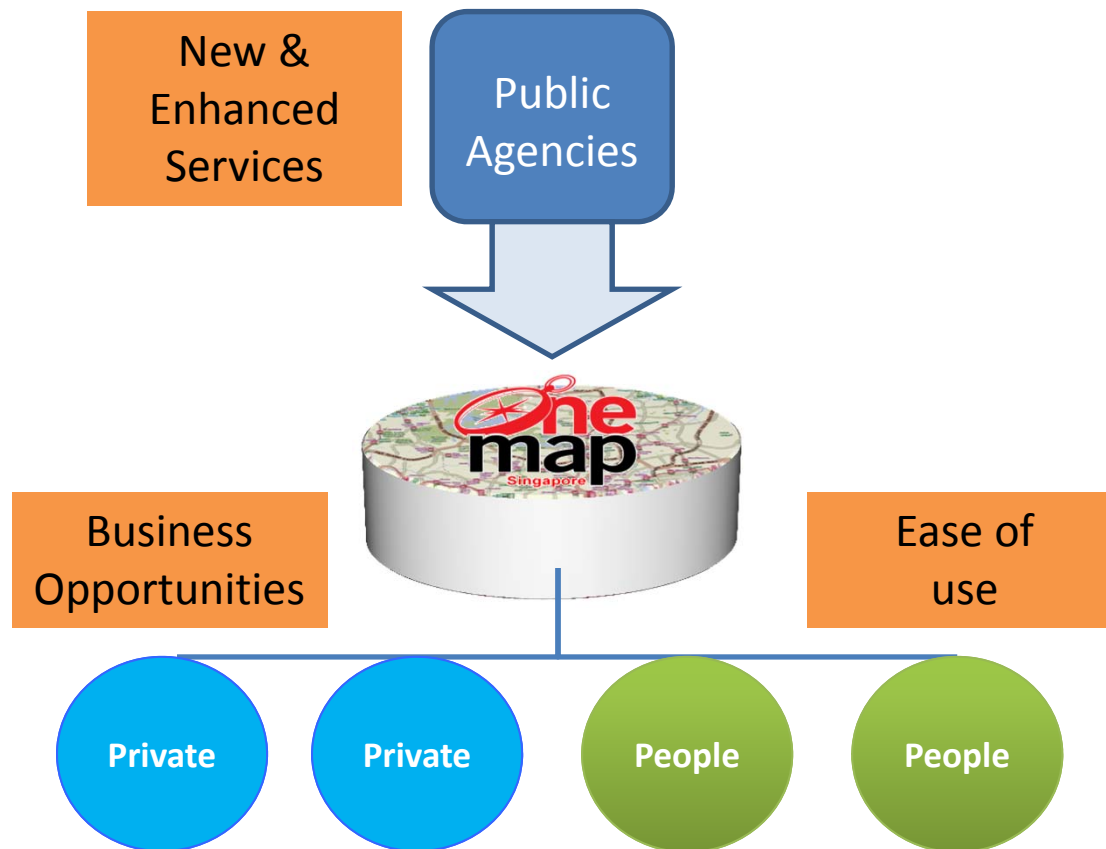


[Read More](#)

OneMap

Overview

- Value Proposition
- Functions
- Public Agency Users
- Mobile Application
- Business Users
- NGO Users



OneMap

Overview

Value Proposition

Functions

Public Agency Users

Mobile Applications

Business Users

NGO Users



74 Participating Agencies; **17** Contributing Agencies;
43 Data Themes

OneMap

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Value Proposition

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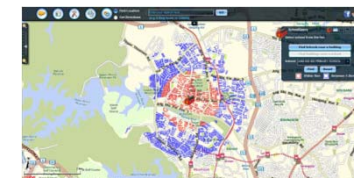
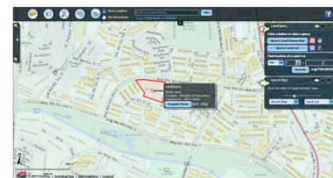
Public Agency Users

