

MELBOURNE AIRPORT NOISE SHARING PLAN

Industry Engagement

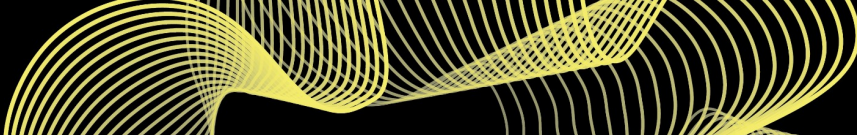
Phase 1



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Melbourne's new third runway will be a north-south parallel, positioned 1,311m west of the current 16/34 runway. The new runway will be 16R/34L and 3,000m long, with a 180m starter extension for 34L departures. To accommodate construction, runway 09/27 will be reduced near 09 threshold and is intended to be extended at the 27 threshold (known as the Eastern Extension Project managed by Melbourne Airport).



On 10 September 2024, the Minister for Infrastructure, Transport, Regional Development and Local Government approved the draft Major Development Plan (MDP) for Melbourne Airport's Third Runway. The Minister's approval has come with a range of conditions.

A key requirement of these conditions is the development of a Noise Sharing and Airspace Concept Plan (NSP). The NSP ensures that the new runway is introduced with a structured and transparent approach to managing aircraft noise, defining how noise will be shared and mitigated across runway operating modes. It will deliver balanced noise outcomes where operational feasibility, integrate with the Melbourne Basin airspace structure and establish a preferred airspace concept and operating strategy.

To achieve this, the NSP is embedding transparency, early engagement and robust technical planning from the outset. Trax has been appointed as an independent consultant to develop the NSP, providing expertise in airspace design, runway operating mode strategy and industry engagement.

NSP Development Timeline

The NSP will be delivered through the following phases with two rounds of dedicated industry engagement:

Phase 1 (Complete) – Project Initiation and Framework Development (May – June 2025)

Establish governance structure, identify key risks, and set out a roadmap for project delivery.

Phase 2 (Complete) – Initial Airspace Concepts and Operating Strategies (July – September 2025)

Analyse existing airspace, traffic flows, and constraints to inform the development of initial Noise Sharing Plan concepts.

Phase 3 (In progress) – Initial Stakeholder and Community Engagement (October – December 2025)

Engage stakeholders and communities early to generate feasible alternatives for the NSP design and operating strategy.

Phase 4 – Preferred Airspace Concept and Strategy Development (January – May 2026)

Evaluate technical analysis, noise impacts and feedback from Phase 3 to refine the preferred option.

Phase 5 – Second Round of Consultation and Feedback (June – October 2026)

Consult with stakeholders on the preferred NSP design and gather feedback for final adjustments.

Phase 6 – Finalisation of NSP and Consultation Report (November – December 2026)

Incorporate consultation insights (or explain where suggestions cannot be adopted) and finalise the Noise Sharing Plan for approval and publication.



Scope and Deliverables

The scope of this initial phase of Industry Engagement is to ensure technical and operational elements essential to supporting the safe, efficient and coordinated introduction of NSP and its associated airspace and flight path changes are understood. The focus is on ensuring that aviation industry stakeholders, including airlines, airports, general aviation operators, air traffic controllers and Civil Aviation Safety Authority (CASA), are fully informed and engaged is provided with a meaningful opportunity to help shape the NSP at a relatively early stage of its development. The focus for engagement will be on the below:

Runway Modes and Operational Strategies

The engagement covers the development, evaluation and industry review of runway operating modes proposed for inclusion in the NSP. These modes describe how the runways could be configured under varying operational scenarios including daytime, night-time, peak demand and weather-driven configurations. Industry stakeholders will be briefed on the expected operational implications of each mode and asked to provide feedback on the key factors that might influence the development of the NSP.

Standard Instrument Departures (SIDs) and Standard Instrument Arrival (STARs)

The engagement provides an overview of proposed new or amended SIDs and STARs that would be required to support the NSP while providing safe, predictable and efficient traffic flows into and out of Melbourne Airport while maintaining seamless integration with regional and international route networks.

Airspace Classifications and Sectorisation

A critical element of the scope of this engagement is the review and determination of any changes to terminal area classifications or sectorisation. These changes may be necessary to safely accommodate new traffic patterns, manage airspace complexity and ensure that ATC has the structures and tools required to maintain safety and efficiency.

Noise Sharing and Respite Integration

Central to the NSP and therefore to industry engagement is the integration of noise sharing and respite options into operational planning. For industry stakeholders, this may mean that, outside peak hours, runway and flight path allocation may not always be optimised for shortest routing or maximum efficiency. Instead, operators, controllers and pilots may be required to adapt to a structured change of runway operating modes as described in this engagement.



