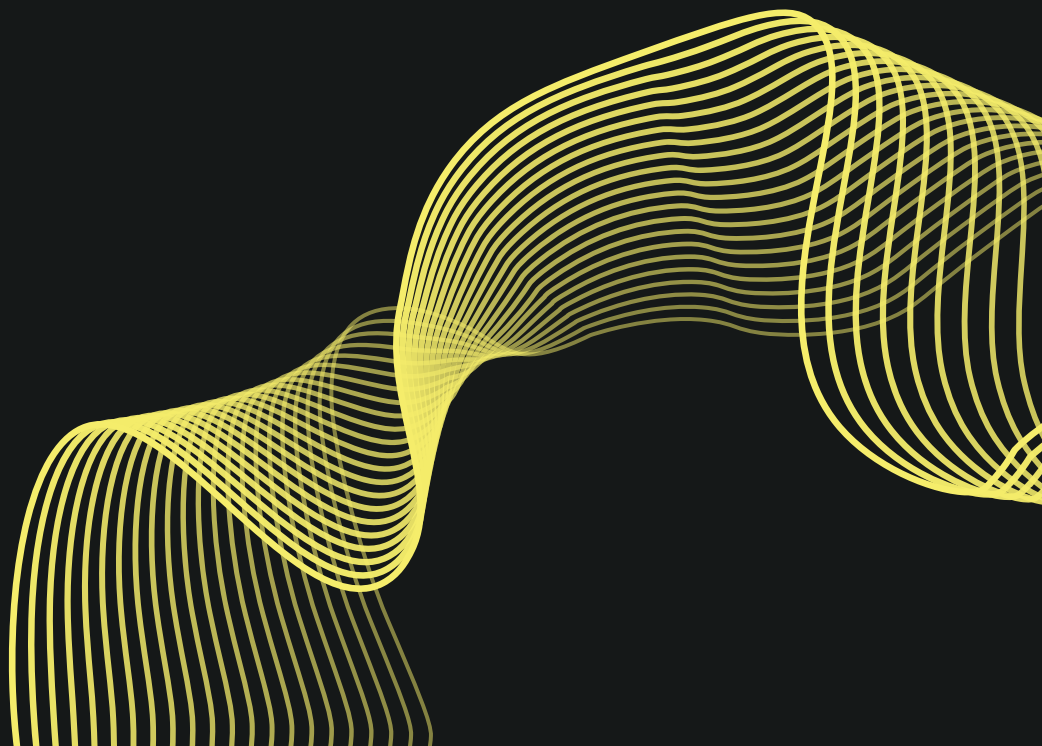


Melbourne Airport Draft Noise Sharing Plan

Flight Path Extract



4.5 Existing runway modes at Melbourne Airport

The eight existing modes detailed below represent the approved runway configurations currently available for operations at Melbourne Airport. These modes form the baseline against which the draft Noise Sharing Plan changes are assessed. Although all eight runway modes are available for operations, Airservices Australia's Noise Abatement Procedures nominate preferred runway modes for use when winds and weather conditions allow. Preferred runways for arrivals and departures vary depending on time of day or night as well as with demand (i.e. the number of arriving and departing aircraft).

In the descriptions and accompanying diagrams, the existing north/south runway is referred to as Runway 16L/34R, with the new Third Runway (Runway 16R/34L) shown for context.

Capacity refers to the maximum number of aircraft movements that can be accommodated by an airport, runway mode or runway over a given period (usually expressed hourly) while maintaining safe and efficient operations. For the purposes of the following tables, capacity is categorised into three groups:

In the diagrams, the following legend applies:

-  arriving aircraft
-  departing aircraft
-  larger aircraft requiring the longer runway (either arrivals or departures)

- Low: 20-50 movements an hour
- Medium: 50-60 movements an hour
- High: 60+ movements an hour.

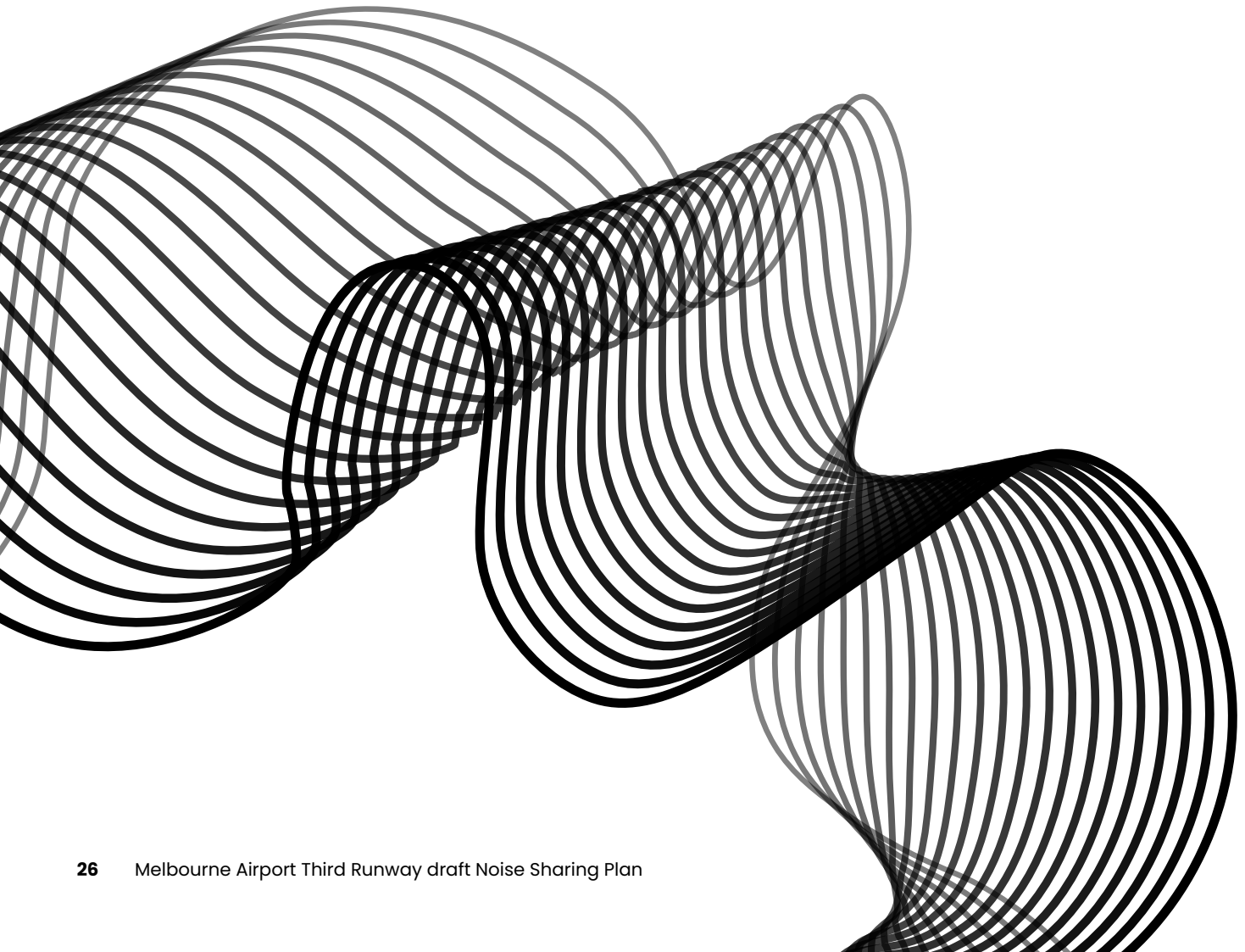
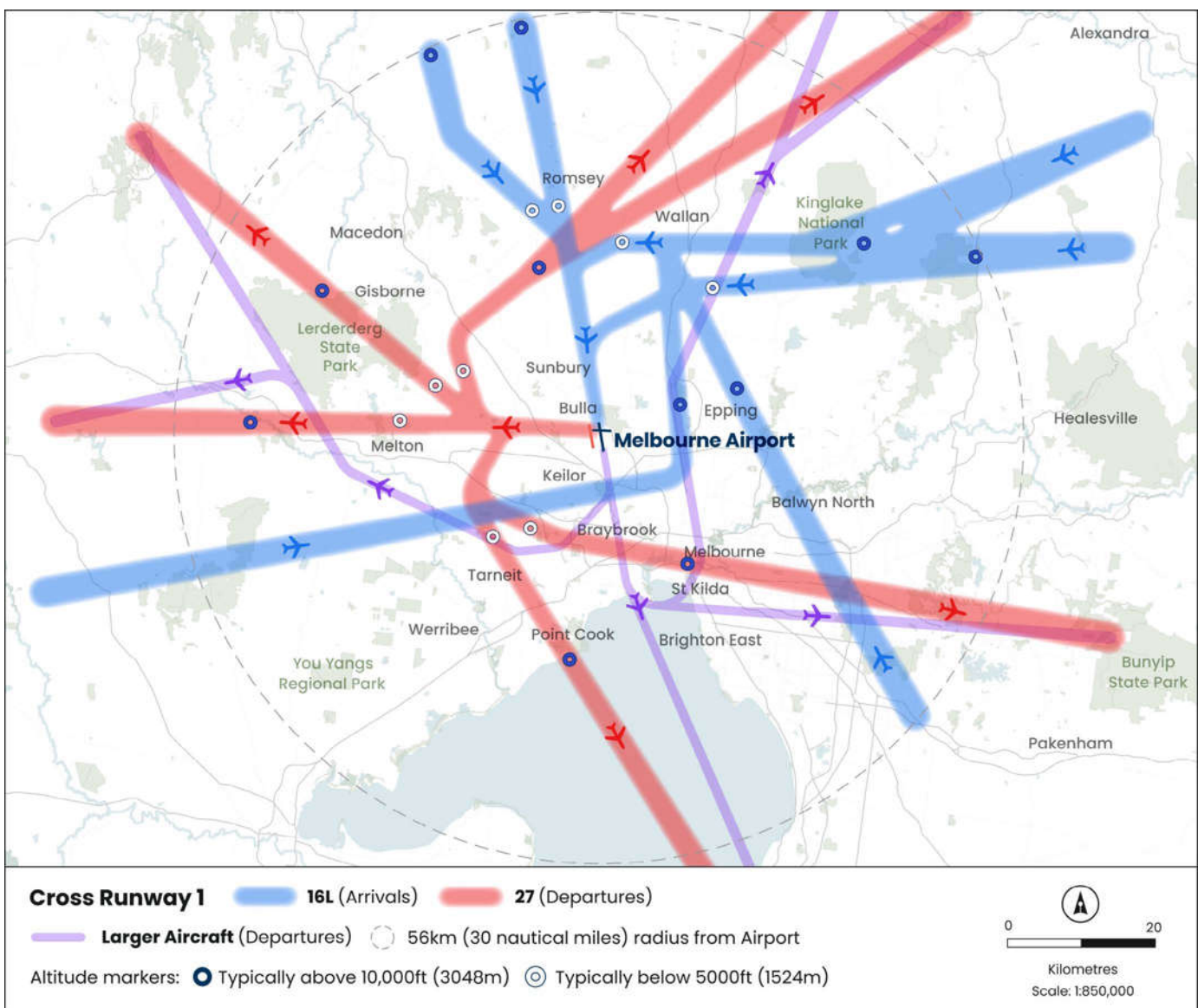
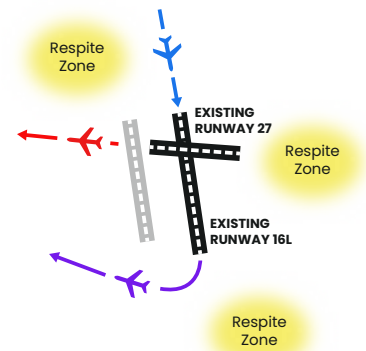




