Air travel statistics and modelling

Ensuring our transport system helps New Zealand thrive
We have analysed a range of air travel data

- International arrivals and departures by air for different travel purposes
- Domestic air passenger travel
- Domestic aircraft-kilometres travelled
- Domestic air passenger-kilometres travelled
Australia is our largest international market

- Over 40% market share
- Still expanding

VFRs = visiting friends and relatives
Other key international markets – a mixed picture

- International arrivals from traditional markets have been down
- International arrivals from China and other emerging markets have increased rapidly
Domestic air travel data and trends

- Domestic air passenger-kms travelled are still increasing
- Domestic aircraft-kms travelled have been relatively stable in recent years

Note: blue lines show seasonally adjusted data
We have studied the key drivers of international air travel

► Real GDP per capita is the most important factor

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PCGDP: Purchasing Power Parity Gross Domestic Product
We have developed a forecast model for both international departures by NZ residents and total domestic air departures.
Future forecasting work

We will develop forecasting models for

- Domestic aircraft-kilometres travelled
- Domestic air passenger-kilometres travelled
- Domestic air travel energy demand and greenhouse gas emissions
- International air freight travel
Better data leads to better decision making – Example 1

Air services agreements

- The Ministry negotiates air services agreements on the government’s behalf.

- We use the international travel and migration database to determine priority countries to negotiate with where the potential for additional air services is greatest.

![Market size and current air services between New Zealand and South East Asia (2013 data)]
Alliance agreements

- The Ministry is responsible for providing advice on alliance applications between airlines (for example, alliance between Air New Zealand and Singapore Airlines)

- International travel and migration data enables us to understand travel flows to and from New Zealand – not just where people are going but *why* they are travelling and *how* they are getting there.

- We can get a far better understanding of the impact that an alliance will have on competition across different markets
Many aviation user-charges (such as passenger security charges) are based on projected passenger volumes. Better forecasts of domestic and international passenger movements will help to prevent fluctuations in revenue.

Robust projections will help identify when and where capacity constraints might occur in the future.

There is potential to use the data to inform infrastructure planning and better understand the links between aviation and other transport modes.
Thank you