Modes

This section outlines the proposed runway operating modes that form a core element of the NSP. Each mode defines how the runways would be configured under different operational circumstances including daytime and night-time usage, periods of peak demand and weather-driven scenarios. The objective is to provide a clear and consistent framework for how runway operations would be managed to balance safety, efficiency, traffic demand and community outcomes.

The following mode descriptions have been developed in consideration with industry stakeholders and are designed to ensure operational readiness and a smooth transition into practice. Each mode is accompanied by an overview of its operational context, expected usage, and implications for both air traffic management and the community.

The M3R MDP placed particular emphasis on north–south operations through the introduction of a parallel runway system, with the existing east–west runway intended for use only during periods of high wind or routine maintenance. Under the NSP, the key change is the continued operational role of the east–west runway for noise distribution purposes. This approach preserves today’s existing priority sequence of runway operating modes outside peak traffic periods, ensuring both operational efficiency and community amenity are maintained.

Runway operating modes will form the basis for noise sharing through alternation and changing conditions. Safety will always be the number one priority and a non-negotiable of the NSP. Alternation was described throughout the MDP as a swapping of segregated modes to provide respite, this has the potential to expand as cross runway 09/27 modes will enable further sharing opportunities. Alternation could potentially be managed routinely through a daily, weekly or monthly change. Alternation will be subject to weather, operational factors and outside of peak busy periods.

Current runway modes retained in the NSP

- Cross Runway 1
- Cross Runway 2
- Cross Runway 3
- Single Runway 27
- Single Runway 09
- Single Runway 34R (night only)
- Single Runway 16L (night only)

New modes introduced for M3R by the MDP

- SODPROPS (night only)
- Segregated Mode 1
- Segregated Mode 2
- Segregated Mode 3
- Segregated Mode 4
- Mixed Mode 34
- Mixed Mode 16



Flight Paths

This section outlines the development of new and existing SIDs and STARs to support the implementation of the NSP and future operating requirements at Melbourne Airport. The procedures are being designed to ensure compliance with regulatory obligations and alignment with relevant international standards, providing a safe and consistent framework for air traffic management.

The intent of the proposed procedures is to deliver predictable and efficient traffic flows into and out of Melbourne while ensuring compatibility with regional and international route networks. By refining departure and arrival paths, the design seeks to balance operational efficiency with the management of aircraft noise across surrounding communities.

Industry consultation to M3R has been central to the NSP design process, with input airlines and technical experts ensuring the procedures are both flyable and operationally robust. At this stage of the project, indicative flight paths have been published through Melbourne Airport's MDP and are subject to further Air Traffic Control and airline simulation. Further detail on these flight paths will be provided at the first round of engagement.

The 14 flight path slides in this section present the proposed flight paths as 4-nautical-mile swathes developed to represent core air traffic management flows. These swathes balance operational requirements with key design considerations including the anticipated impacts on both airspace users and surrounding communities. The flight paths shown are indicative of design intent only and do not represent how aircraft will be tactically managed within Melbourne airspace.

What's not changing?