Figure 4.2 Existing runway modes by priority

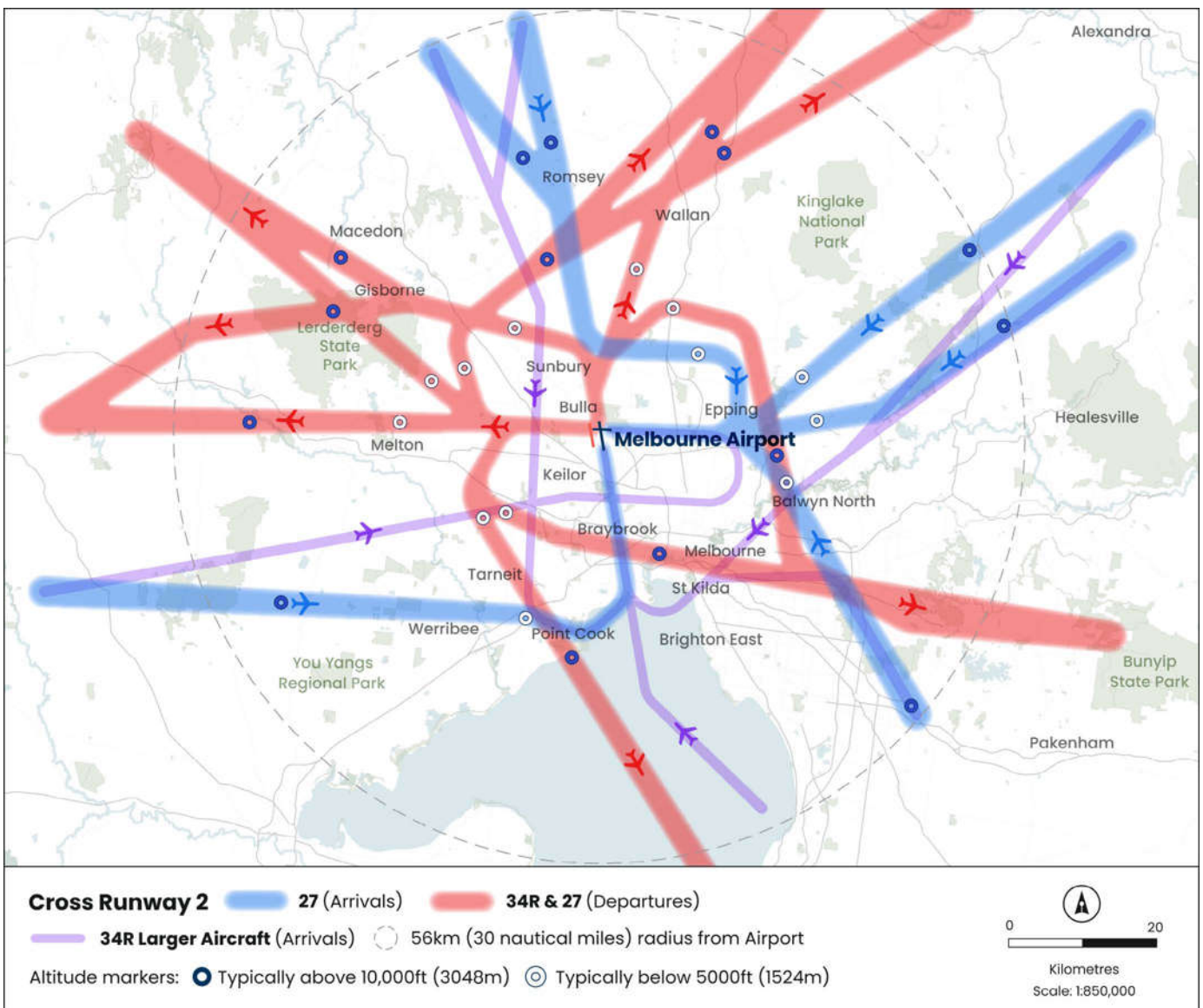
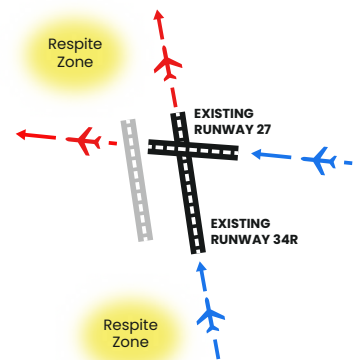
Cross Runway 1

Runways	 Arrivals 16L	 Departures 27 and 16L		
Weather	 South westerly or calm			
Timing	 Available 24 hours			
Special conditions	Larger aircraft may require the long runway and depart to the south off 16L			
Capacity	Medium			
Forecast usage range (% of time)	2025 38.7%	Implementation 24-38%	+5 years 16-25%	2047 9-15%



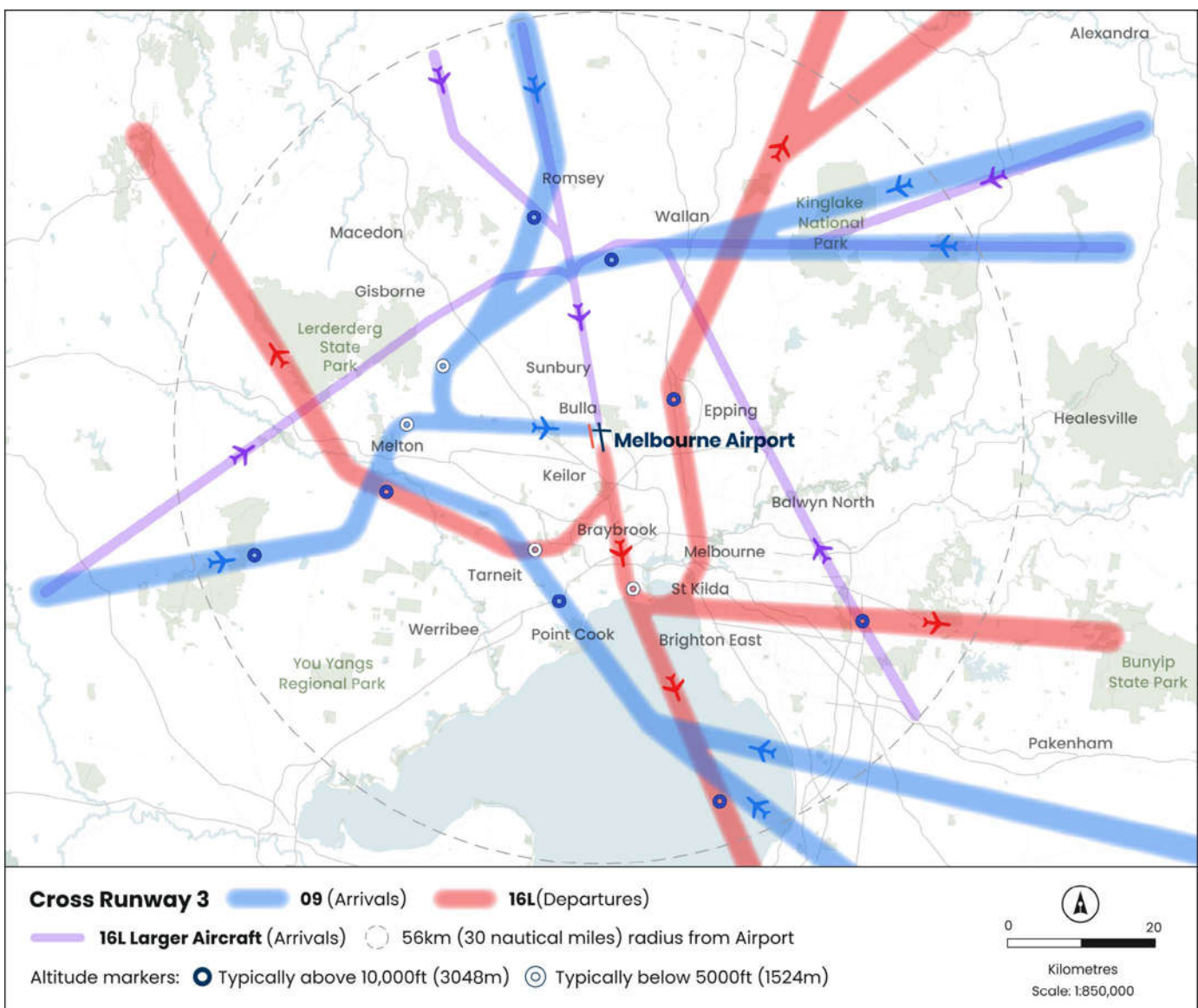
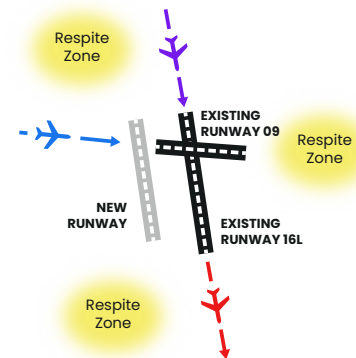
Cross Runway 2

Runways	 Arrivals 27 and 34R	 Departures 27 and 34R		
Weather	 North westerly or calm			
Timing	 Available 24 hours			
Special conditions	Larger aircraft may require the longer Runway 34R for arrival			
Capacity	Medium			
Forecast usage range (% of time)	2025 17.6%	Implementation 13-20%	+5 years 10-16%	2047 9-15%