Mobile Applications

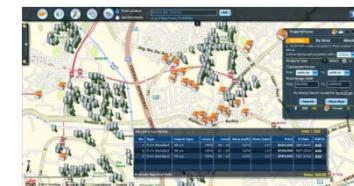
Business Users

NGO Users

- Street Map & Land Lot based maps

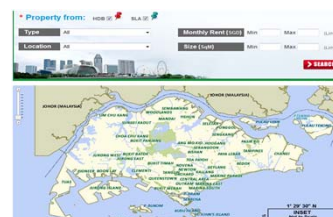


- Routing (including public transport)



- SchoolQuery

- OneMap iPhone App **NEW!**



- LandQuery

- PropertyPrices **NEW!**

- BizMap **NEW!**



OneMap

Overview

Value Proposition

Functions

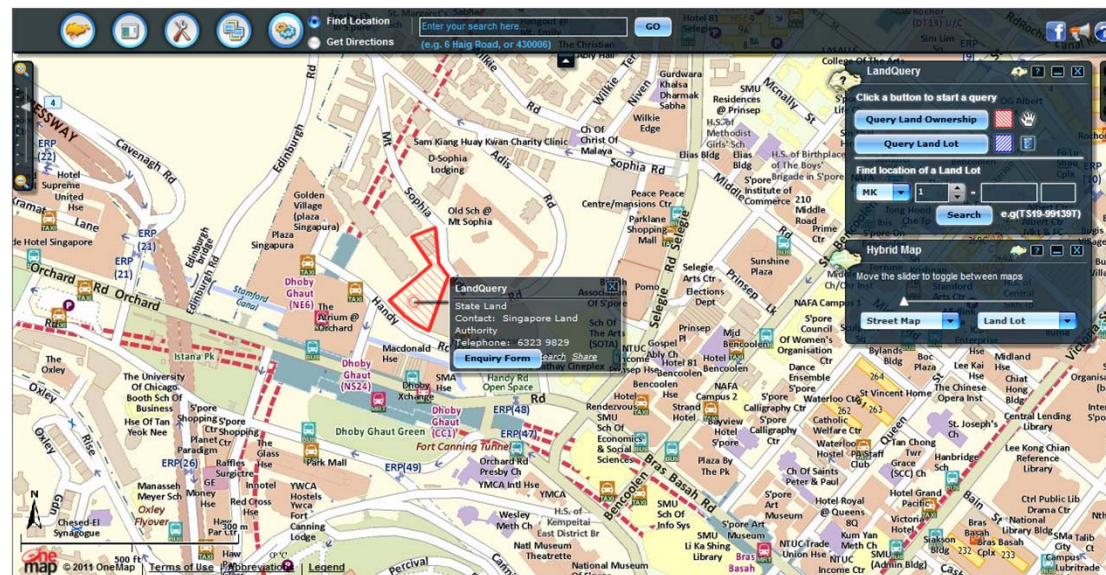
Public Agency Users

Mobile Applications

Business Users

NGO Users

•LandQuery



Back

OneMap

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Public Agency Users

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•PropertyPrices

The screenshot displays the OneMap Property Prices interface. At the top, there is a search bar with 'BISHAN MRT STATION' entered and a 'GO' button. Below the search bar, a map shows the Bishan area with various landmarks and roads. A 'Property Prices' panel is open on the right, featuring filters for 'By Map', 'By Area', and 'About'. It includes a 'Find Location' box, a 'Show transacted properties within' dropdown set to '1.0km', and a 'Property Type' dropdown set to 'Select'. The 'Transaction Period' is set from 'APR 10' to 'APR 11', and the 'Price Range (SGD)' is from '400000' to '900000'. A 'Search' button and a 'Clear Map' button are at the bottom of the panel. Below the map, a table titled 'RAFFLESIA CONDOMINIUM BISHAN STREET 21' provides detailed information for six properties.

