Analysis of

PAX, FREIGHT AND MAIL REVENUE

Comparison of the top Australian Cities by the Pax Revenue and by the number of flights

- **Canberra** is the **9th** city with by the **total revenue**, but only **12th** by the **number of flights.** It shows a high effectiveness of the local business.

- **Clarins i**s the **5th** city by the **number of flight**, but it is only **7th** city by **total revenue**. The low performance of this city might be investigated in the future.

	AustralianPort
Sydney	5987
Melbourne	3753
Brisbane	3279
Perth	1668
Cairns	870
GoldCoast	779
Adelaide	722
Darwin	487
Norfolk Island	101
Townsville	57
Port Hedland	47
Canberra	47
Sunshine Coast	29
Toowoomba Wellcamp	20

Australian Cities by the number of Flights

|	TotalPax	AustralianPort
0	125854224.0	Sydney
1	73939755.0	Melbourne
2	46294219.0	Brisbane
3	36071308.0	Perth
4	8340836.0	GoldCoast
5	7284587.0	Adelaide
6	5041565.0	Cairns
7	2656972.0	Darwin
8	156849.0	Canberra
9	126166.0	Townsville
10	90480.0	Norfolk Island
11	69189.0	Sunshine Coast
12	29641.0	Port Hedland
13	5435.0	Toowoomba Wellcamp

Australian Cities by the Pax Revenue

Total Pax Revenue

- The map highlights the Foreign Cities with the highest Pax Revenue Over the decade. Along with the revenue it shows Australian Ports for very city.

- Foreign Cities with routes in red color produce the biggest amount of Pax Revenue.

- For example, in the North American corridor, the Los Angeles has the highest Pax Revenue.

Total Freight Revenue

- The map highlights the Foreign Cities with the highest Freight Revenue Over the decade

- Anchorage has flights to 6 Australian Cities, but 0 Freight and Mail Revenue. This city only brings Revenue by Passenger flight. Possibly, the Airline should search for opportunities to sign contracts with Cargo companies in this area.

Total Mail Revenue

- The map highlights the Foreign Cities with the highest Mail Revenue Over the decade.

- Auckland, Tokyo, Los Angeles, Singapore, London, Bangkok, Guangzhou are ones of the most beneficial cities for Mail Revenue.

Freight and Mail Revenue dynamic

The **Total Freight Revenue** is expected to grow in the next year following eight-year trend. This might require **additional Cargo capabilities** and have a potential for development in the future.
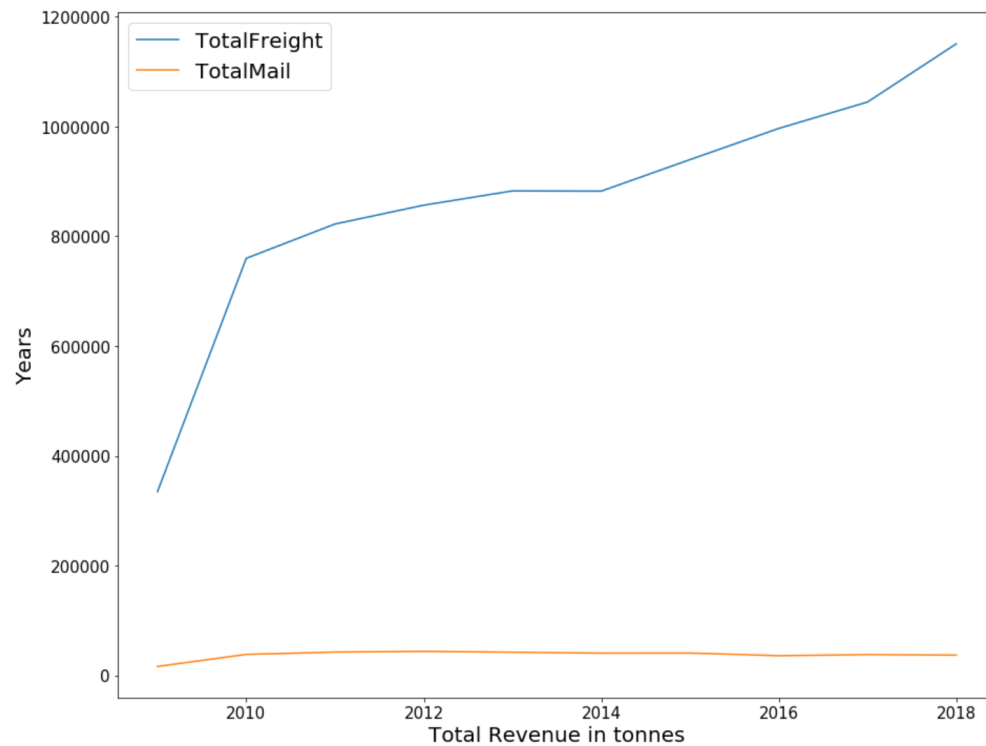
The Freight Revenue Out from Australian cities has a **long-term growth** dynamic since 2010.