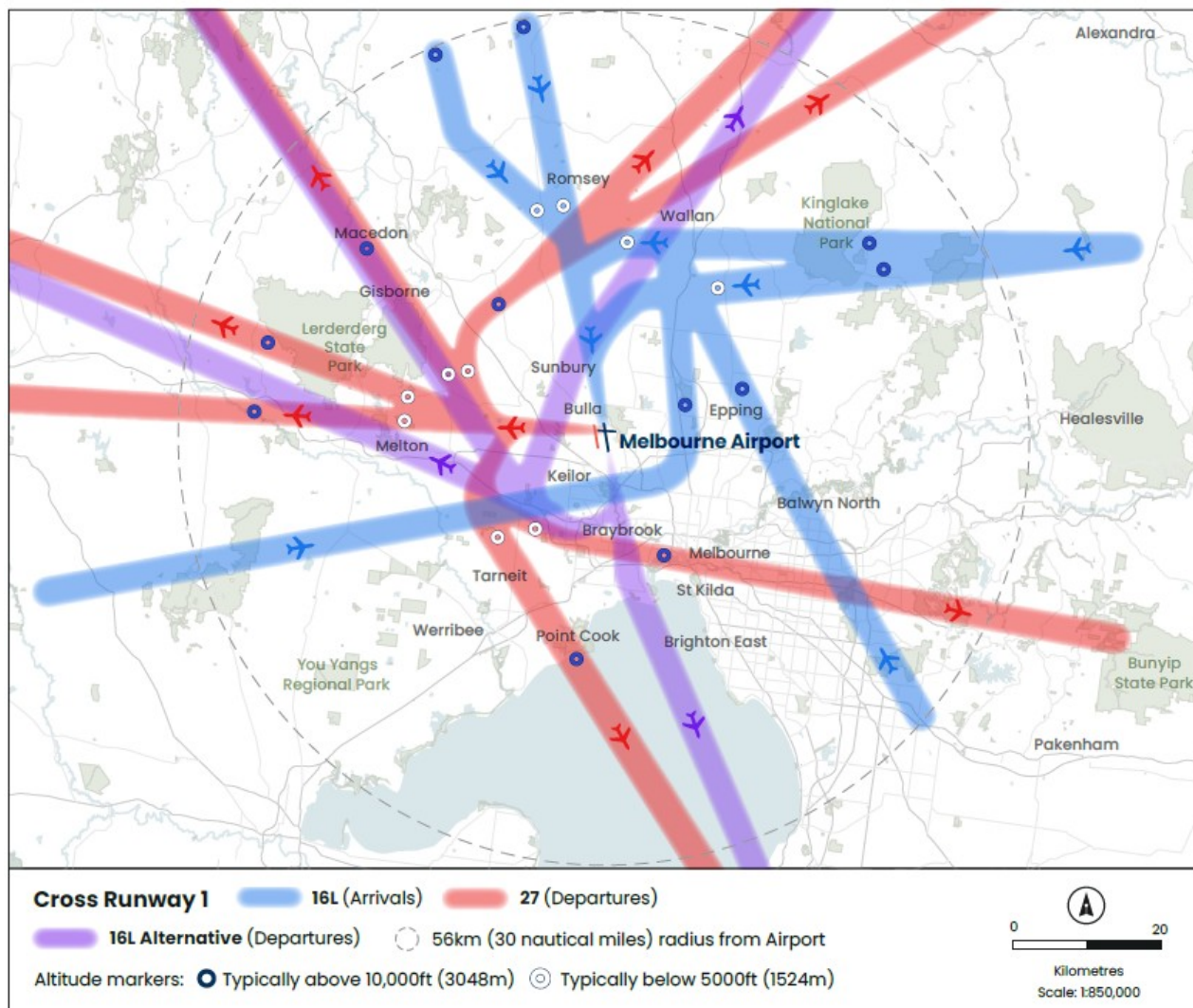
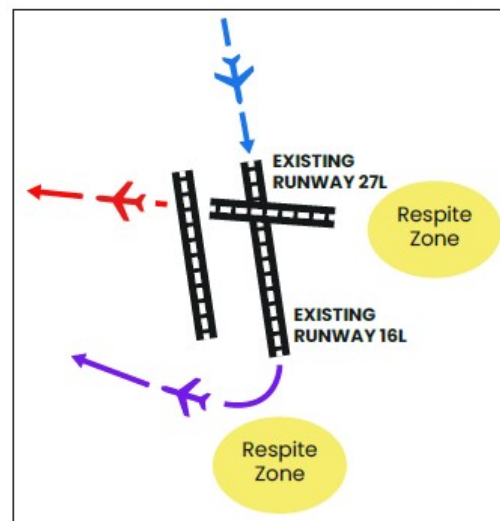
The introduction of the new runway system does not set out to alter the flight paths associated with cross-runway (09/27) operations, however minor adjustments may be required to align approaches onto the updated RWY27 threshold as part of the Eastern Extension Project (EEP). Wider flight paths associated with the cross-runway (09/27) remain unchanged through the initial phase of the project, ensuring that current operational patterns and procedures are not affected.

For controlled airspace, the majority of the existing structure surrounding Melbourne Airport (YMML) remains suitable for use and requires no modification. The only refinements identified relate to two sections of airspace to the north and south of the airport. These adjustments are expected to fully contain independent parallel runway arrival procedures as consulted throughout the M3R MDP.