No.	Type	Tenure Type	Lease	Level	Area (sqft)	Area (sqm)	Price	Price(\$ps)	Area Type	#	Date	Add to
1	Condominium	99 yrs	1997 06 - 10	915	85	\$875,000	\$957	Strata	AUG 2010	Add		
2	Condominium	99 yrs	1997 01 - 05	915	85	\$890,000	\$973	Strata	AUG 2010	Add		
3	Condominium	99 yrs	1997 01 - 05	915	85	\$845,000	\$924	Strata	JUL 2010	Add		
4	Condominium	99 yrs	1997 01 - 05	915	85	\$870,000	\$951	Strata	JUL 2010	Add		
5	Condominium	99 yrs	1997 06 - 10	915	85	\$885,000	\$968	Strata	JUN 2010	Add		
6	Condominium	99 yrs	1997 01 - 05	915	85	\$790,000	\$864	Strata	MAY 2010	Add		

Back

OneMap

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NGO Users

•BizMap

* **Property from:** HDB SLA

Type All

Location All

Monthly Rent (SGD) Min Max (Limit: 1 - 99999)

Size (SqM) Min Max (Limit: 1 - 99999)

SEARCH



Back

OneMap

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Public Agency Users

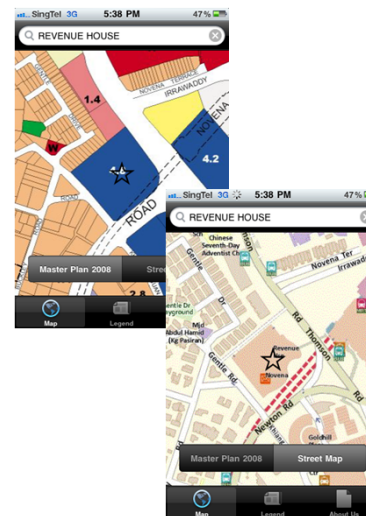
Mobile Applications

Business Users

NGO Users



National Parks Board
[Location-Based](#)



Urban Redevelopment Authority
[Master Plan](#)



Nanyang Polytechnic
[Pocket OneMap](#)

OneMap

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Public Agency Users

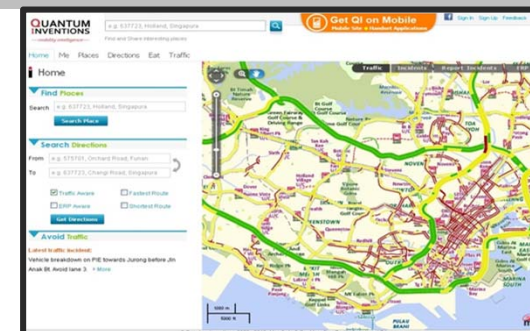
Mobile Applications

Business Users

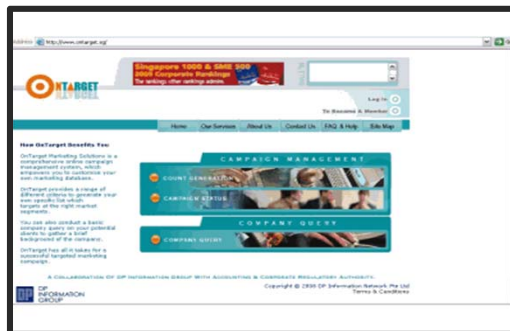
NGO Users



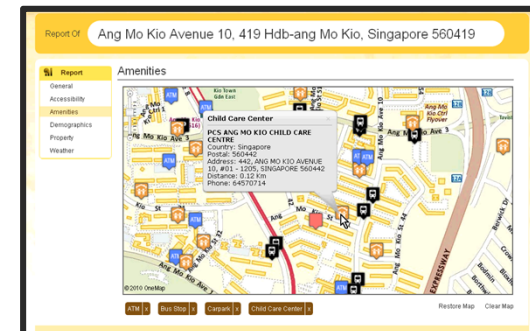
Surround Networks Pte Ltd
[Location-Based Commerce](#)



Quantum Inventions Pte Ltd
[Customised Real-time Navigation](#)



DP Information
[GeoSearch in Questnet & OnTarget Portal](#)



ShowNearby Pte Ltd
[ShowNearby Analytics](#)

OneMap

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**Nature Society of
Singapore Pte Ltd**
[Bird-watching Hotspots in
Singapore](#)



**National Volunteer and
Philanthropy Centre**
[SG-Cares Volunteering
Opportunities](#)

Statistical Data

Collected

Stored

Distributed

Where are the data stored?