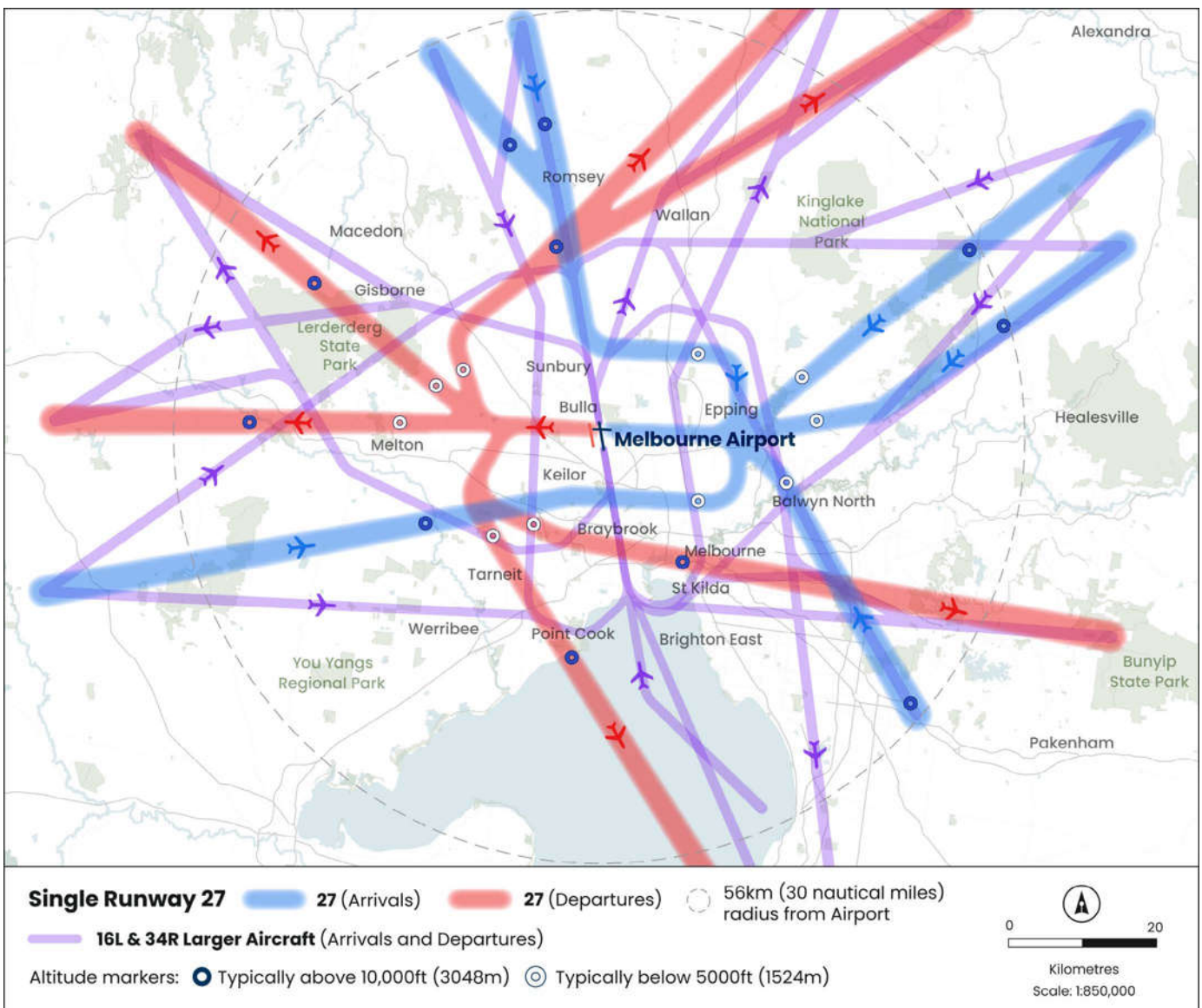
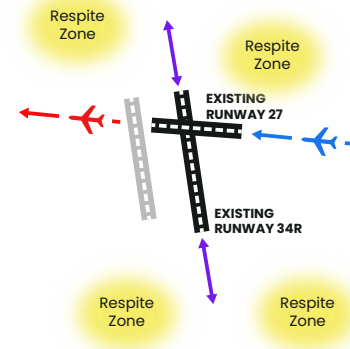
Cross Runway 3

Runways	 Arrivals 09 and 16L	 Departures 16L		
Weather	 South easterly wind			
Timing	 Day use 6am–11pm			
Special conditions	Larger aircraft may require the longer runway 16L for arrival			
Capacity	Medium			
Forecast usage range (% of time)	2025 1.1%	Implementation 2–4%	+5 years 1–2%	2047 <1%



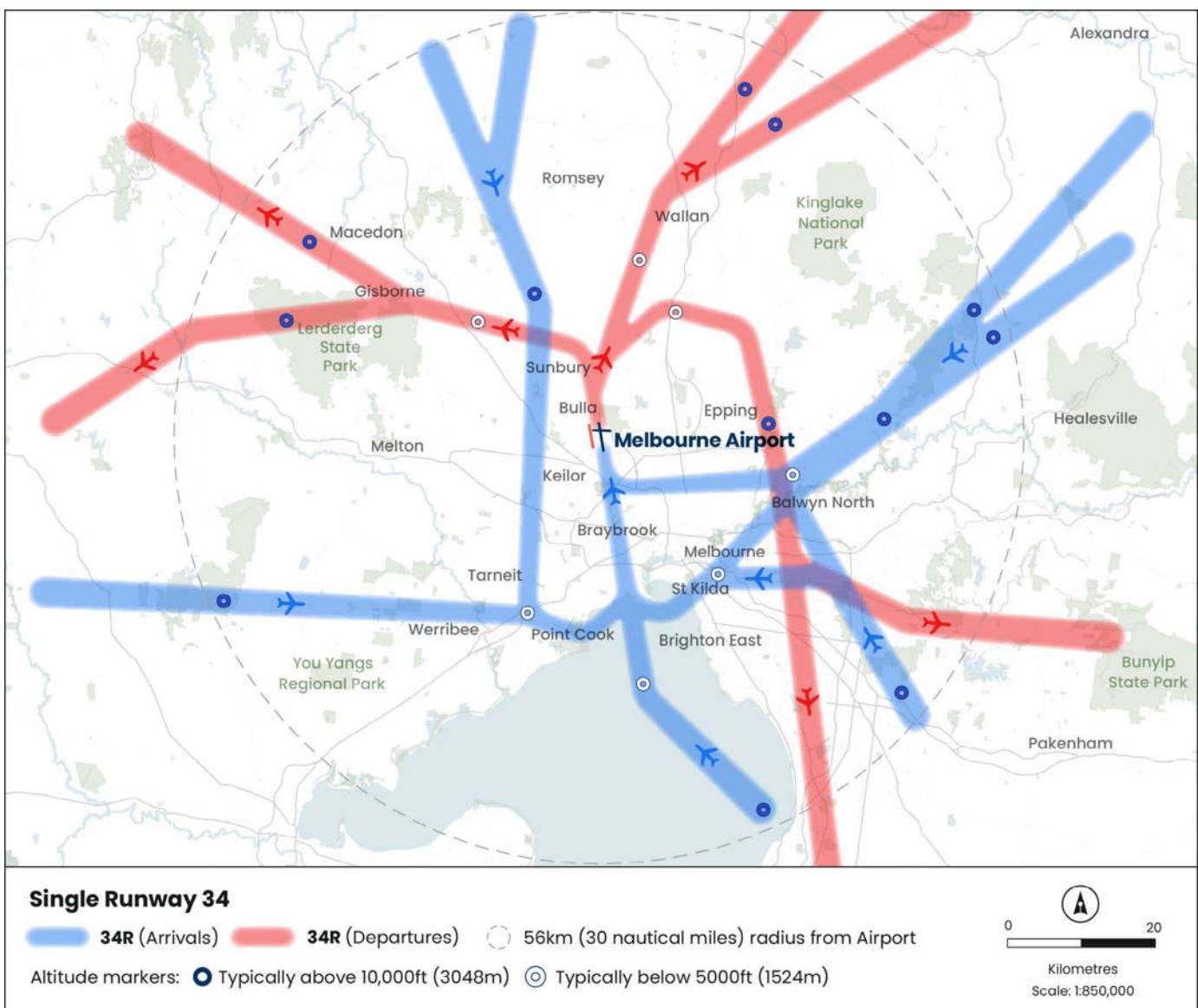
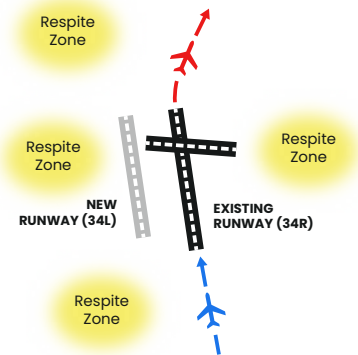
Single Runway 27

Runways	 Arrivals 27	 Departures 27		
Weather	 Westerly wind			
Timing	 Available 24 hours			
Special conditions	Larger aircraft may require the longer Runway 34R/16L for arrival or departure			
Capacity	Low			
Forecast usage range (% of time)	2025 6.1%	Implementation 2-4%	+5 years 2-4%	2047 1-3%