Cross Runway 1



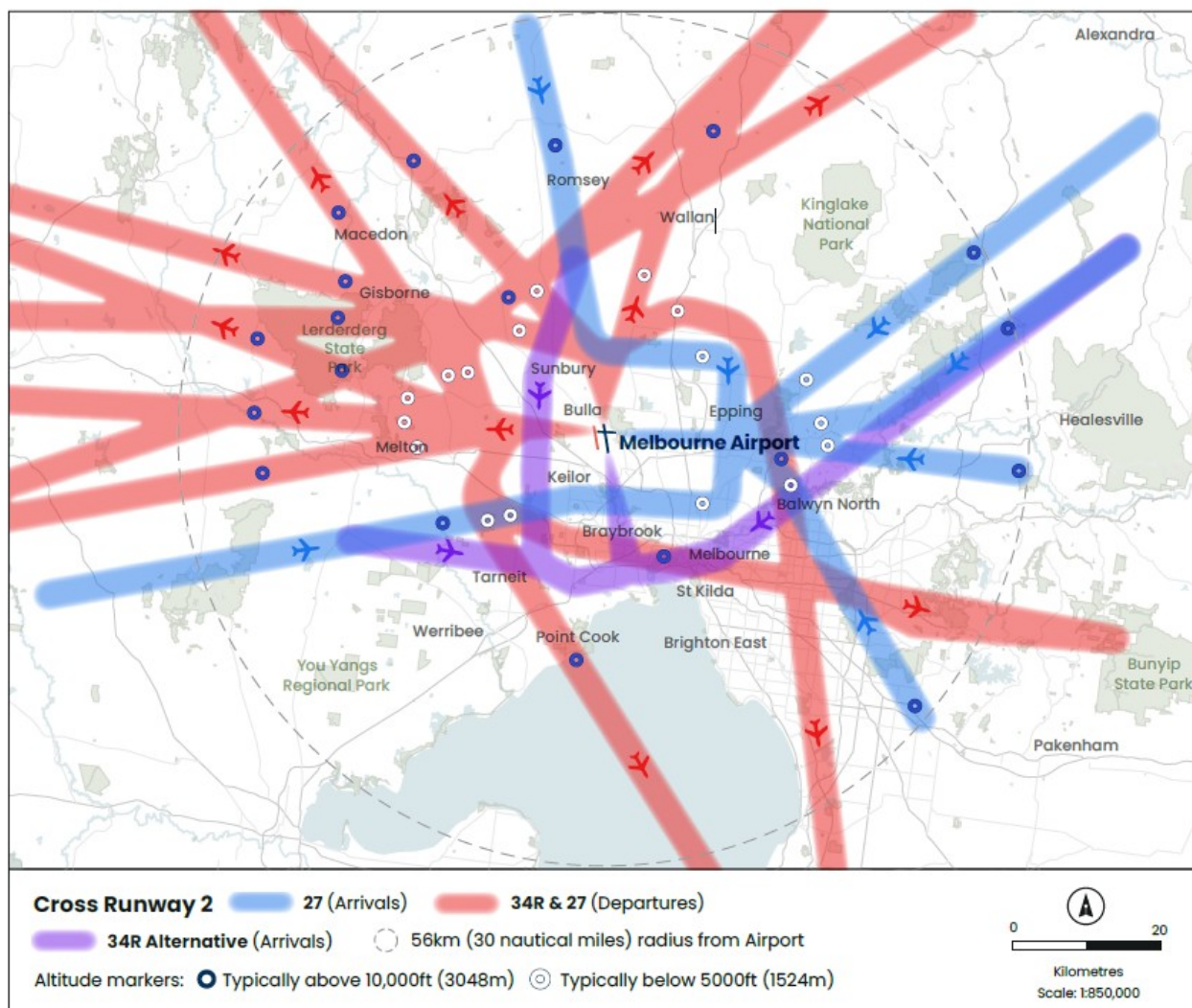
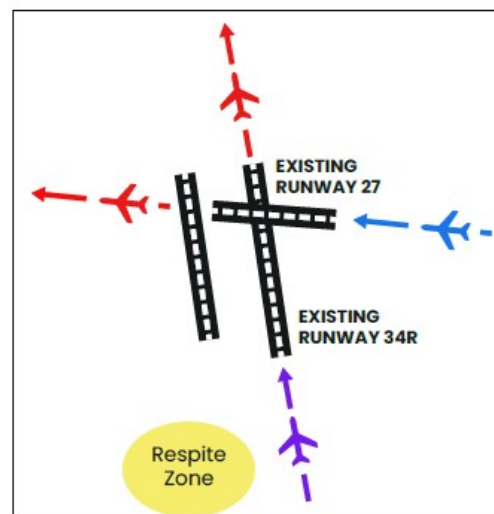
Runways	Arrivals 16L
	Departures 27
Weather	South westerly or calm
Timing	Available 24 hours
Special conditions	*Larger aircraft may require the long runway and depart to the south off 16L
Melbourne Airport respite provided	East and south of airport