The **Mail cargo** is not expected to have an increase in the revenue in the future.
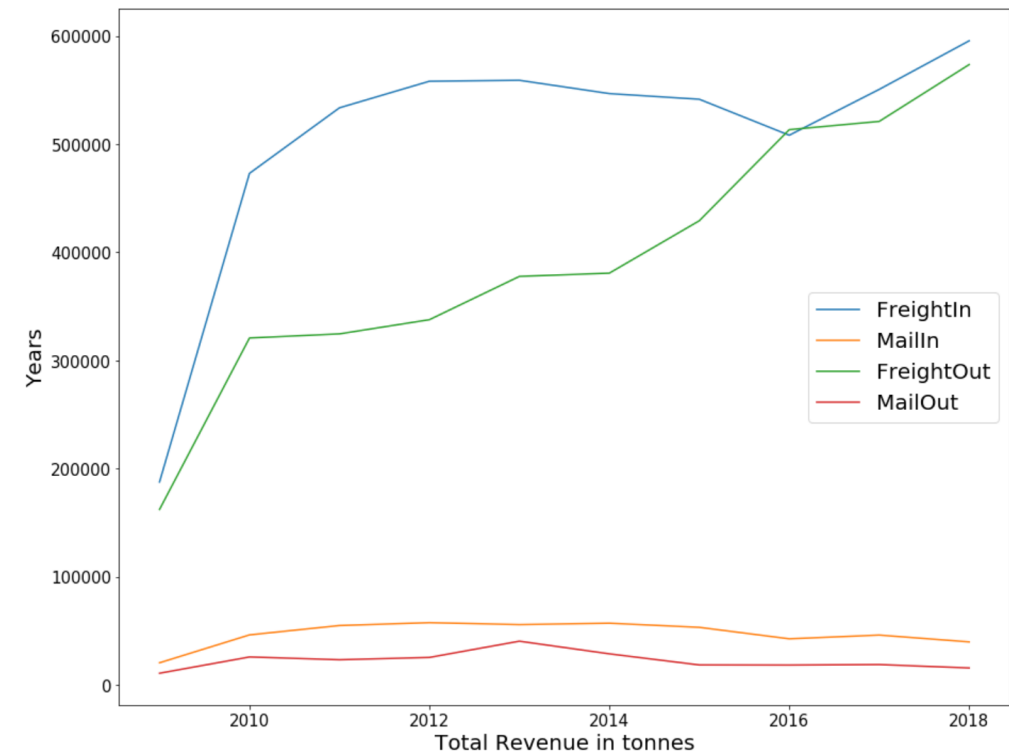
Total Freight and Mail Revenue ratio in 2018