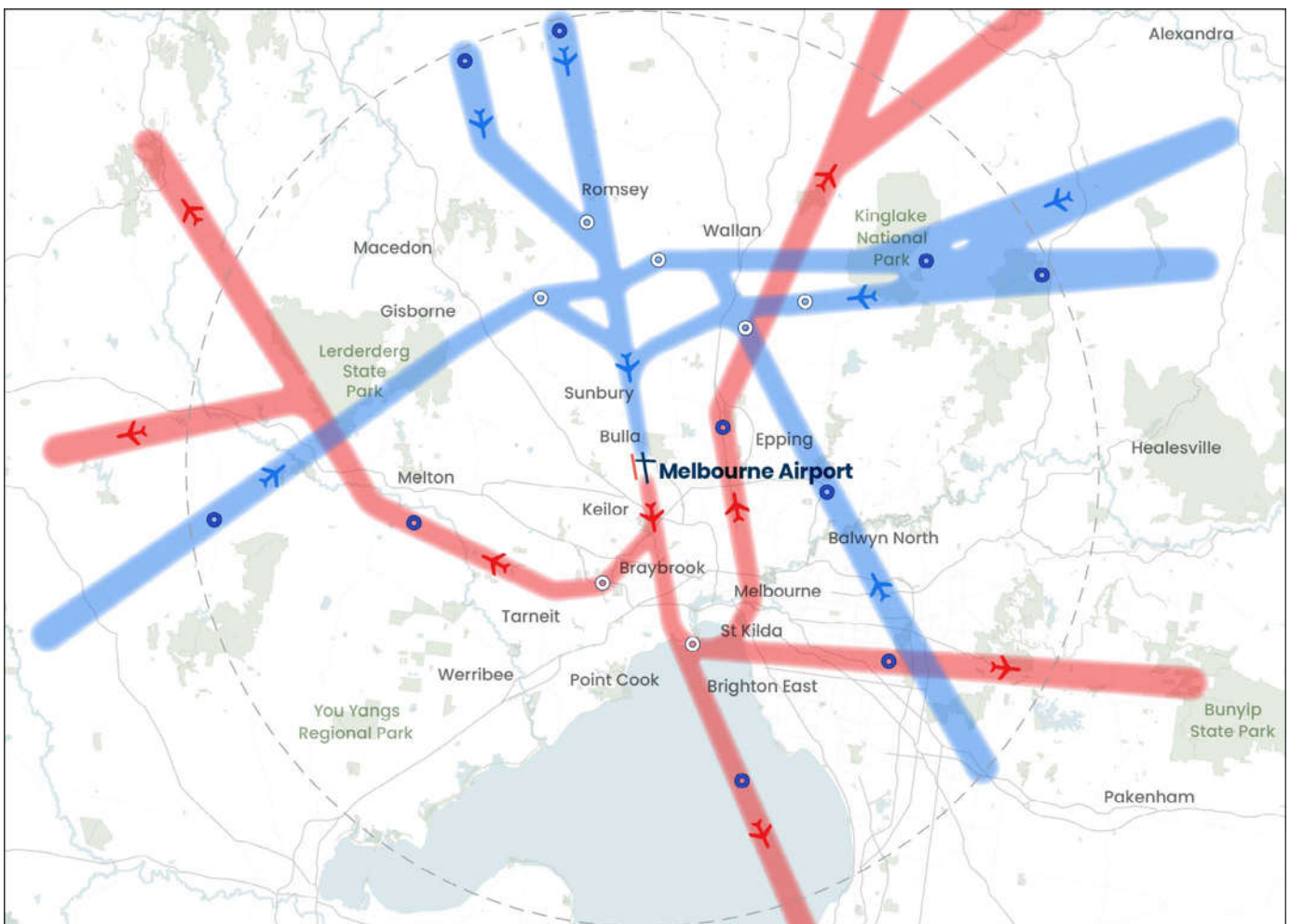
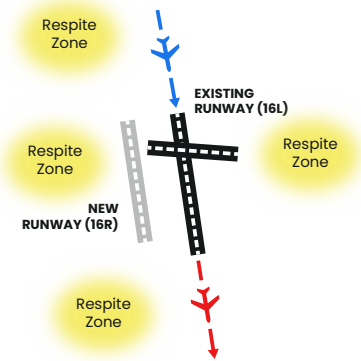
Single Runway 34

Runways	 Arrivals 34R	 Departures 34R
Weather	 Northerly wind	
Timing	 Available 24 hours	
Special conditions	N/A	
Capacity	Low	
Forecast usage range (% of time)	2025 17.6%	Implementation 2-4%
		+5 years 2-4%
		2047 2-4%



Single Runway 16

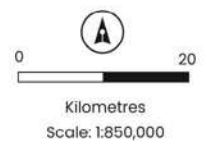
Runways	 Arrivals 16L	 Departures 16L		
Weather	 Southerly wind			
Timing	 Available 24 hours			
Special conditions	N/A			
Capacity	Low			
Forecast usage range (% of time)	2025 15.4%	Implementation <1%	+5 years <1%	2047 <1%



Single Runway 16

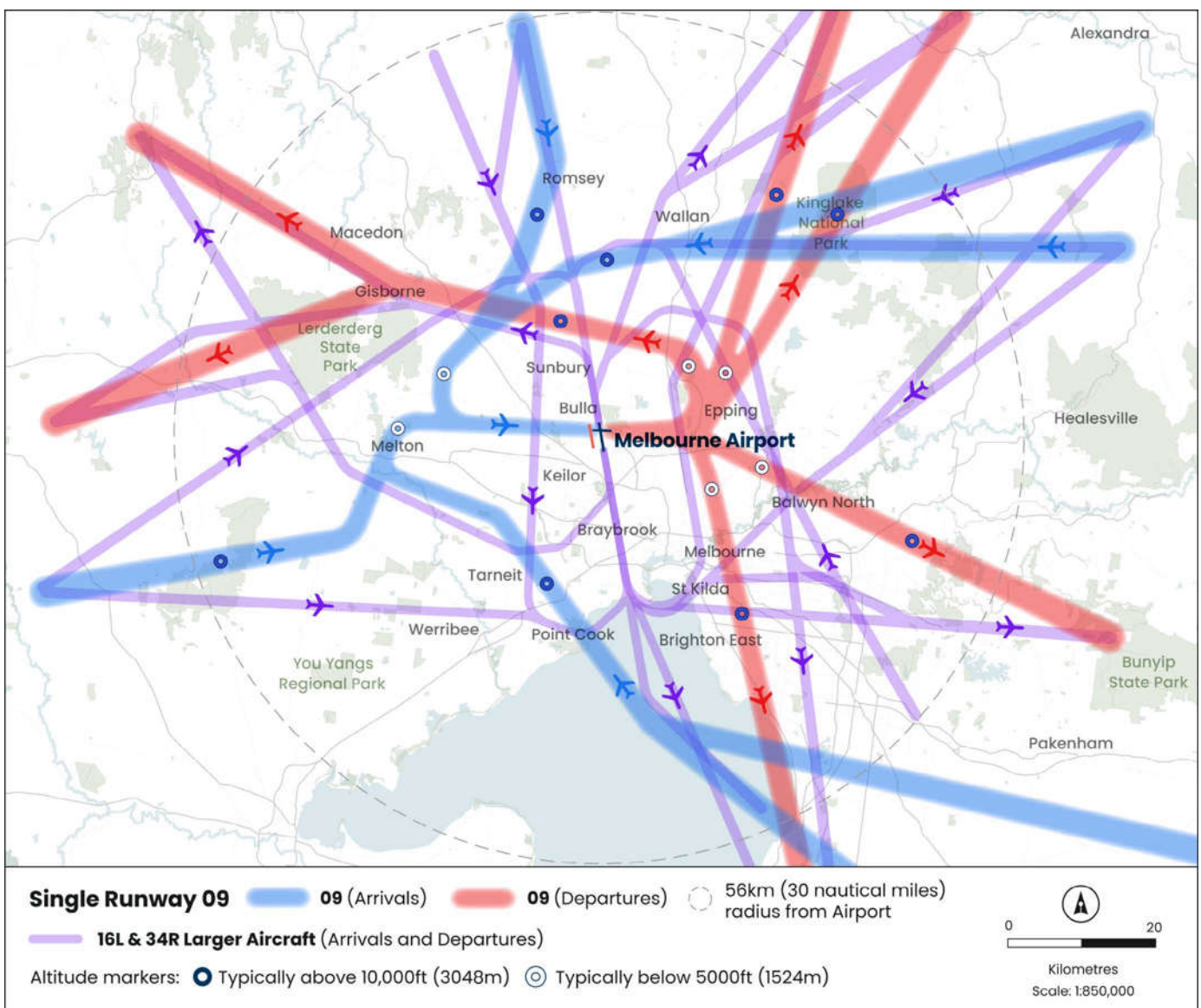
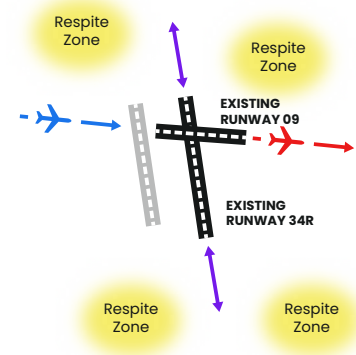
 16L (Arrivals)
  16L (Departures)
  56km (30 nautical miles) radius from Airport

Altitude markers:  Typically above 10,000ft (3048m)  Typically below 5,000ft (1524m)



Single Runway 09

Runways	 Arrivals 09	 Departures 09
Weather	 Easterly wind (rare)	
Timing	 Available 24 hours	
Special conditions	Larger aircraft may require the longer Runway 16L/34R for arrival or departure	
Capacity	Low	
Forecast usage range (% of time)	2025 0.2%	Implementation <1%
		+5 years <1%
		2047 <1%

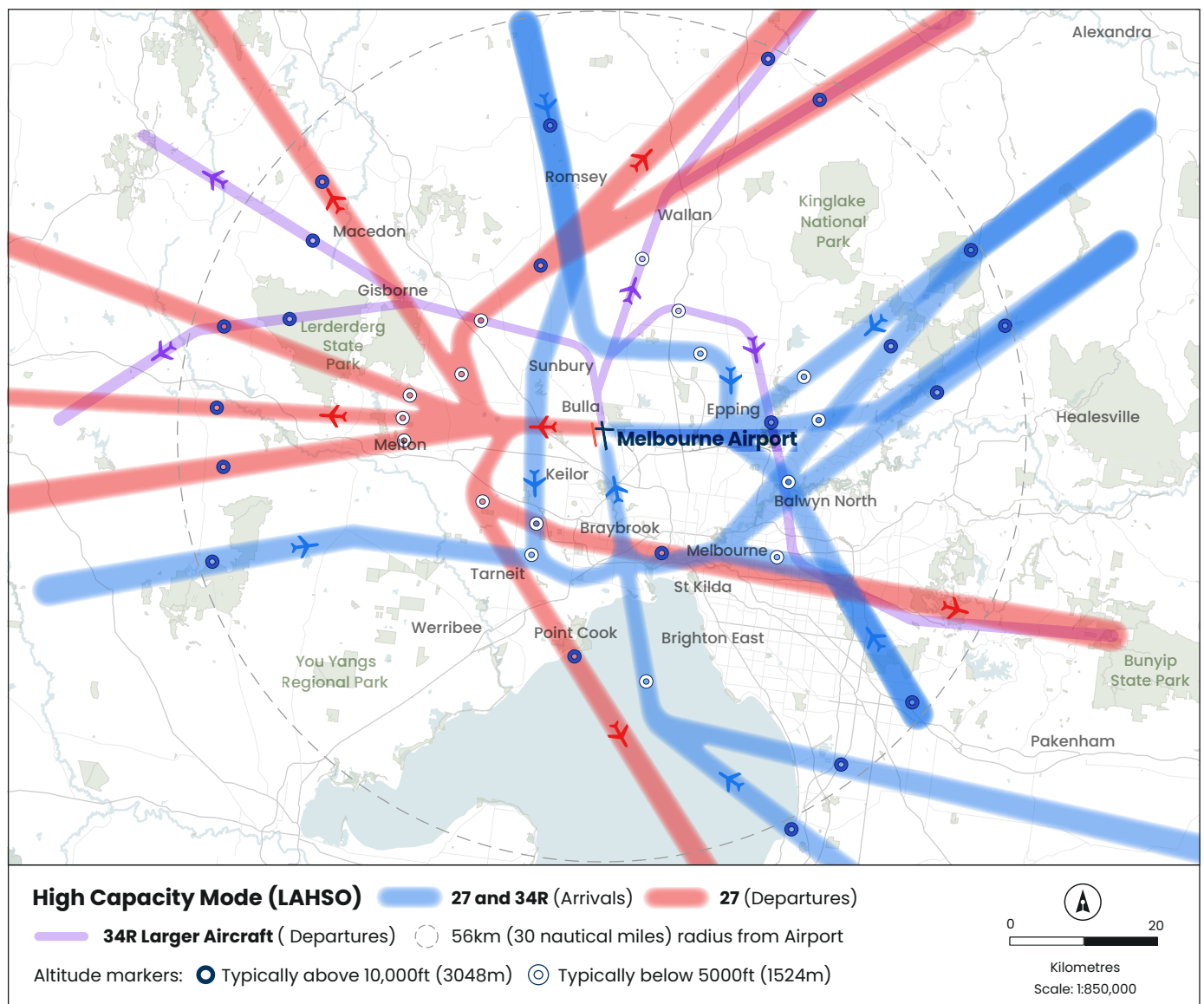
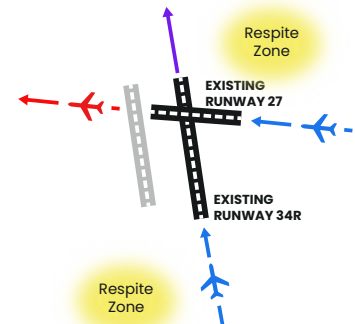