- Ministries, Statutory Boards, Organs of State & Government Departments.
- Private companies



Statistical Data

Collected

Stored

Distributed

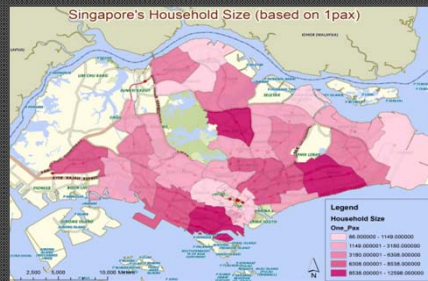
How are the data distributed?

- Whole of Government Initiatives
- Data licensing
- Collaboration among agencies

Initiative	Type of Data	Targeted Users
GeoSpace	Geospatial data	Government agencies Only
SG-Data	Textual data	Government agencies Only
OneMap	Geospatial data	General Public
Data.gov.sg	Geospatial + Textual data	General Public

Integrating Geospatial and Statistical Data

Public



Read More

Private

Workforce Productivity: MAEK, mevo, REECSBT

Planning & Decision Making: ShowNearby, Urbano URBAN PLANNING GROUP

Demand-Supply Matching: StreetLine.com, SE

Lifestyle: BiPP Company, XMAPKING

Read More

People

Main Page: Census Analytic

Search Address Page: Search, Cancel

- 0 Ang Mo Kio Avenue 0
- 1 Ang Mo Kio Avenue 00
- 1 Ang Mo Kio Avenue 0
- 1 Ang Mo Kio Industrial Park 2A
- 1 Ang Mo Kio Street 02
- 1 Ang Mo Kio Street 02
- 1 Ang Mo Kio Street 02
- 1 Ang Mo Kio Street 03
- 1 Ang Mo Kio Street 03
- 10 Ang Mo Kio Avenue 10

Read More

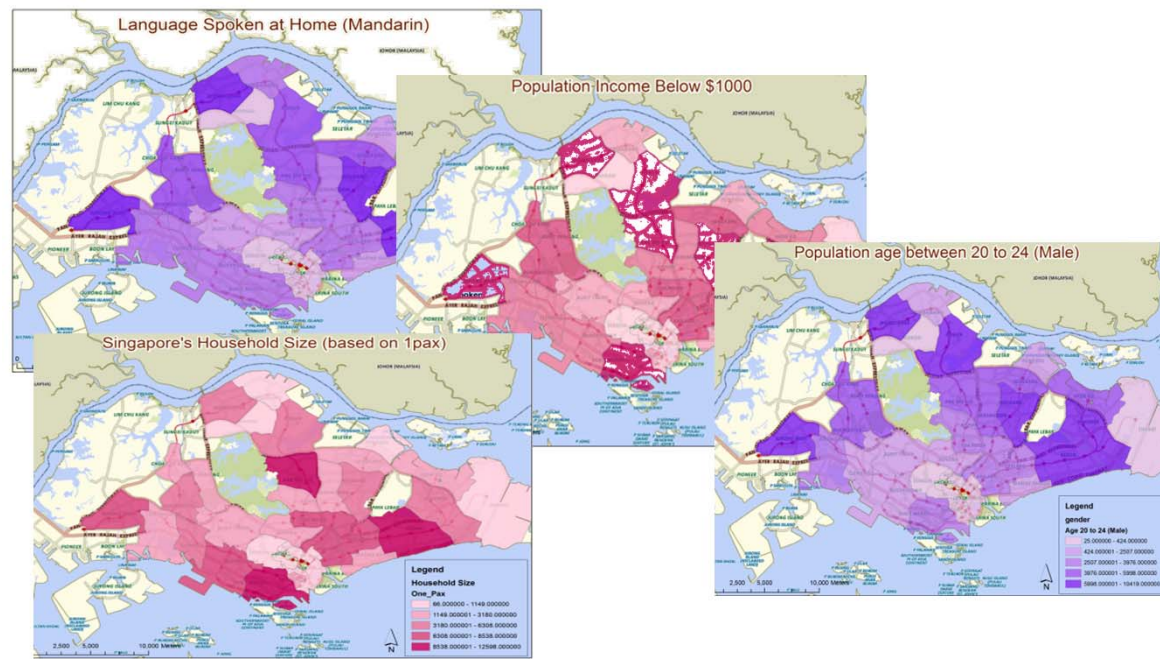
Integrating Geospatial and Statistical Data

