CASE STUDY: Singapore

Singapore is an island city-state located in Southeast Asia with a population of about 5.6 million. The island was colonized by the British in the 1800's and had a tumultuous history including occupations and violence during WWII. It became an independent nation in 1965, and experienced rapid economic growth thereafter. Though small and lacking in natural resources, Singapore used its strategic location to form an economy based on the concept of "entrepôt" (trans-shipment) [1], where goods are imported and stored, to be exported again.

The port network of Singapore is the 2nd largest in the world and is a critical port in the distribution of oil and other resources to the region.[2] It is one of the few cities worldwide with an "Aaa" credit rating from Moody's. Besides trade, the Singaporean economy has grown to include technology, banking and finance, with a recent focus in biotechnology. It has also become a major tourist hub and is considered one of the top travel destinations in the world.

What makes it a smart city?

Marina Bay Sands Skypark

The crown jewel of Singapore's skyline is the 3-tower, 57-story, 2,600 room Marina Bay Sands hotel[3]. The 3 towers are connected by a 2.5 acre "skypark", with gardens and a public observation deck, creating green space in the sky. This architecture style can allow dense cities to create public parks in the air when space is at a premium at ground level.

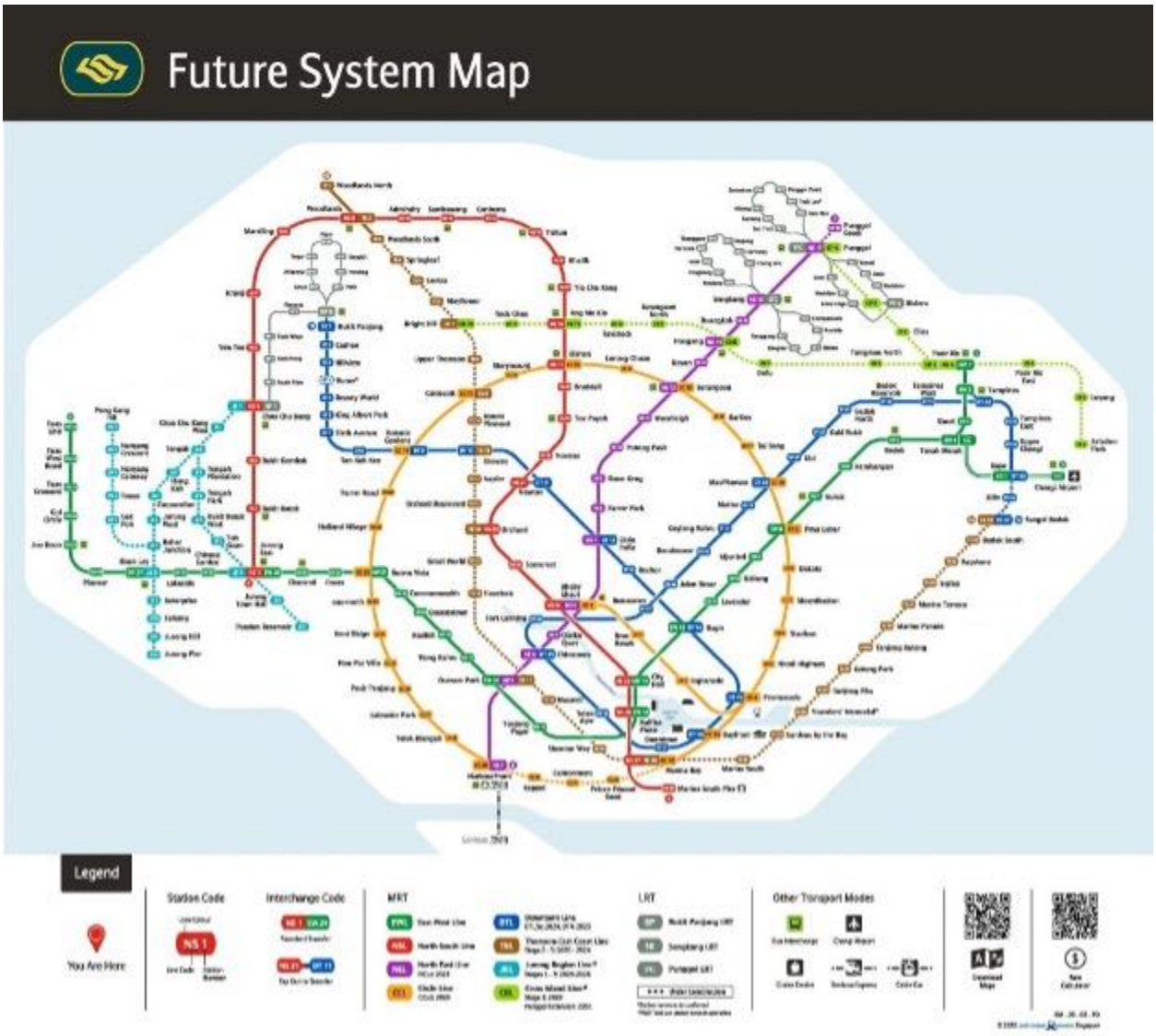
Vehicle to Everything (V2X)

This project which the government hopes to have completed by 2025 will see *every* car on the streets downtown being self-driven[4]. Research is being done in vehicle-to-vehicle and vehicle-to-infrastructure communication. This can improve quality of life in a number of ways: increasing productivity due to less time stuck in traffic, improving air quality by reducing congestion and aiding public safety by clearing lanes for emergency vehicles.

Sustainable Public Transit

In March 2020, the Singaporean government moved forward with a 10 year, $43.5 billion investment in sustainable infrastructure[4]. This plan includes expansions to 3 existing subway lines by 2025. Two brand new lines will also be completed by 2029, increasing the total length of subway systems in the region from 143 miles to 224 miles. Upon completion, 80% of

Singaporean citizens will live within walking distance of a transit station. Singapore has also experimented with noise barriers to reduce sound pollution [5]. Access to a high degree of public transit can greatly improve life for the average citizen, allowing them an easier and less expensive method to travel to work and to visit friends and family.



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