High-Capacity Mode (LAHSO)

The draft Noise Sharing Plan does not include the future use of LAHSO as it will be replaced with alternative parallel runway high-capacity modes (refer to Section 7.2).

Runways 27 and 34R for arrivals and departures

- Melbourne's only current high-capacity mode uses Land and Hold Short Operations (LAHSO) for approved operators and aircraft.
- LAHSO is a day-only mode and may be used during peak traffic periods only when specific weather conditions permit.
- Simultaneous arrivals are conducted on Runways 34R and 27, with departures allocated to Runway 27.
- Certain aircraft performance requirements may demand the use of the longer Runway 34R for departures depending on the local weather conditions at the airfield.
- LAHSO procedures require aircraft arriving on Runway 34R to stop and hold short of the Runway 27 intersection, enabling simultaneous and independent operations on both runways with amended separation requirements.



4.6 New modes introduced by the draft Noise Sharing Plan

The draft Noise Sharing Plan introduces seven new runway configurations to add to the seven current configurations that will be carried over for implementation of the third runway. LAHSO will not be maintained as an operating mode.

Each new mode is described below, together with the conditions under which Melbourne Airport will operate in that mode and the noise sharing benefits it is intended to deliver.

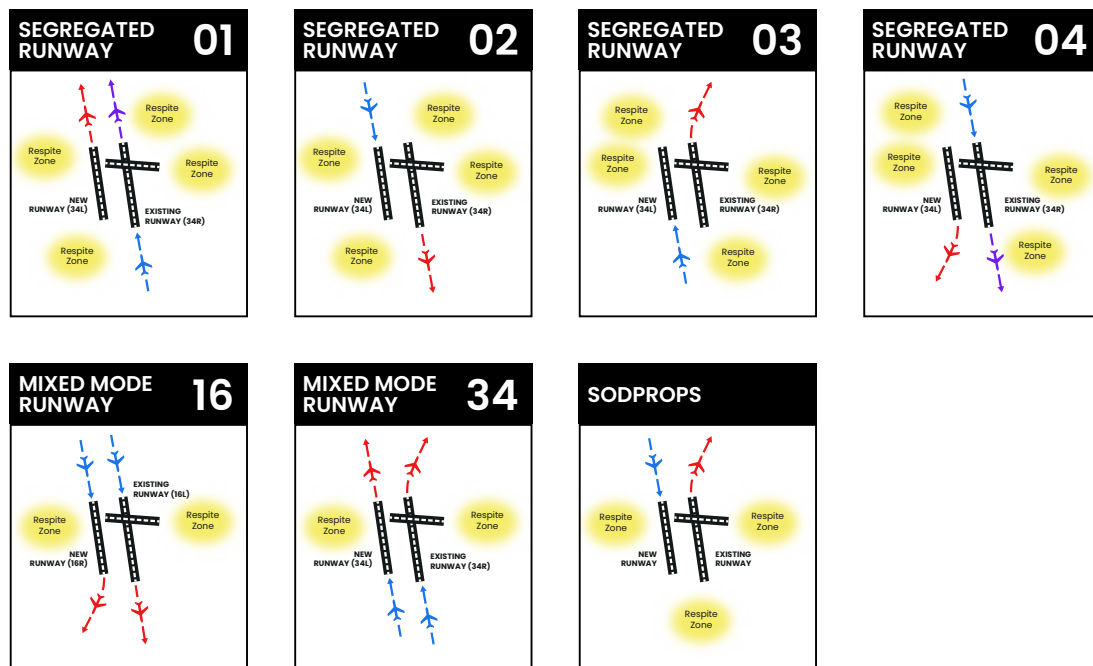
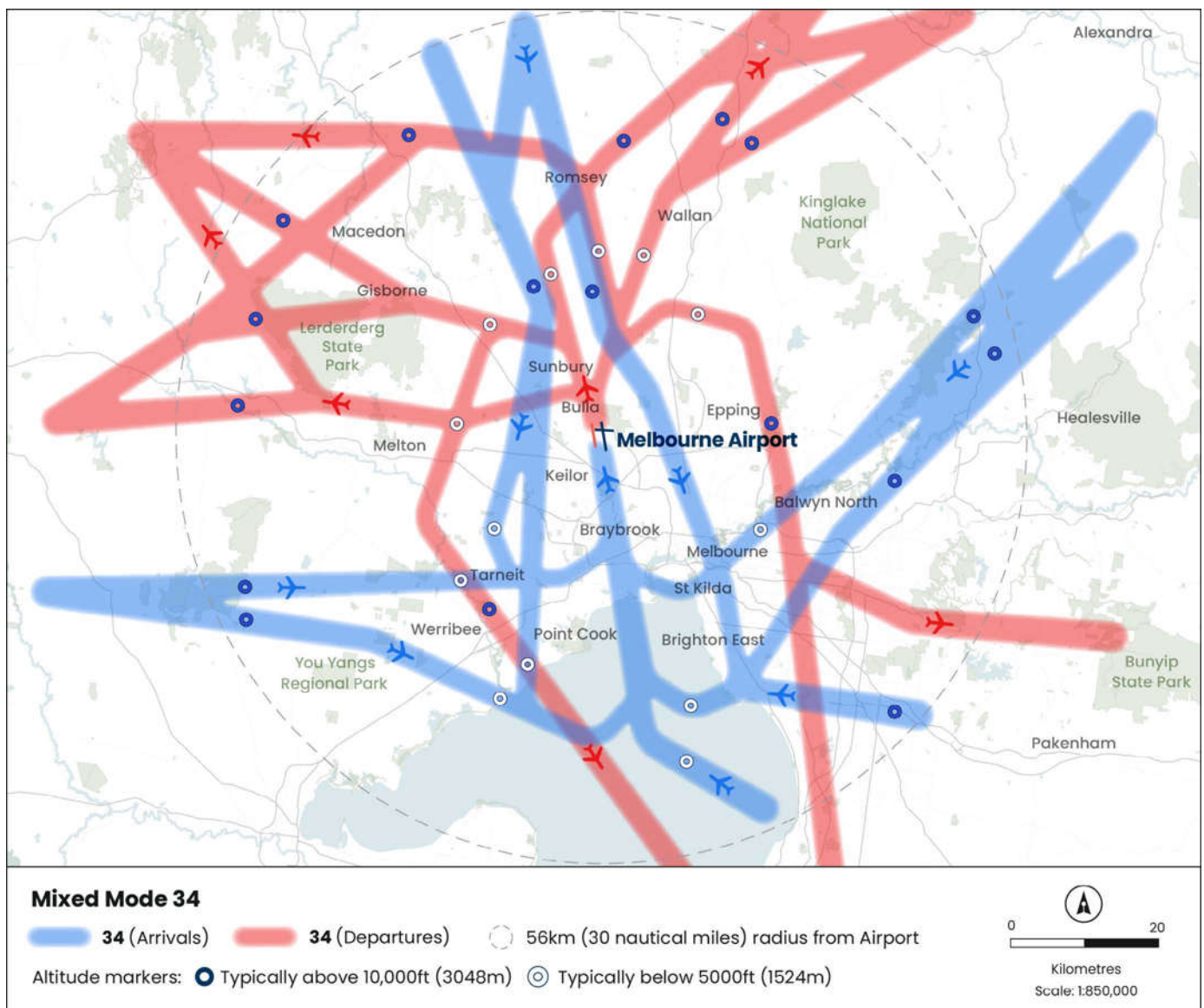
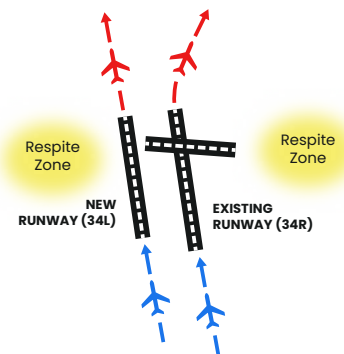