The Freight is the **more significant** part of the total revenue than **Mail.**

Since the Mail Revenue is not going to grow in the future, the **Freight Revenue** is expected **to increase its share.**
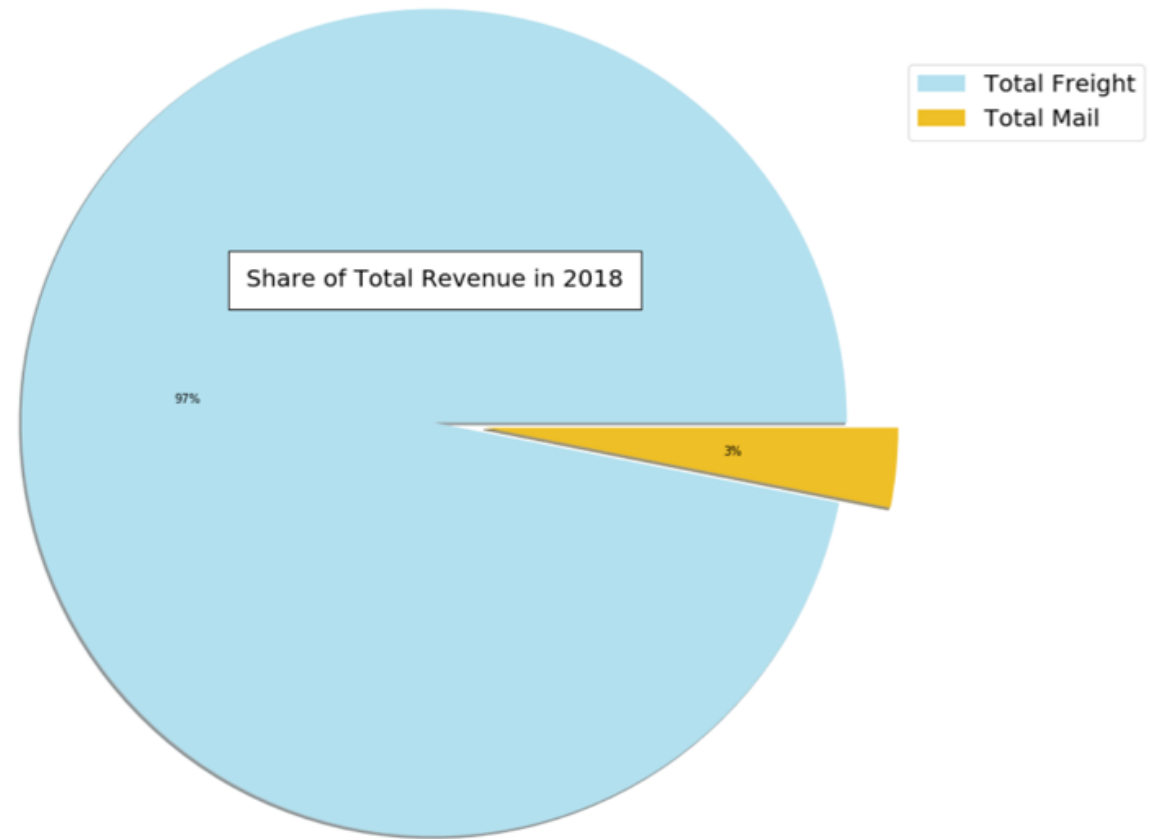
Pax Revenue
Dynamic over the decade
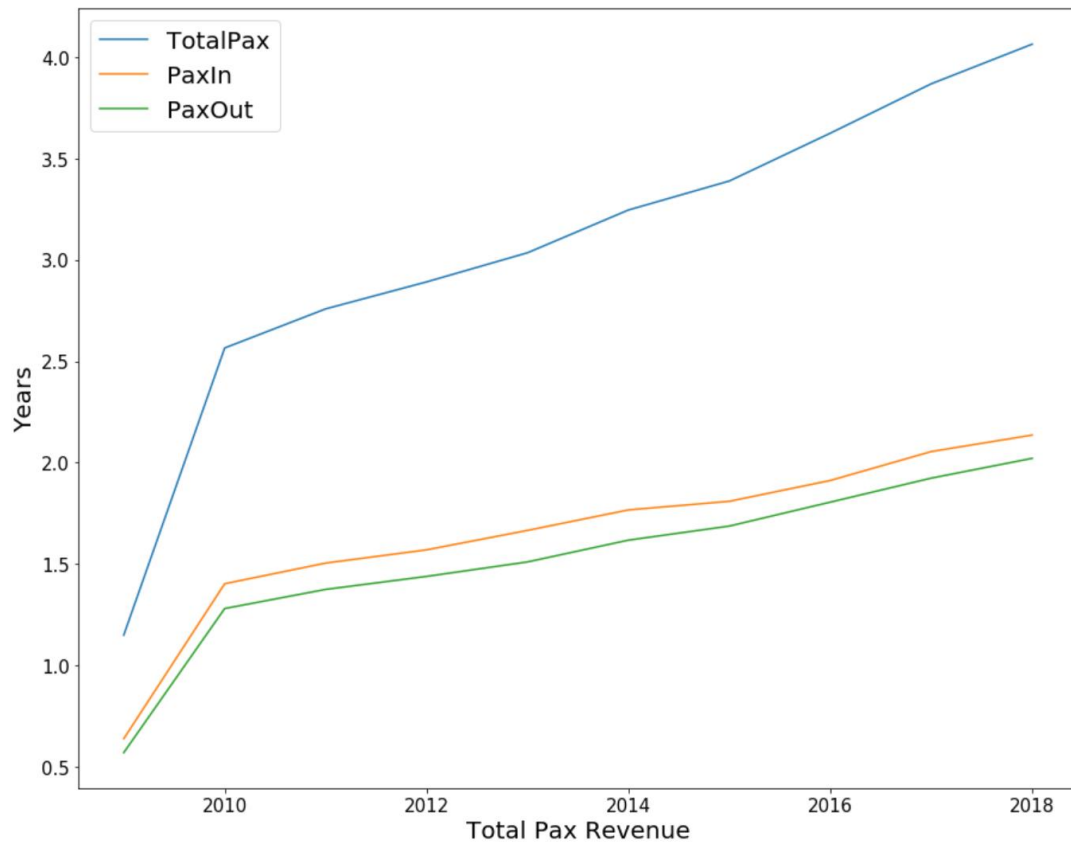
The **Total Pax** Revenue has been **doubled** since 2010.

The ratio between passenger in and out of Australian cities is close to 1. This means a uniform revenue for in and out flight. This dynamic is very strong and expected to keep stay the same in the next year.