Public

Private

People

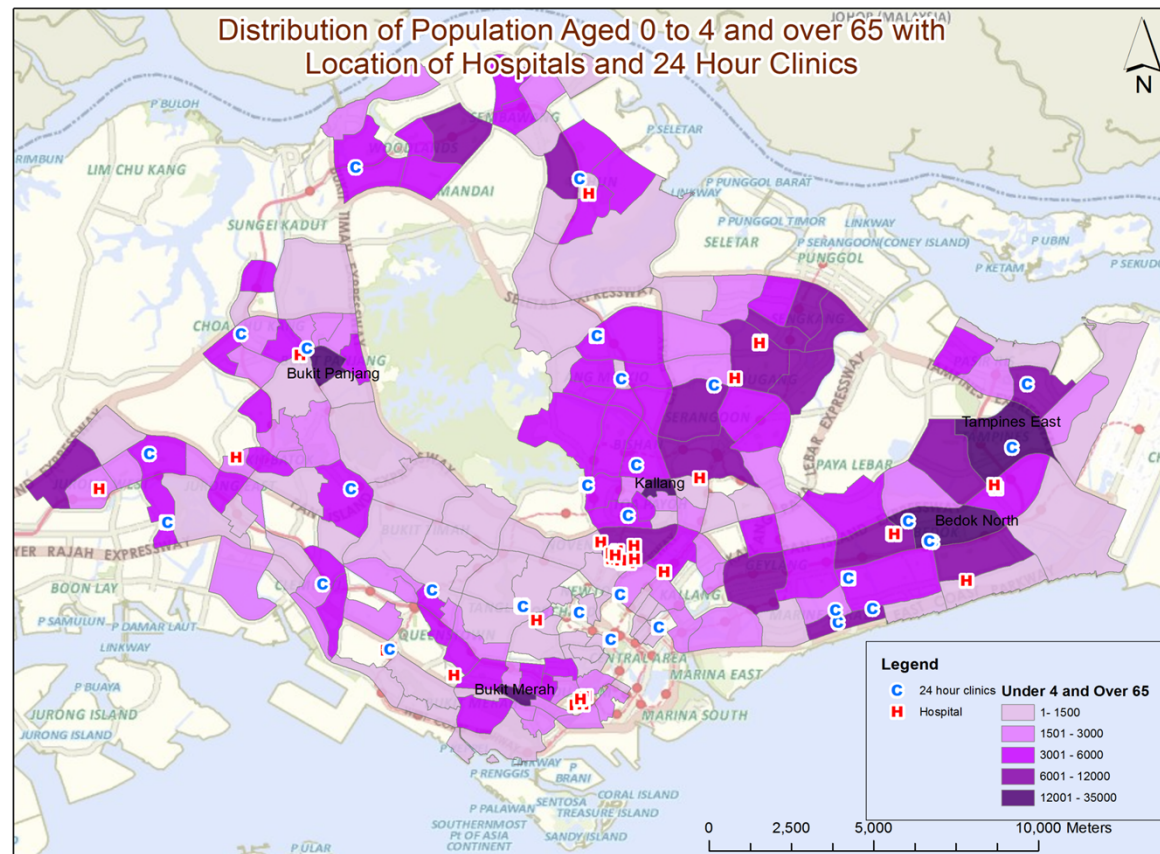
80 layers of demographic and household data
geo-coded