Figure 4.3 New runway modes

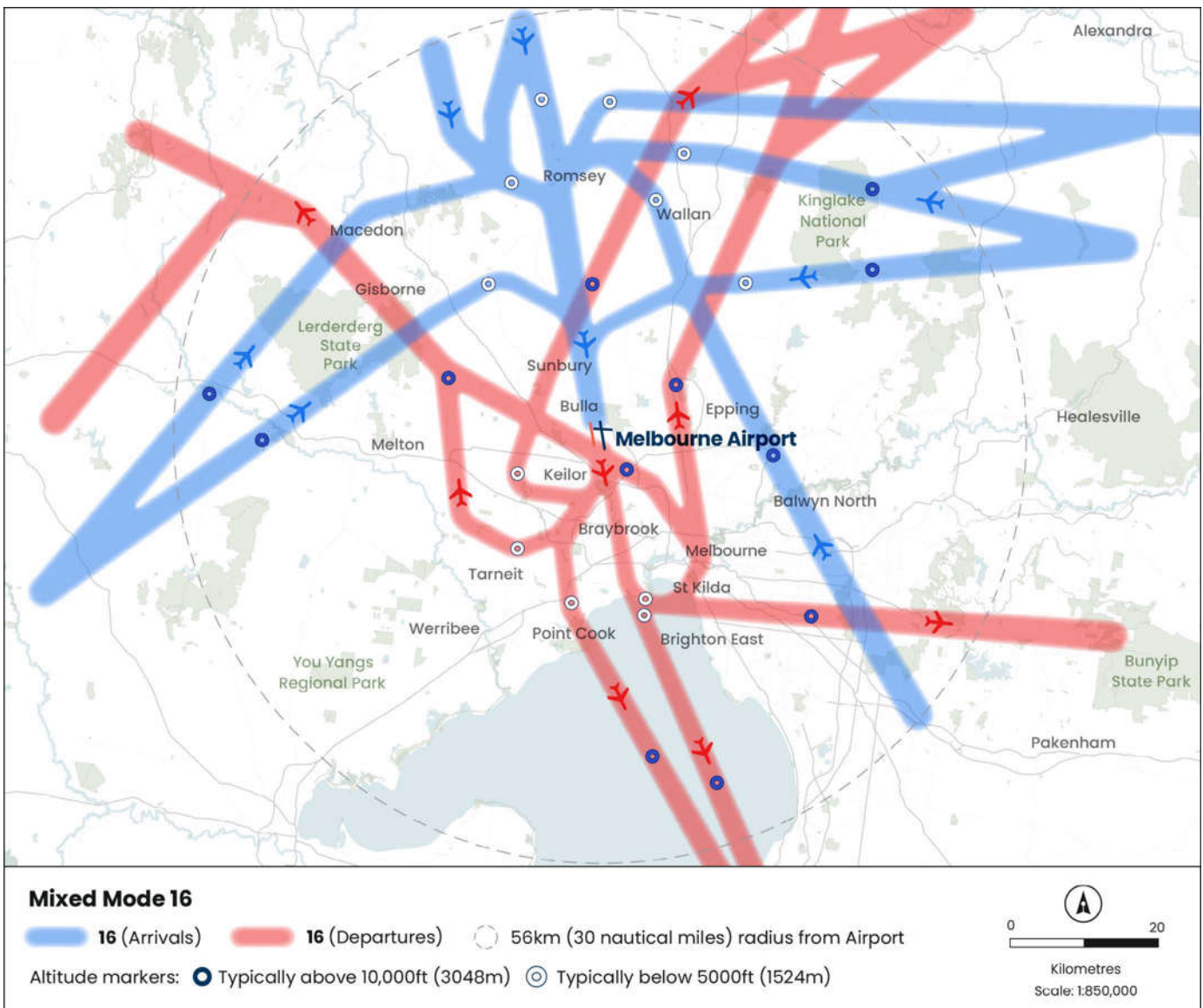
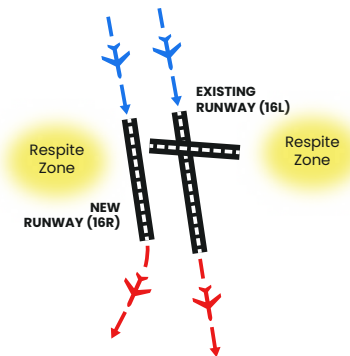
Mixed Mode Runway 34

Runways	 Arrivals 34R and 34L	 Departures 34R and 34L	
Weather	 Northerly wind		
Timing	 During high demand periods		
Special conditions	Runways are operated in 'independent parallel mode' meaning aircraft can land and depart side-by-side at the same time		
Capacity	High		
Forecast usage range (% of time)	Implementation 7-12%	+5 years 14-22%	2047 20-32%



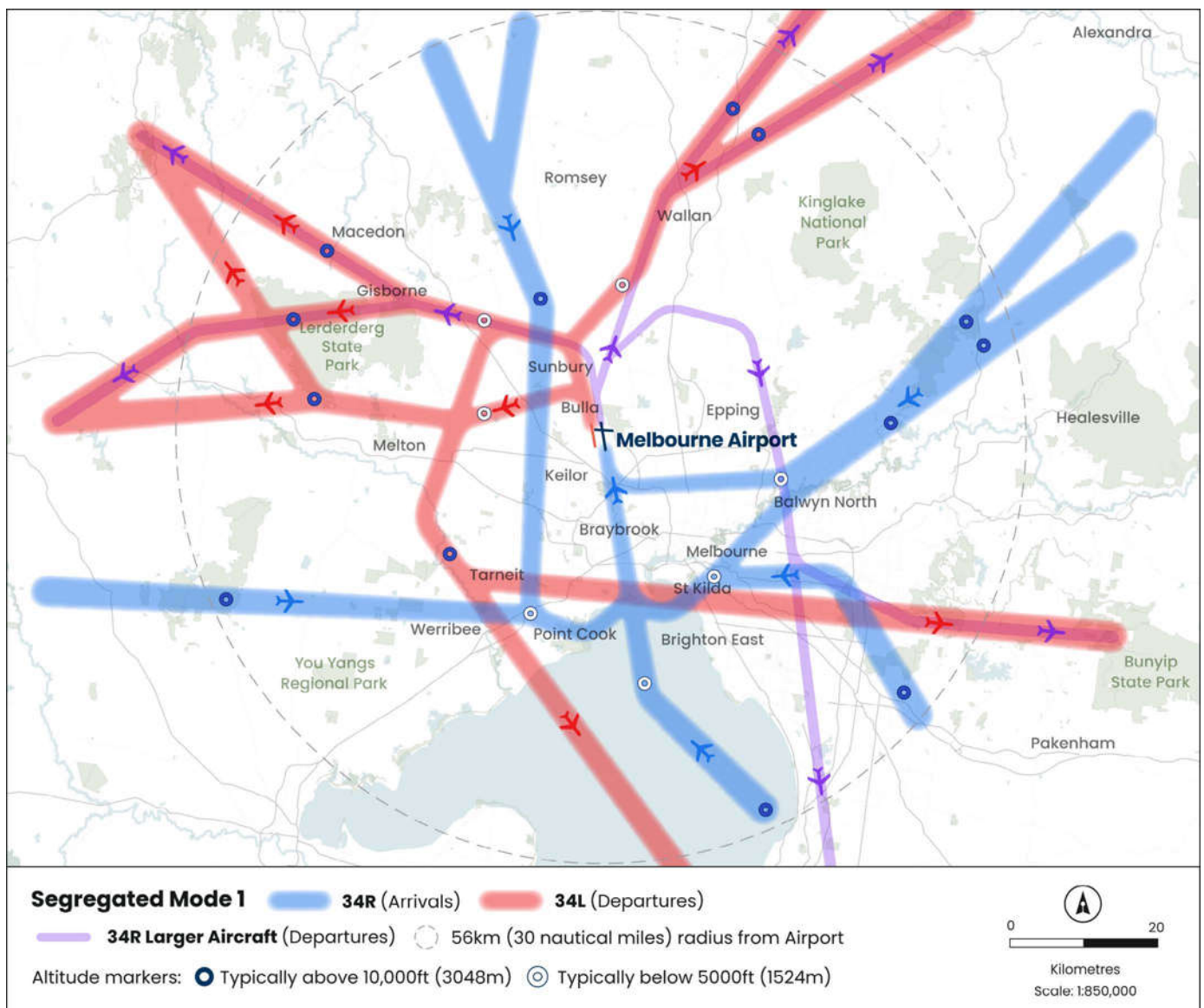
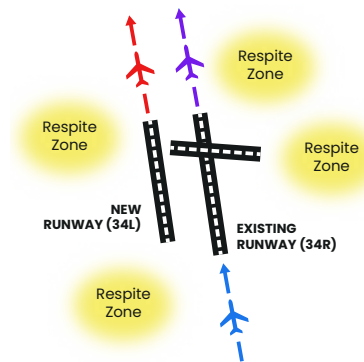
Mixed Mode Runway 16

Runways	 Arrivals 16R and 16L	 Departures 16R and 16L
Weather	 Southerly winds	
Timing	 During high demand periods	
Special conditions	Runways are operated in 'independent parallel mode' meaning aircraft can land and depart side-by-side at the same time	
Capacity	High	
Forecast usage range (% of time)	Implementation 3-6%	+5 years 10-17%
		2047 17-27%



Segregated Mode 1

Runways	 Arrivals 34R	 Departures 34L
Weather	 Northerly wind	
Timing	 Available 24 hours, expected use 6am-11pm	
Special conditions	Some larger aircraft may require the longer Runway 34R for departure	
Capacity	Medium	
Forecast usage range (% of time)	Implementation 3-6%	+5 years 1-3%
		2047 3-5%