Pax Revenue in 2009 and 2018 comparison
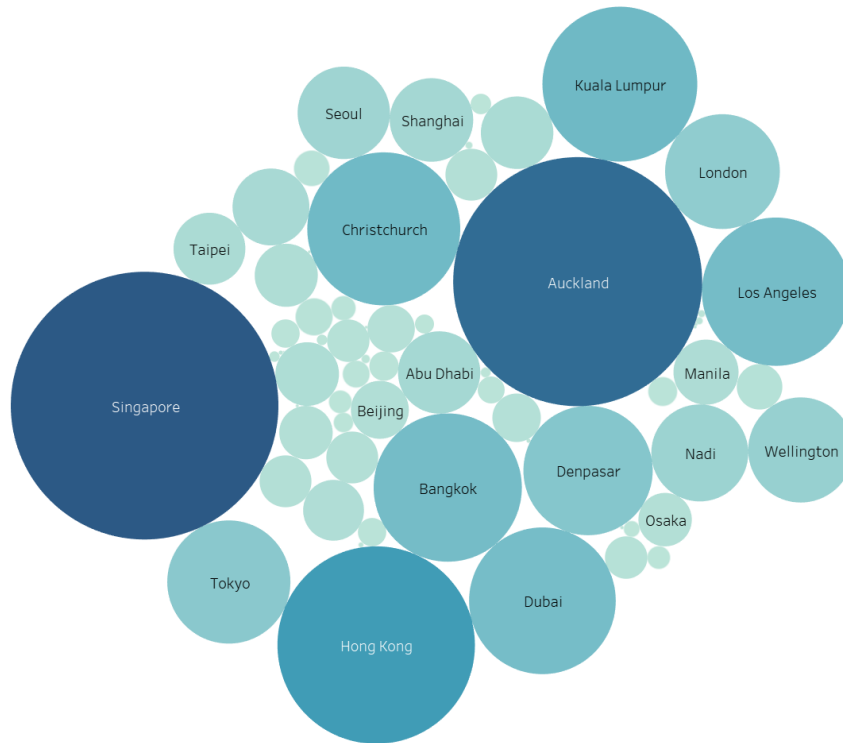
2009

2018

The **Singapore** and **Auckland** continue to be the top countries by the Pax Revenue.

The 3rd leading city in 2009 is **Hong Kong.**

But in 2018 the **Hong Kong** shares this position with three other cities: **Denpasar, Kuala Lumpur and Dubai.**