Cross Runway 2



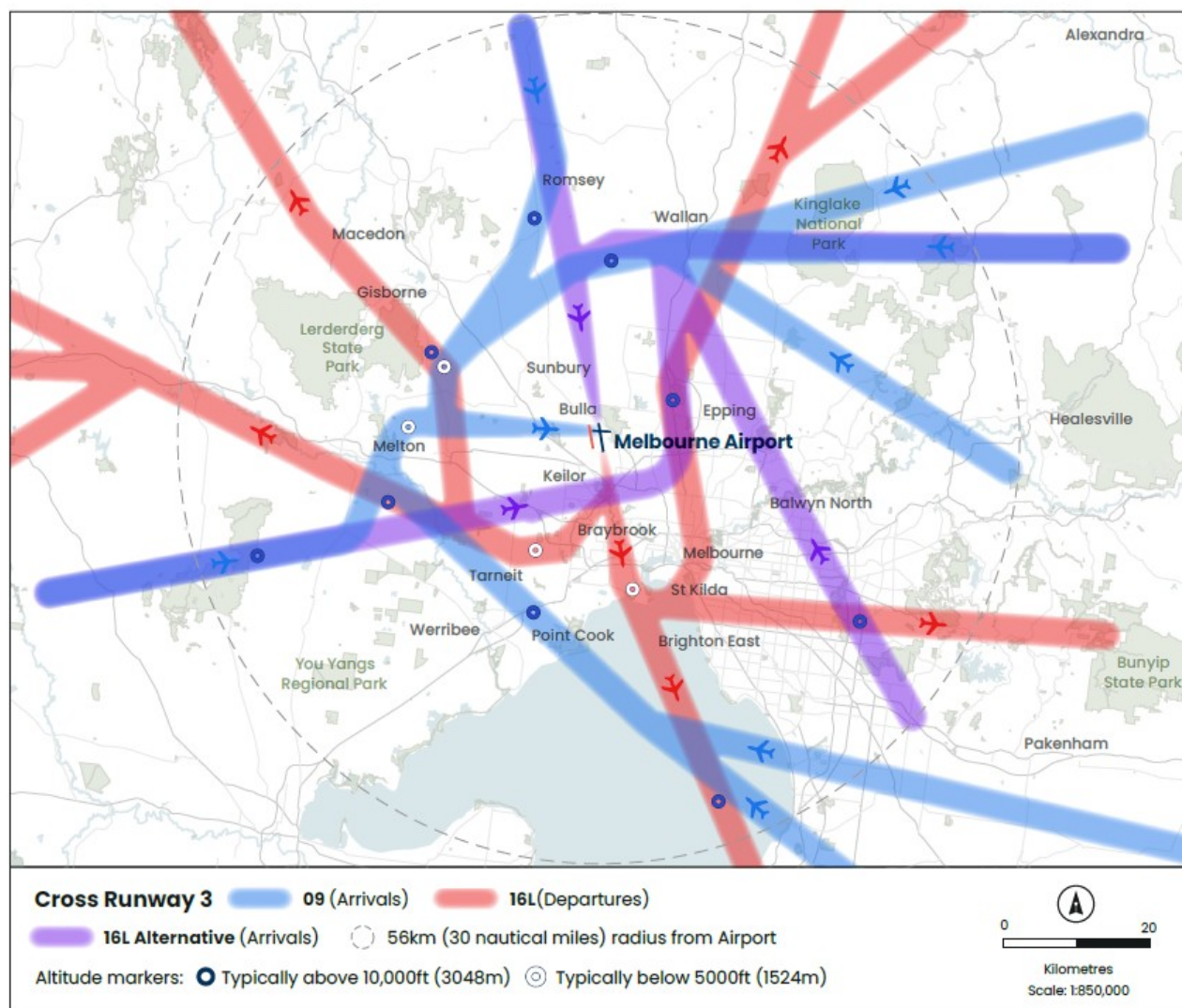
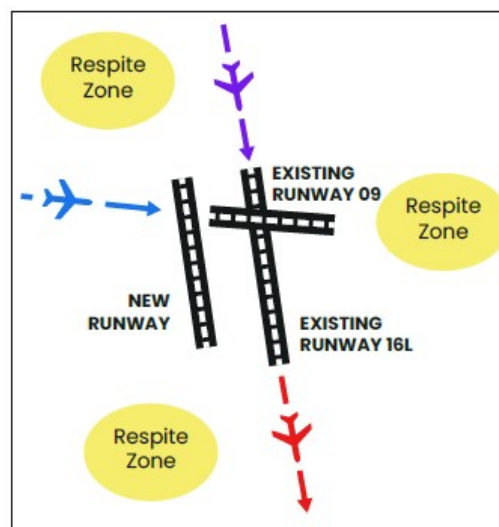
Runways	Arrivals 27
	Departures 27 & 34R
Weather	North westerly or calm
Timing	Available 24 hours
Special conditions	Larger aircraft may require the long runway and arrive from the south off 34R
Melbourne Airport respite provided	Southwest of airport