Segregated Mode 2

Runways  Arrivals 16R  Departures 16L

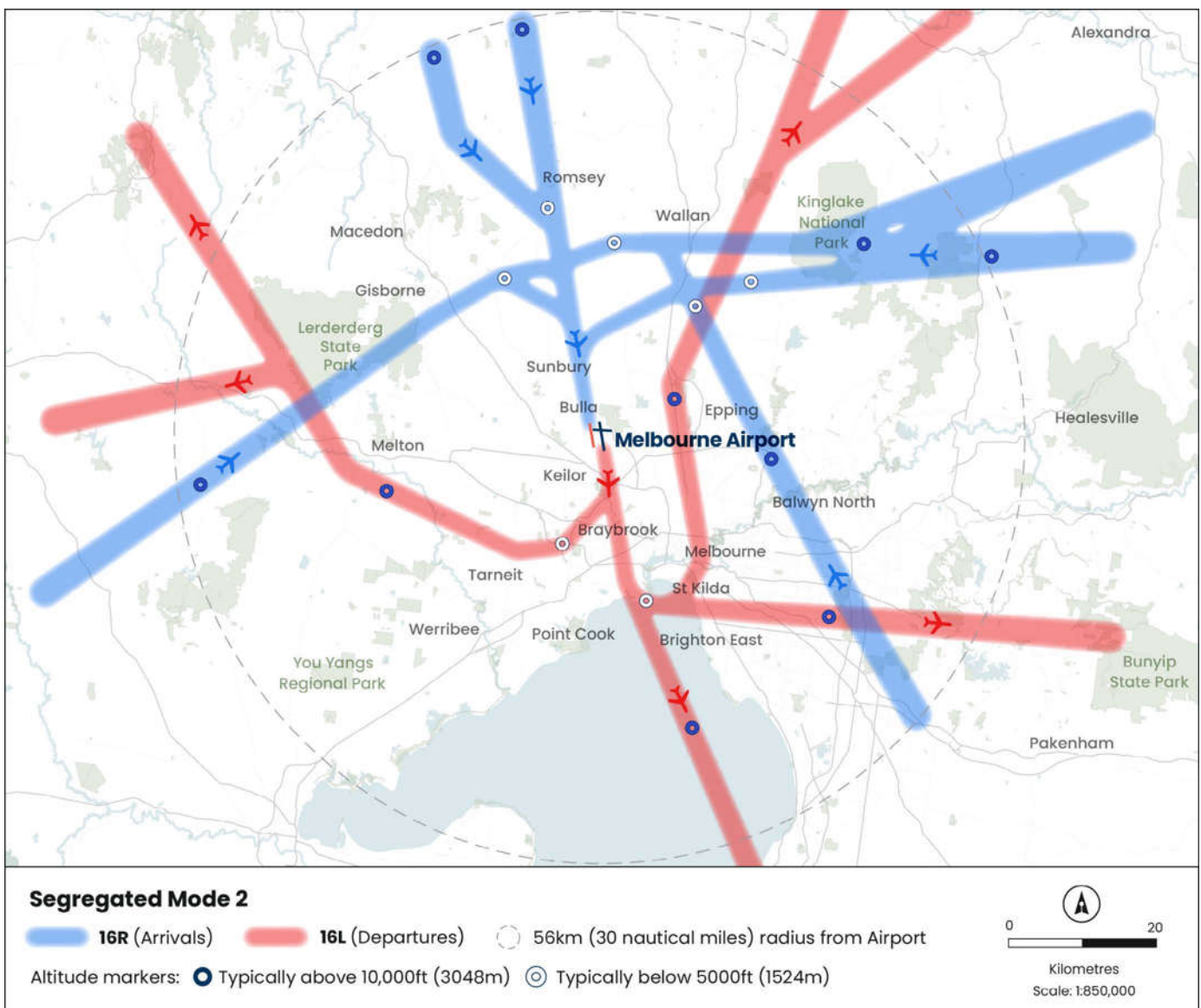
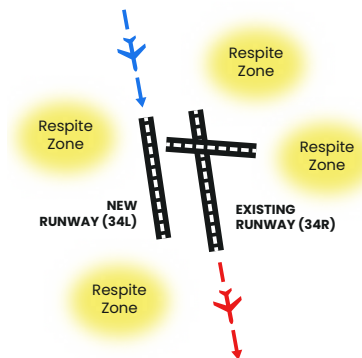
Weather  Southerly winds

Timing  Available 24 hours, expected use 6am-11pm

Special conditions N/A

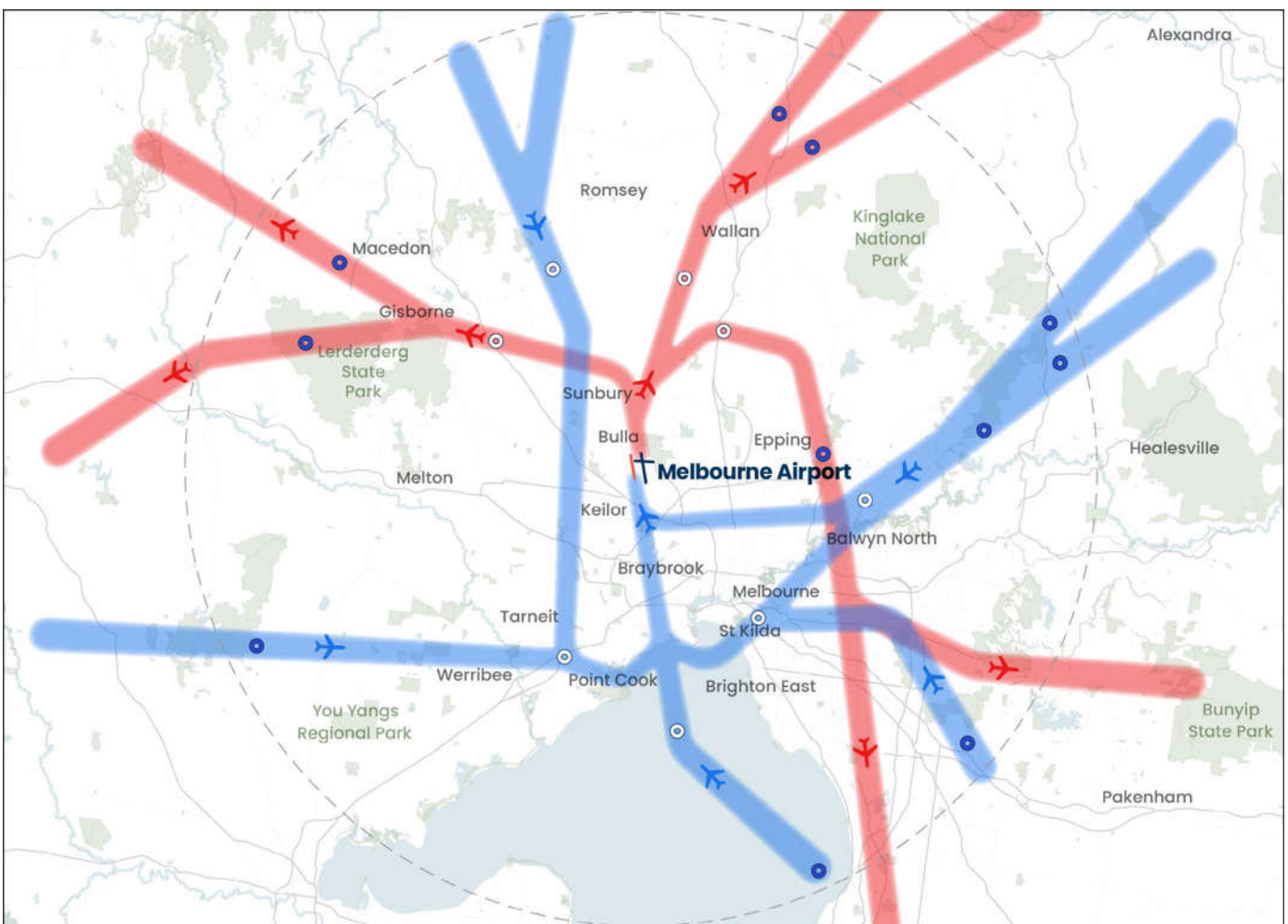
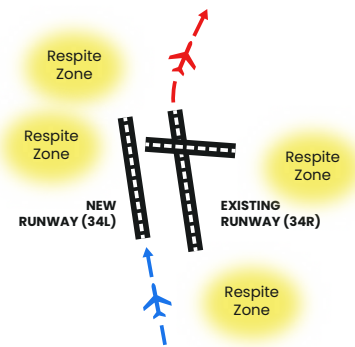
Capacity Medium-high

Forecast usage range (% of time)	Implementation	+5 years	2047
	4-8%	5-9%	3-6%



Segregated Mode 3

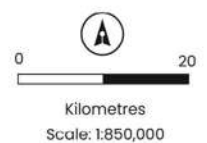
Runways	 Arrivals 34L	 Departures 34R
Weather	 Northerly wind	
Timing	 Available 24 hours, expected use 6am-11pm	
Special conditions	N/A	
Capacity	Medium - high	
Forecast usage range (% of time)	Implementation 9-14%	+5 years 8-13%
		2047 3-6%



Segregated Mode 3

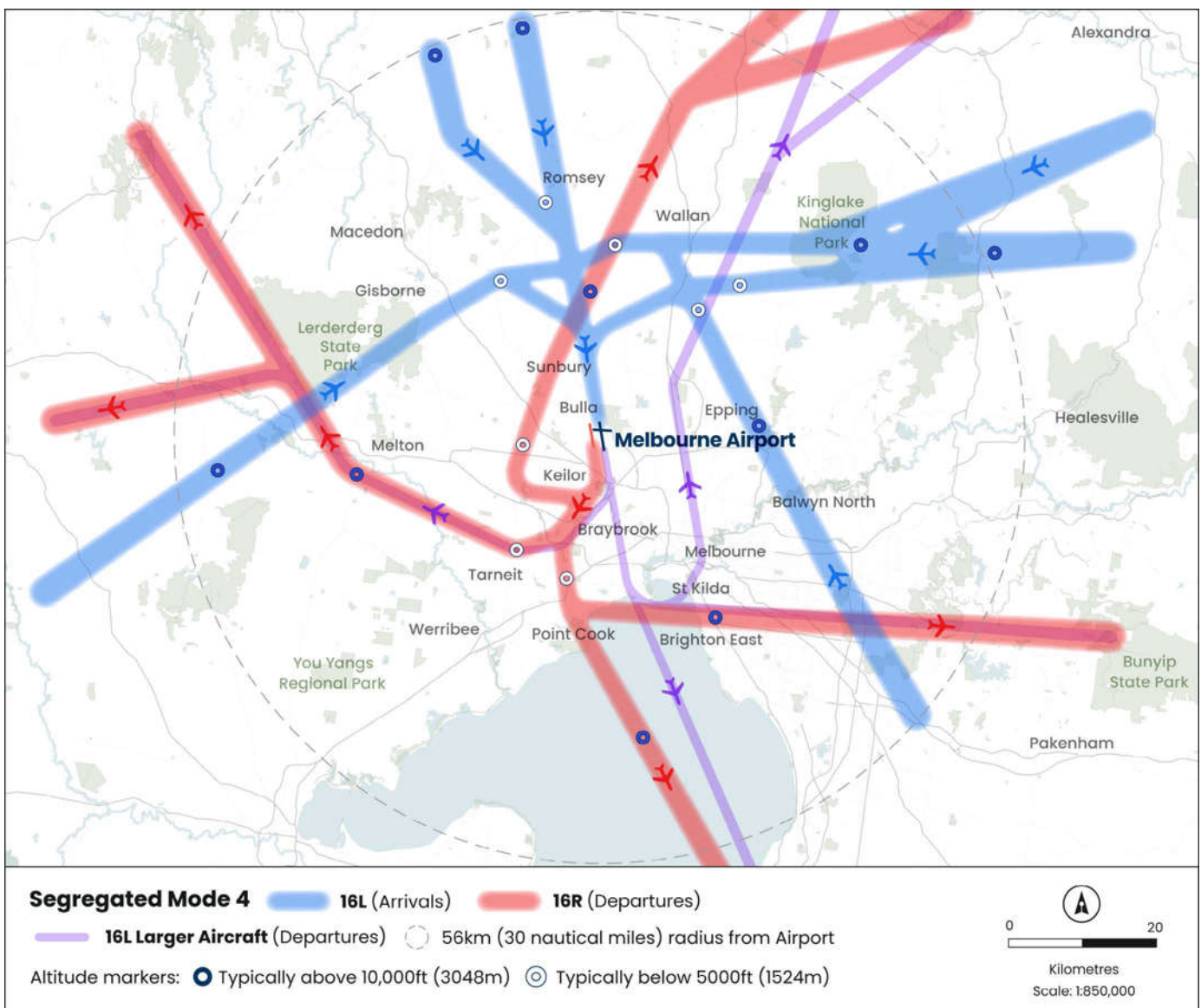
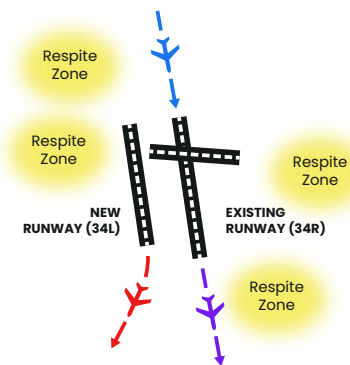
 34L (Arrivals)
  34R (Departures)
  56km (30 nautical miles) radius from Airport

