Arrivals and Departures	Curriculum Area: Mathematics and Statistics, **Level 3/4**	Strand: Statistics
Achievement Objective:	**Statistical investigation** gathering, sorting, and displaying multivariate category and whole-number data and simple time-series data to answer questions	

Below is a picture of the arrivals and departures screen from Christchurch Airport. Study the picture and answer the questions.

1. What time was the photo taken?
2. If you couldn't read English, what visual cue is there for the difference between arriving and departing?
3. How many flight items are shown on the Arrivals board?
4. How many flight items are shown on the Departures board?
5. How much time is covered in this photo of the Arrivals Board?
6. How much time is covered in this photo of the Departures Board?
7. How many flights arrive from Auckland?
8. How many flights depart for Auckland?
9. How many international flights are departing during this time?
10. Name the places that have more than one flight arriving?
11. Name the places that have more than one flight departing?
12. How many different airlines have flights arriving?
13. How many different airlines have flights departing?
14. If you missed the first Auckland flight, how long after it is the next one?
15. If you were to meet someone on the first flight in from Wellington and they were actually on the next one, what is the time difference?

16. List all the different messages shown in the right column of the two boards. What other messages might be shown?
17. How many flights arrived on time?
18. What is the most common amount of time between *Shed* (scheduled departure) and *Brd* (boarding time)?

19. Extra questions for discussion:
    o Why are words shown in all-caps when that could be harder to read than mixed-case?
    o How is colour used on the boards?
    o Look at the flight codes. What patterns can you see?
    o Why are times shown in military format?
    o Look at the gate numbers. What patterns can you see and speculate why that might be?
    o If you had the job of redesigning the boards, what changes would you suggest, if any?
    o Why might mathematicians analyse some of the data shown over a days/weeks/months/years?
    o What suggestions do you have for using technology to improve the user's experience regarding arrivals and departures?