Cross Runway 3



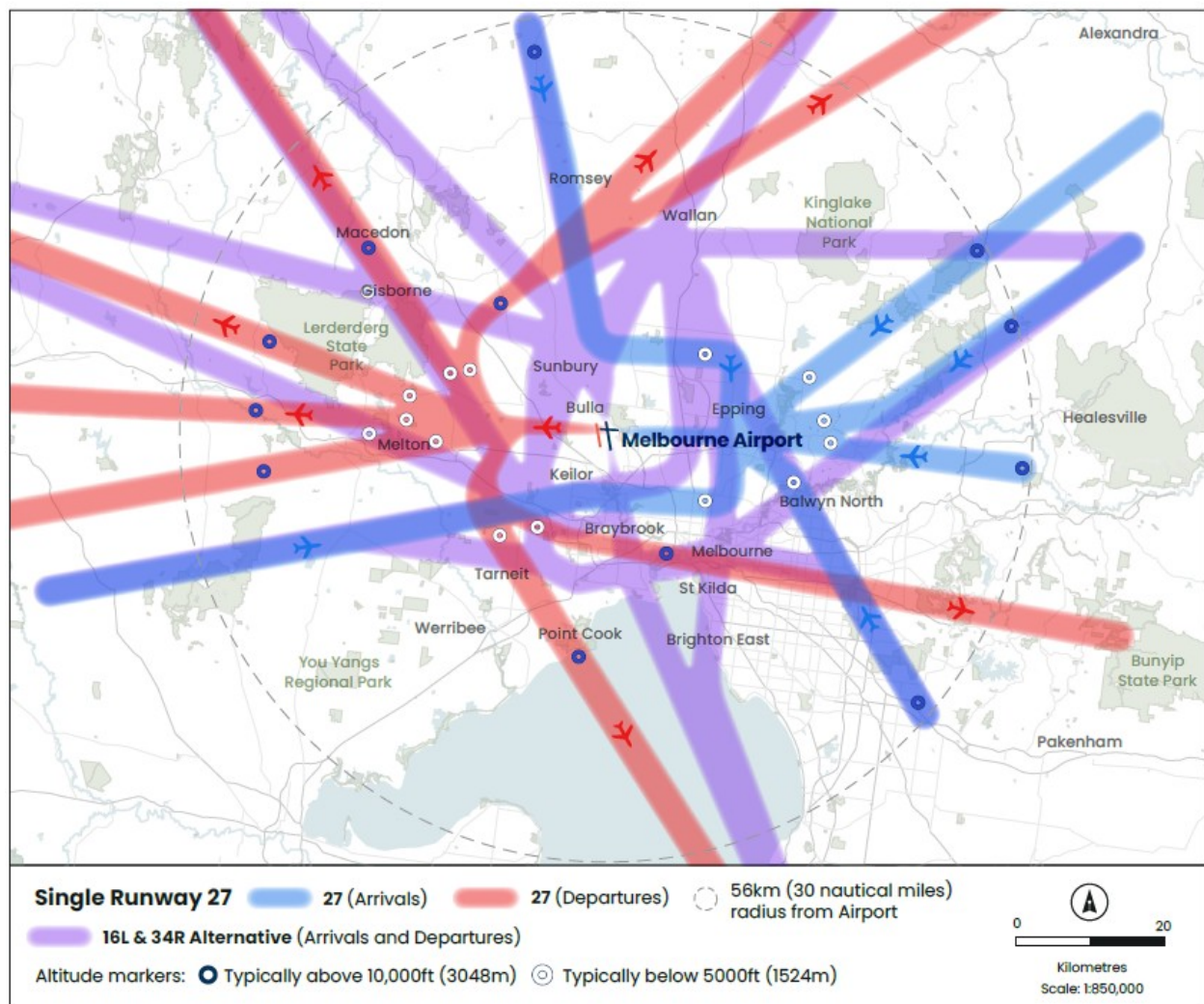
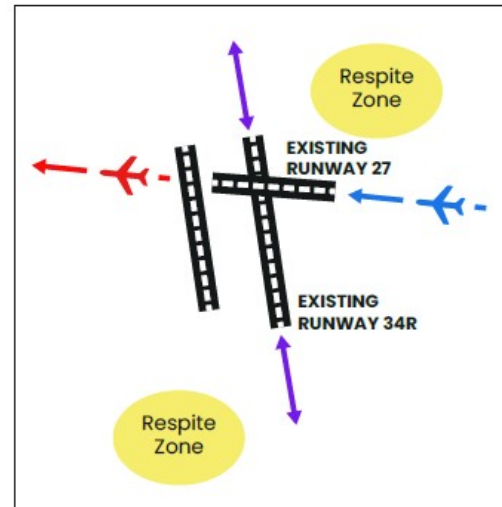
Runways	Arrivals 09
	Departures 16L
Weather	South easterly
Timing	Day use 6am-11pm
Special conditions	Larger aircraft may require the long runway and arrive from the north on 16L
Melbourne Airport respite provided	Northwest, east and southwest of airport