All three of them should be considered as a highly important for the Pax revenue in the future.
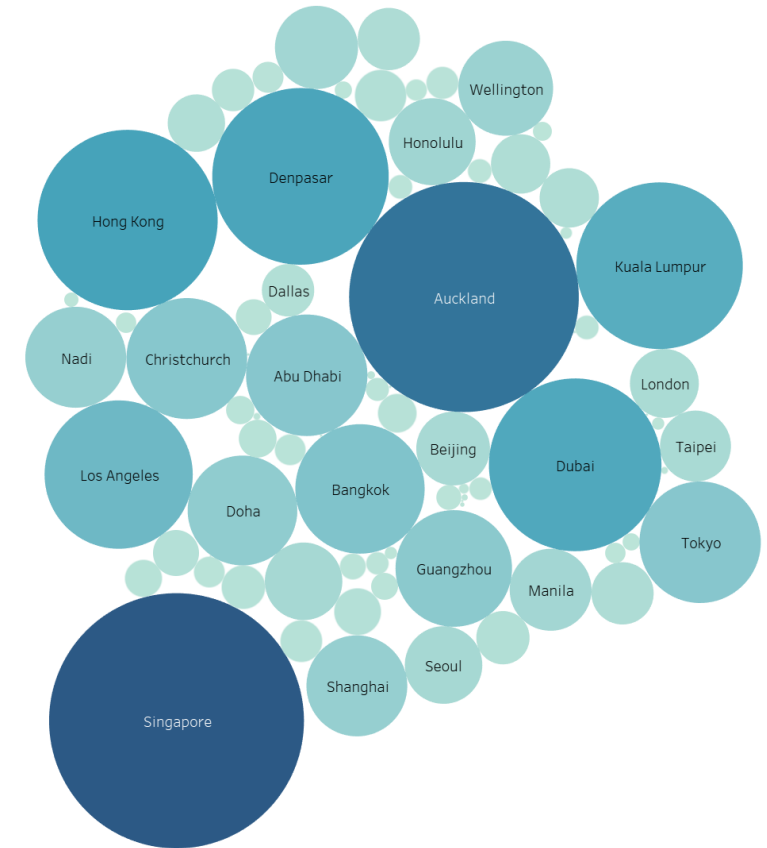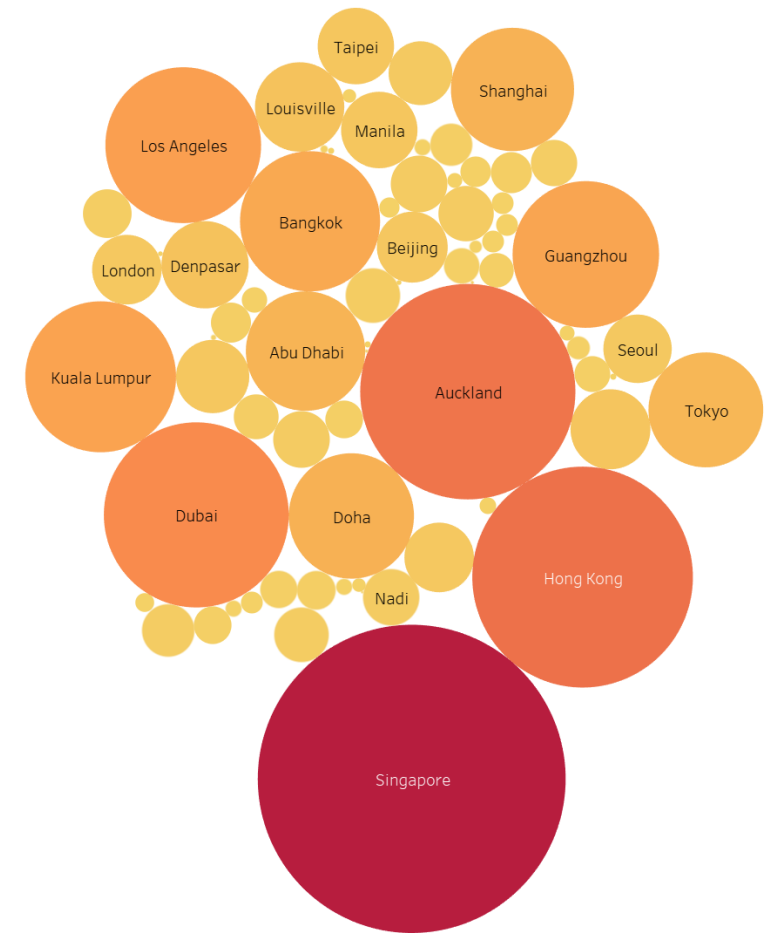
Freight Revenue in 2009 and 2018 comparison
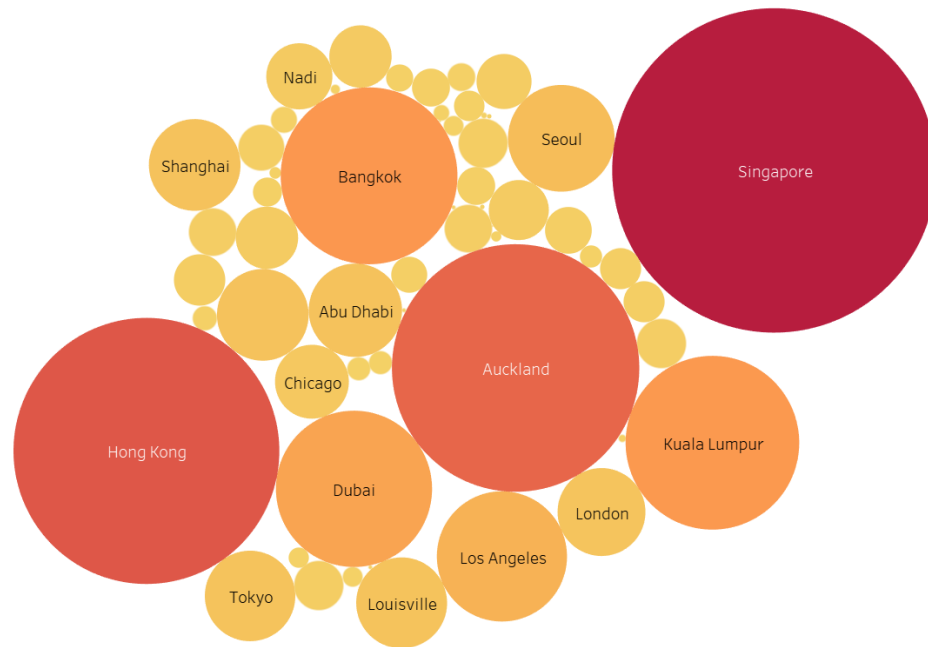
2009