Integrating Geospatial and Statistical Data

Public

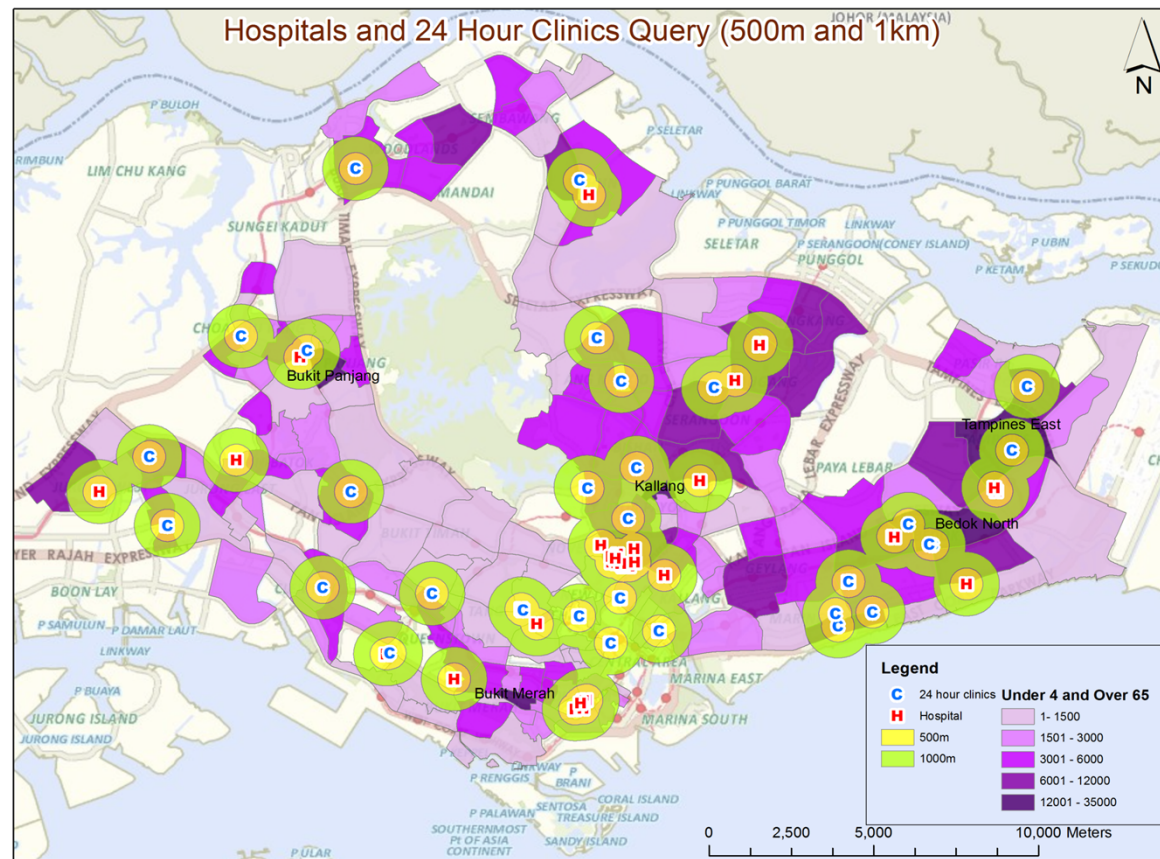
Private
People



Integrating Geospatial and Statistical Data

Public

Private
People



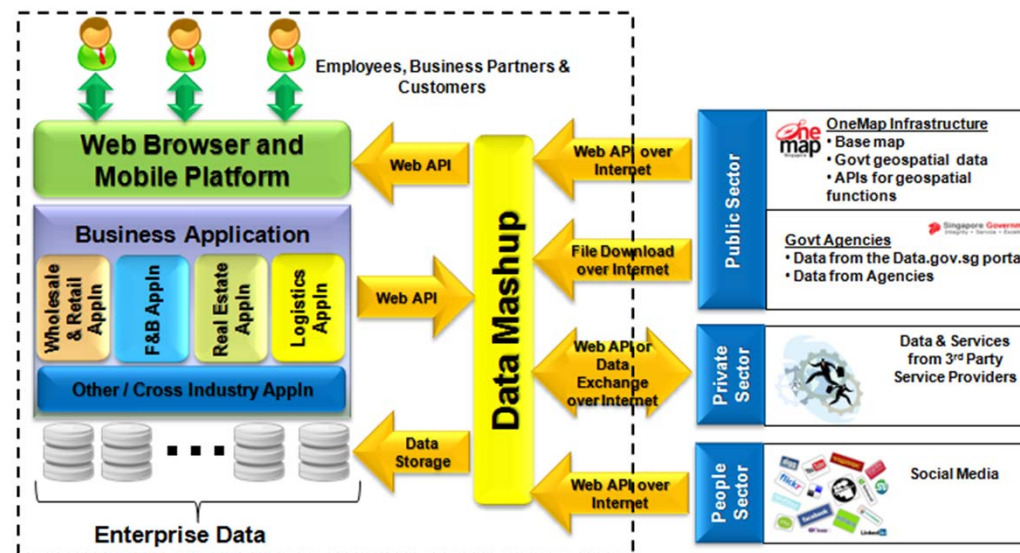
Integrating Geospatial and Statistical Data

Public

Private

People

i-Singapore@work initiatives



Integrating Geospatial and Statistical Data

