ITS Singapore
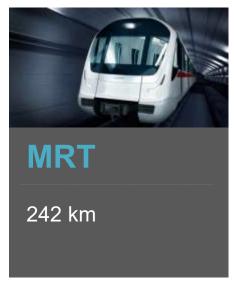
Regional Leaders Forum
May 2025

Howie Sim
President ITS Singapore

Singapore's Transport Network
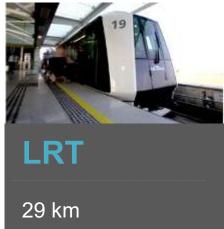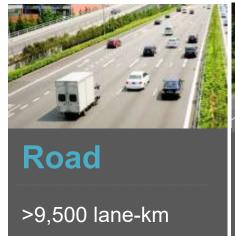

MRT

242 km

Taxi/PHCs
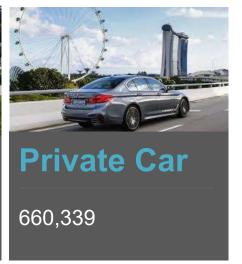
>13,000 Taxis
>59,000 PHCs

Bus

~5800 Buses
~370 Routes

LRT

29 km

Road

>9,500 lane-km

Vehicles

1,007,094

Private Car

660,339

Source (Dec 2024): SPL

ITS Singapore

Singapore's Smart Mobility Journey

20-min Towns, 45-min City

Healthy Lives, Safer Journeys

Transport for All

Land Transport Master Plan **2040**

Policies → More Connections, Better Services → Greener Travel Modes → Barrier Free Travel →

Latest developments

Nationwide GNSS-based Congestion Pricing

AV Buses Operating on Actual Public Service Routes

Greening our Vehicle Fleet

Practical Applications of Data & AI in Transport

ITS Singapore

ERP2.0: Nationwide GNSS-based Congestion Pricing

All You Need to Know about ERP 2.0

What are the changes?
ERP 2.0 replaces the current ERP system that is reaching end of life.

- Tapping on Global Navigation Satellite System (GNSS) technology, ERP 2.0 enables more flexible congestion management without physical gantries

How does this benefit motorists?

- Improves traffic flow

- Enhances the driving experience by providing useful information like real-time traffic incident and road safety alerts

- Improves driver awareness with notifications on bus lanes and speed cameras, to encourage safer driving

- Facilitates seamless payments for roadside parking, usage licenses and checkpoint tolls

AV Buses

- Singapore is piloting the deployment of AV solutions for commercial use cases in passenger shuttles, logistics and utilities.

- Singapore is actively testing and deploying autonomous public buses, with a pilot program expected to begin in mid-2026.

Trial of autonomous public buses on Service 400

Map: Clara Ho   Source: Land Transport Authority, Jan 27, 2025

Greening Our Vehicle Fleet

2050

Net-zero Emissions by 2050
Key movers: Vehicle electrification along with promoting Walk-Cycle-Ride

2040

Cleaner Energy Vehicle Vision
By 2040, 100% vehicles on cleaner energy

2030

Singapore Green Plan 2030
60,000 EV charging points
All new car registrations to be cleaner-energy

2025

No new diesel car registrations and every HDB Town an EV Ready Town

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Practical Use of AI and Data in Transport

Land Transport DATAMALL

LTA's **Datamall** provides public with land transport-related datasets and APIs.

At least 45 apps have been developed using information released thru Datamall.

Big Data Analytics

Singapore has installed on-board units (OBU) on more than 450,000 vehicles, or close to 50% of our vehicle population, as part of our upgrade of our road pricing system to a new system which is based on Global Navigation Satellite System. These OBUs have given us very rich vehicular movement data and is transforming the way Singapore conducts road planning, traffic operations and enforcement.

Thank You