2018

The **Singapore** continues to be the top country for the Cargo Revenue.

The Second Leading cities **Hong Kong** and **Auckland** made a small step back.

In 2009 **Bangkok** and **Kuala Lumpur** had a strong 4th and 5th position, but year 2018 shows that **Dubai** could be a very important destination for Cargo.
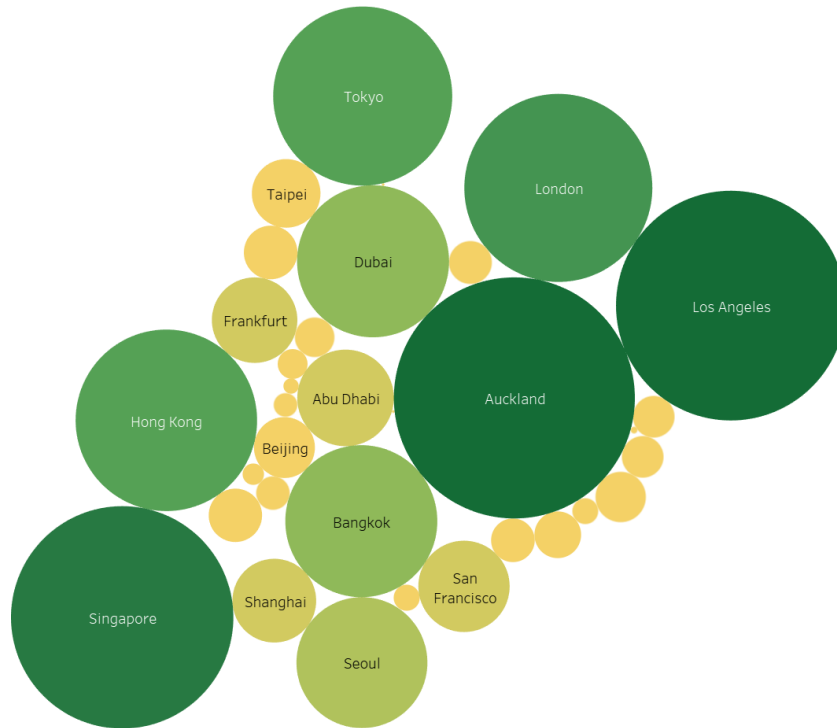
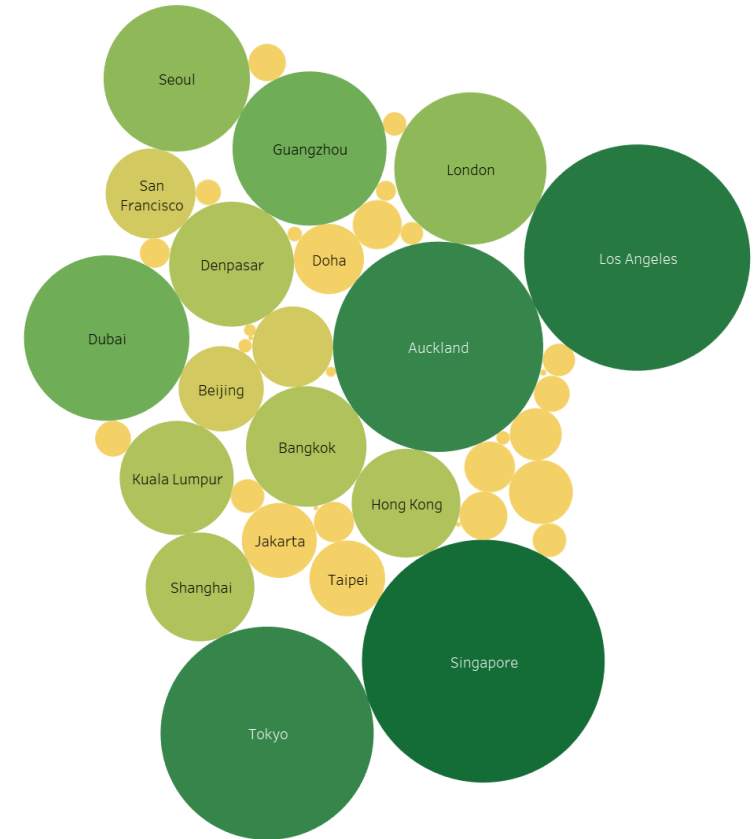The **Dubai** should be considered a top Revenue potential city in the next year and onwards.

# Mail Revenue in 2009 and 2018 comparison

2009

2018

The **Singapore** has become the leading city for the mail revenue in 2018.

The next leading cities are **Lo Angeles** and **Auckland** stepped down a little bit, but were joined by the **Tokyo** in 2018.
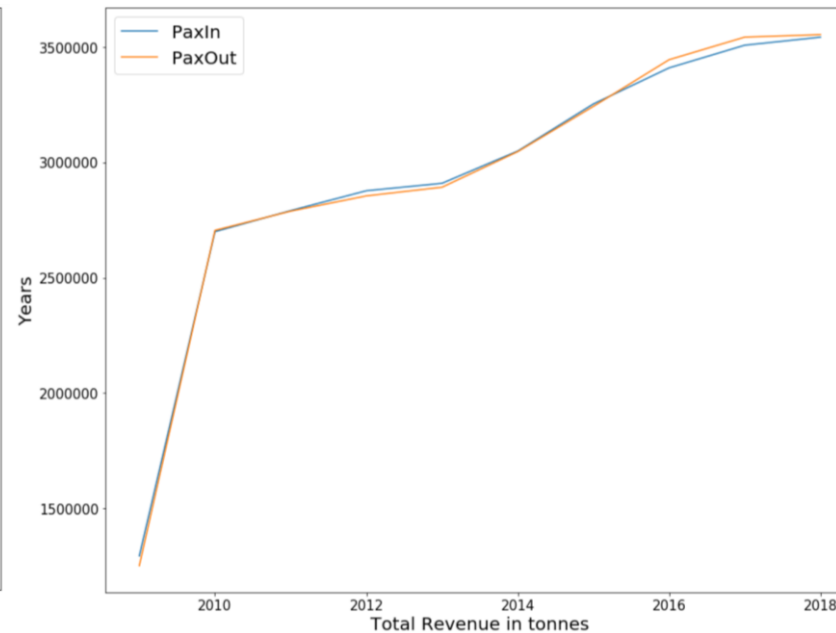
Guangzhou and **Seoul** both grew the annual revenue in comparison to 2009.