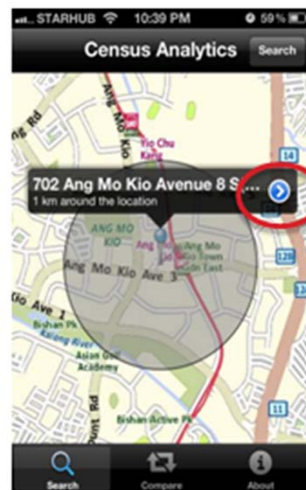
Public

Private

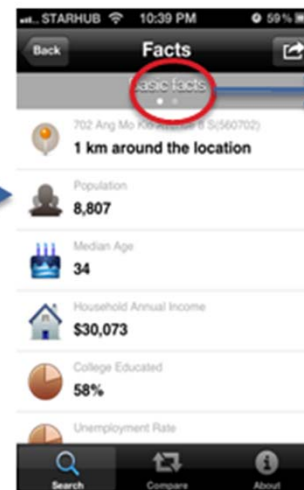
People

Census analytic (mobile application)

Selection of
First Location



Basic Facts



Nearby Amenities



Integrating Geospatial and Statistical Data

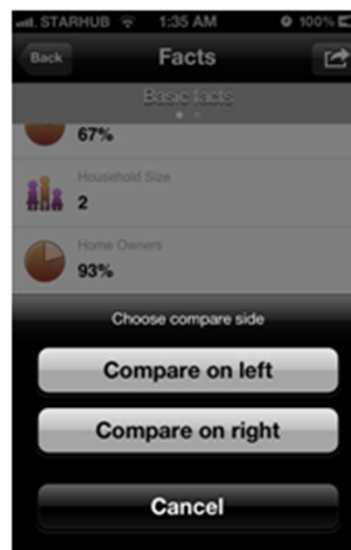
Public

Private

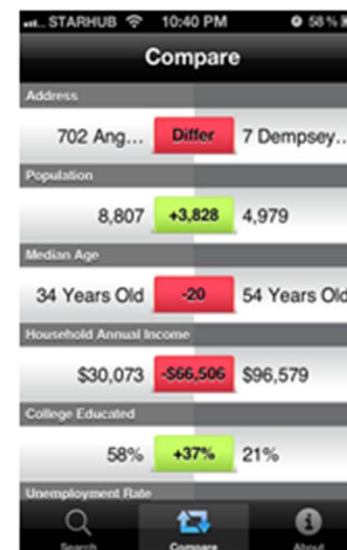
People

Census analytic (mobile application)