Single Runway 27



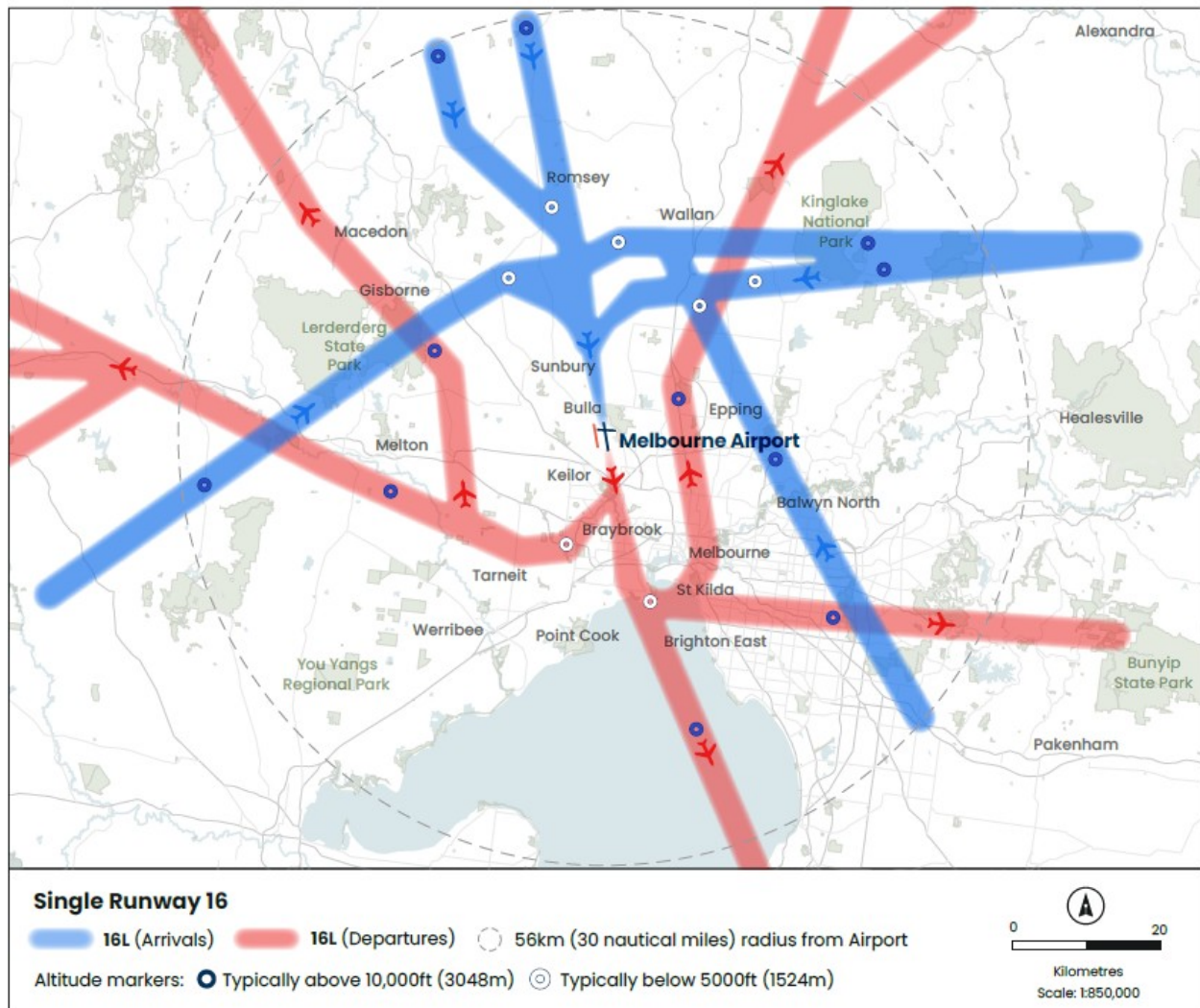
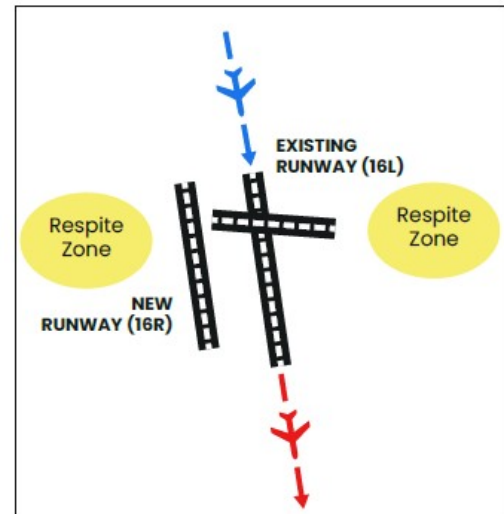
Runways	Arrivals 27
	Departures 27
Weather	Westerly wind
Timing	Available 24 hours
Special conditions	Larger aircraft may require the long north/south runway for arrivals or departures
Melbourne Airport respite provided	Southwest and northeast of airport