Altitude markers:  Typically above 10,000ft (3048m)
  Typically below 5,000ft (1524m)



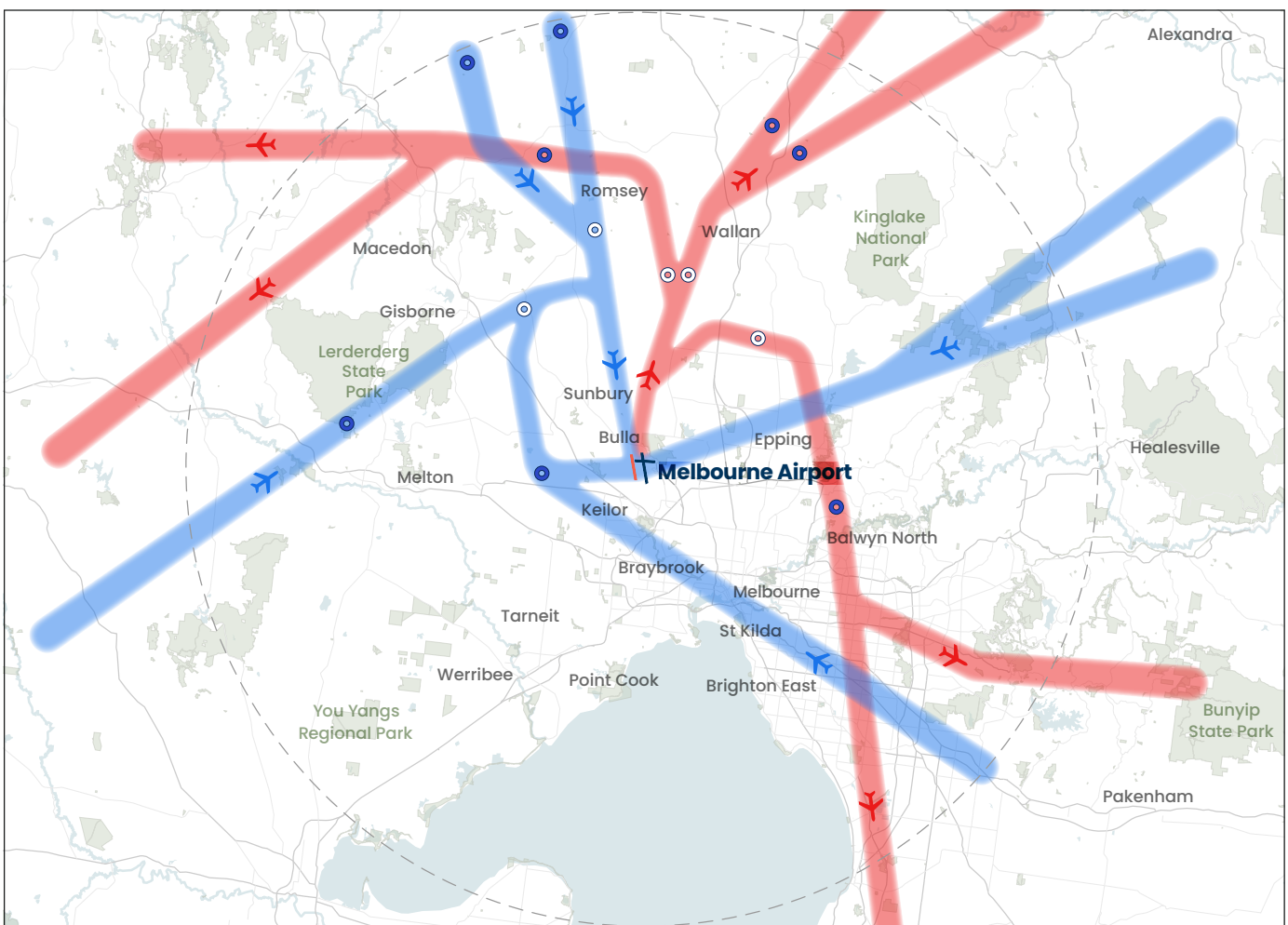
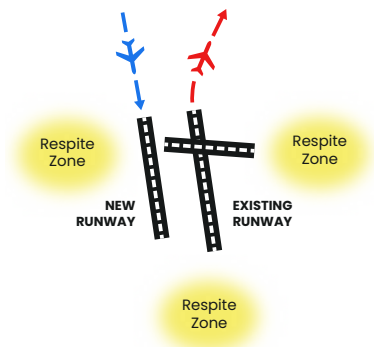
Segregated Mode 4

Runways	 Arrivals 16L	 Departures 16R
Weather	 Southerly winds	
Timing	 Available 24 hours, expected use 6am-11pm	
Special conditions	Larger aircraft may require the longer Runway 16L for departure	
Capacity	Medium	
Forecast usage range (% of time)	Implementation <1-2%	+5 years <1% 2047 1-3%



Simultaneous Opposite Direction Parallel Runway Operations SODPROPS

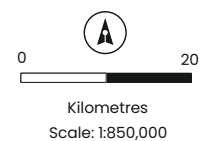
Runways	 Arrivals 16R	 Departures 34R	
Weather	 Clear, wind less than 5 knots		
Timing	 Only used overnight (11pm – 6am)		
Special conditions	Requires a dry runway with visibility at least 8 kilometres and low traffic demand		
Capacity	Low		
Forecast usage range (% of time)	Implementation <5%	+5 years <5%	2047 <5%



SODPROPS (Simultaneous Opposite Direction Parallel Runway Operations)

 16R (Arrivals)  34R (Departures)  56km (30 nautical miles) radius from Airport

Altitude markers:  Typically above 10,000ft (3048m)  Typically below 5000ft (1524m)



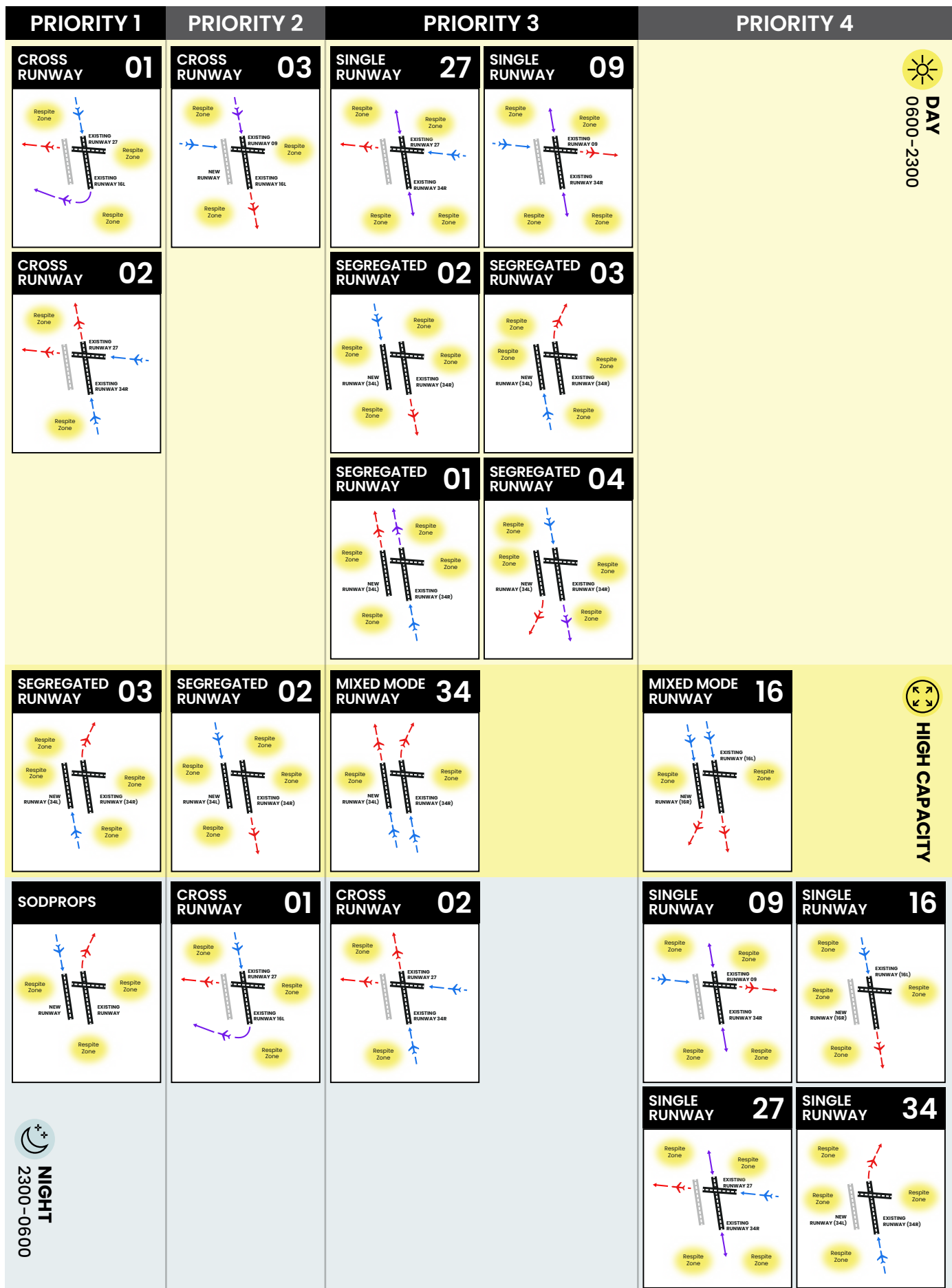


Figure 4.4 Proposed runway modes by priority