Total Freight Revenue Singapore

Total Pax Revenue New Zealand
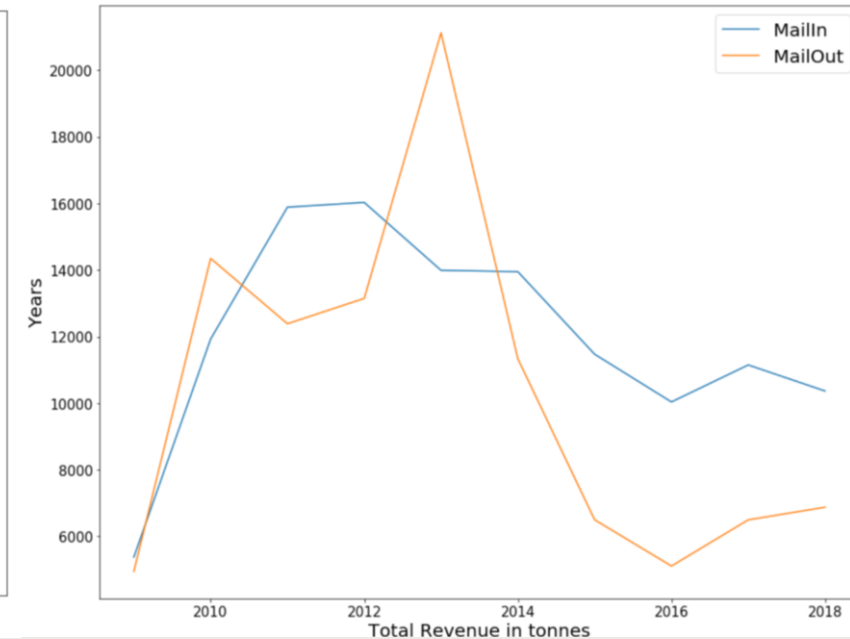
Total Mail Revenue USA
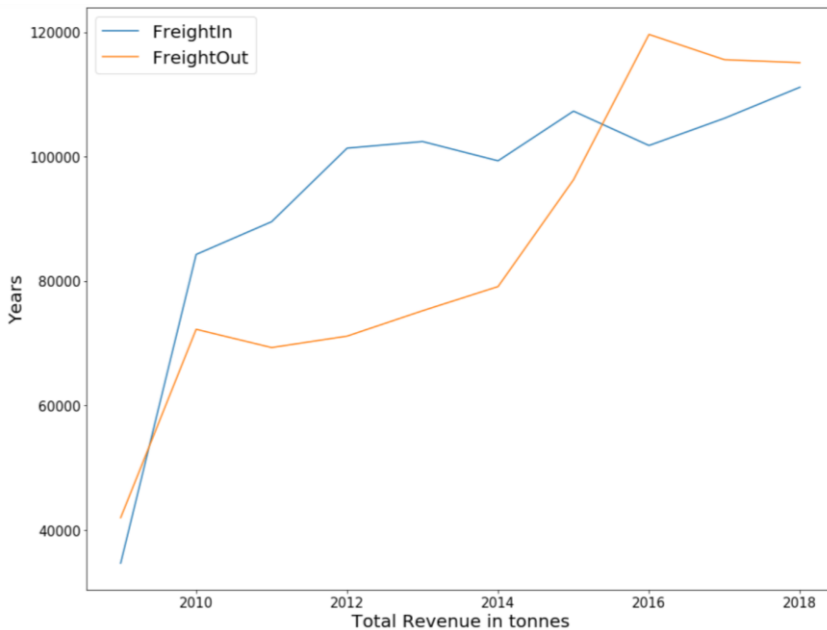
The **Total Freight** Revenue for **Singapore** shows a stable level over the last few years and **did not** experience a significant **growth** in the future.
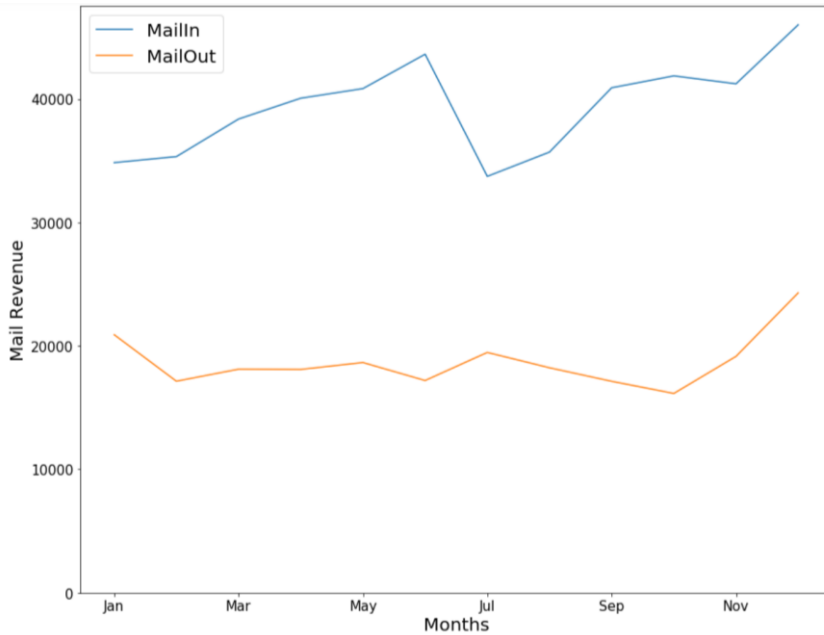
The **Total Pax** Revenue for **New Zealand** is expected to **continue its growth** in the future.