Selection for Comparison

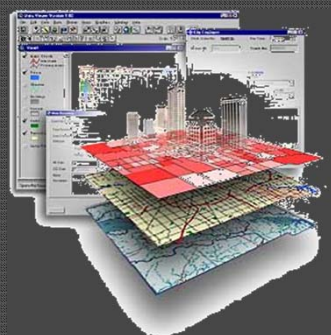


Comparison Chart



Overcoming Challenges

Challenges



[Read More](#)

Challenges

Centralise effort


Privacy


Aggregation

Data privacy and confidentiality issue

- Access Framework in GeoSpace

Data Access Class	Security Classification	Access		
		Metadata Listed?	Viewable?	Downloadable?
1	Secret*	Yes [^]	No	No
2	Confidential	Yes	Yes <i>(subject to permission)</i>	Yes <i>(subject to permission)</i>
3	Restricted	Yes	Yes	Yes
4	Unclassified	Yes	Yes	Yes

 Log-in required for traceability

 Open access

[^] only if Metadata is classified Confidential and below
*including market sensitive information

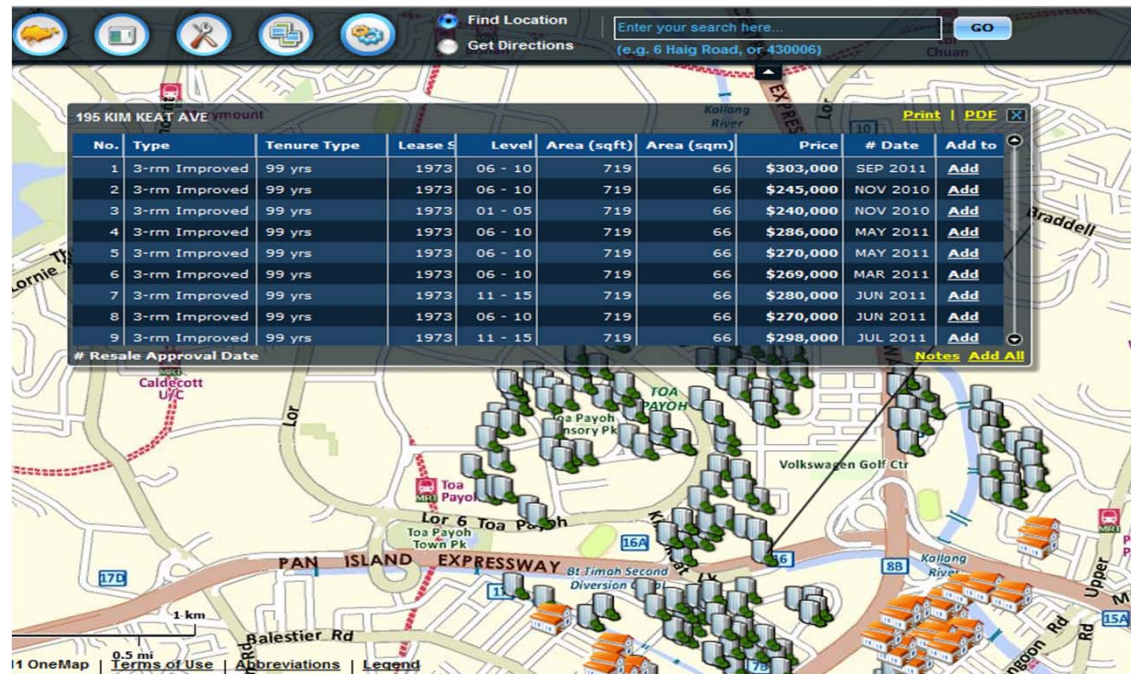
Challenges

Centralise effort

Privacy

Aggregation

Data aggregation and anonymisation in OneMap



www.onemap.sg

ng_siau_yong@sla.gov.sg

