

LTA COE Trends and Analysis in Singapore

Link recording: https://drive.google.com/drive/folders/1RkJBviMUDIIsvVRSG9TxxQZxTUEKM3v?usp=drive_link

Seminar 13 Group 4

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LTA Background

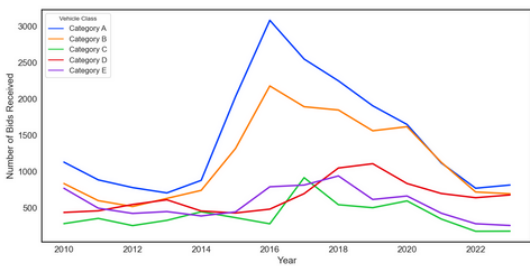
LTA manages land transport developments in Singapore. They design, plan, build and maintain Singapore's land transport infrastructure and systems, with the aim to strengthen Singapore's land transport **connectivity** and integrate a **greener** and **more inclusive** public transport system, inclusive of **walk and cycle options**.

Problem Statement

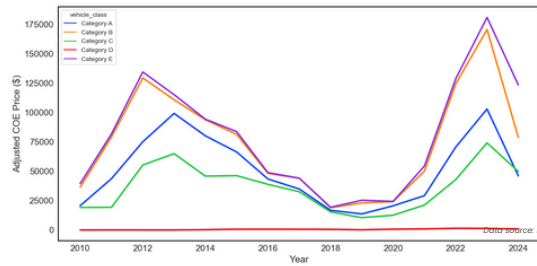
Upon analyzing the trends and factors influencing COE demand despite the convenience of the public transport network, our objective is to develop strategies aimed at **curbing the demand for cars** in Singapore.

COE Demand & Supply & Price

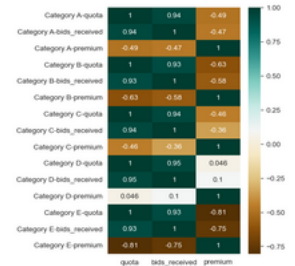
COE Bids Received Over Time



Adjusted COE Premium Using GDP per Capita Over Time



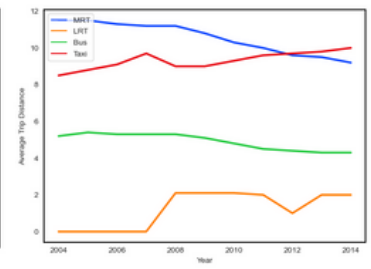
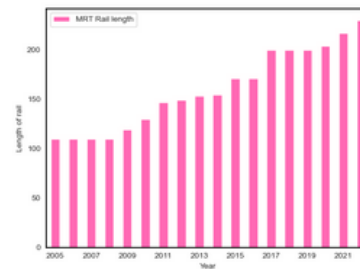
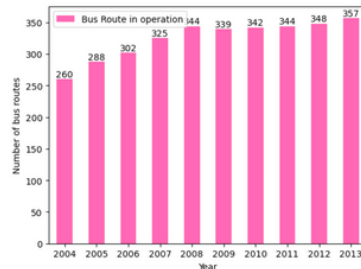
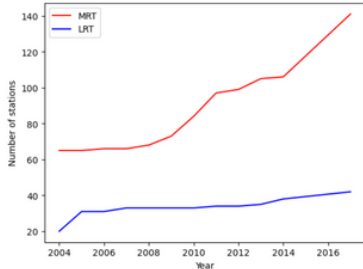
Correlation with Quota



Analysis

- From 2015 to 2017, bids received for Categories A and B sharply rose **by threefold**, indicating a surge in demand for COEs for cars.
- The adjusted COE premium, factoring in GDP per Capita, demonstrated a real increase in COE prices relative to the standard of living in Singapore.
- Across most categories, a negative correlation exists between bids received and premiums and a positive correlation exists between bids received and quota, indicating that LTA might adjust supply to raise prices and reduce demand.
- However, demand **remained around 1000 bids received** for most years, highlighting the ineffectiveness of high COE prices on car demand.

Improvement of Public Transport



Analysis

- There was significant growth in the number of MRT, LRT stations, and bus routes, by about **117%, 110% and 37%** respectively, reflecting LTA's ongoing efforts to enhance the public transport network since 2004.
- The average trip distance for MRT and buses showed a mild decrease, indicating that improvements in public transport made travel more efficient.
- However, the increase in average trip distance for taxis suggests persistent demand for private vehicles despite improvement in the public transport system, highlighting limitations in curbing the usage of cars.

Findings and Insights

Why is demand so high?

There is a strong desire in Singapore to purchase and own cars, even with the increasing COE prices.

This is due to:

- Many look at purchasing cars as a necessity for their family, especially with children and older parents.
- It also provides comfort and convenience.
- Owning a car is also attributed to social class and standing. (Zalizan, 2023)



Findings and Insights

What are LTA's current policies?



Vehicle Quota System

Zero-growth for cars, all future COE quotas will be based solely on the number of cars deregistered after its 10-year COE expires. Encouraging a transition to cleaner-energy cars.

Emission Scheme

Introduced in 2018 with the aim of reducing additional pollutants beyond carbon emissions Rebates increase as the CO2 emission of car models increase.

Early Turnover Scheme

Introduced in 2013 to further encourage vehicle buyers to shift to low-carbon emission models.

(One Motoring, 2020)

(LTA, 2024)

Suggestions for Further Improvement

What can be done:

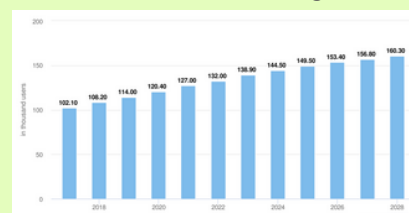
- Despite the high COE price and convenience of public transport system, the demand for cars hardly changed.
- Because of the growing demand for car-and-bicycle-sharing services, further efforts and investment can be made to encourage their usage in the long run, possibly shifting the demand towards other private car alternatives.

Growth of Car Alternatives

Number of Car-sharing Users



Number of Bike-sharing Users



- Although starting from a lower base, there has been a steady increase in users of car-sharing services from 2018 – now and is predicted to increase to **0.60 million** users in 2028, **double** the number in 2017, reflecting an emerging preference for alternatives to car ownership.
- Similarly, the number of people using bike-sharing services consistently increases and is predicted to reach **160.3 thousands** users in 2028.
- The growth in the use of car and bike-sharing services indicates that Singaporeans are adapting to and welcoming shared mobility options.
- This trend along with the high demand for cars despite rising COE premiums, suggests that the use of car-sharing and bike-sharing services could help in shifting commuters away from private car ownership.

Suggestion:

We suggest to implement CDC vouchers for car-sharing and bicycle-sharing

Community Development Council (CDC) vouchers are an initiative implemented in 2021 to alleviate the impacts of inflation and the COVID-19 pandemic

Car-sharing

- Vouchers of \$5-\$10
- Caters to the demand for comfort and social class as it extends to all car brands, including luxury ones
- It also provides convenience for families as shared cars can be found near public carparks and be used for family activities



Bicycle-sharing

- Vouchers of \$2-\$5
- Effectively connects residential areas to the nearest MRT station or bus stop at a low-cost
- Can also be implemented in less accessible estates to increase convenience
- This supports LTA's 2040 master plan for Healthy Lives, Safer Journey



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