The **Total Mail** Revenue for **USA** over the last two years is on the **stable level**, but experienced a dynamic of decrease over the last 6 years.
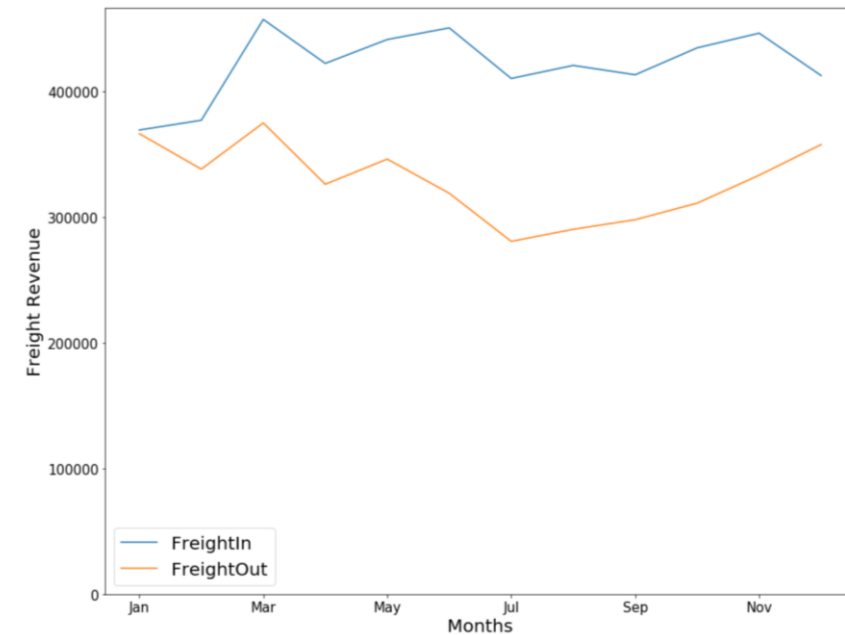
Dynamic by Months

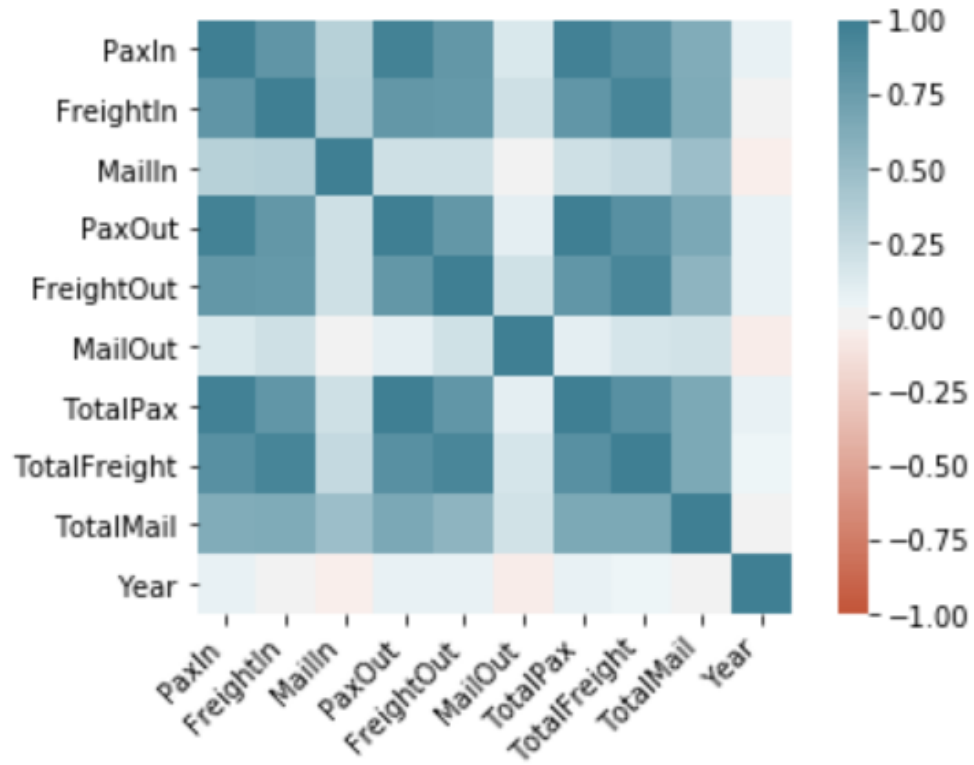The **Mail Revenue** has a growth around June and December months.

The **Pax Revenue** experience a noticeable increase around the Christmas holidays.

There is an increase of **the Freight Revenue Out** is its lowest in the winter months.

Additional Notes

The correlation between the variables is very low. Therefor, **the ML is not applicable**. Moreover, in the small experiment the Decision Tree classifier showed the test accuracy of 0.05.