Single Runway 16



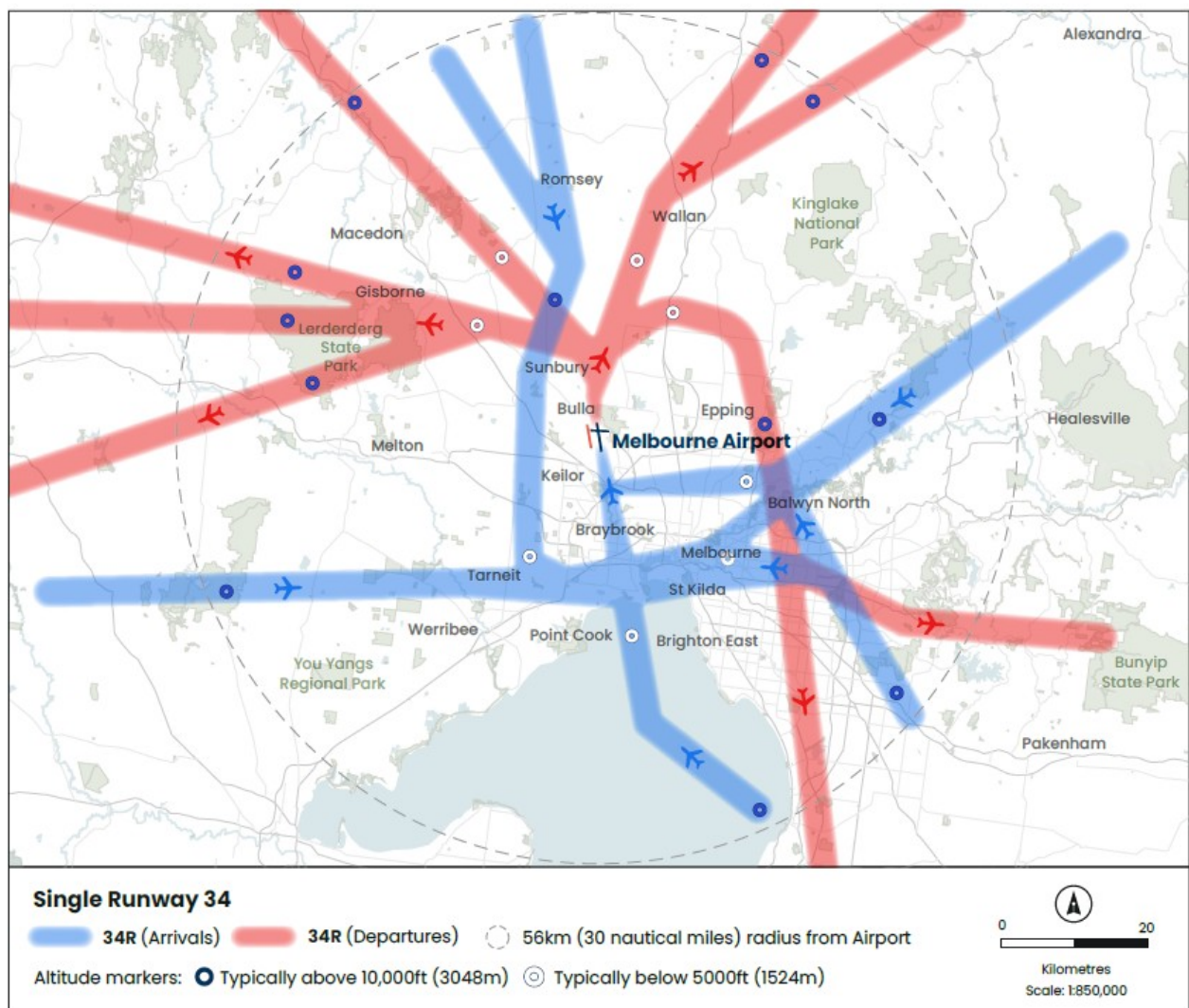
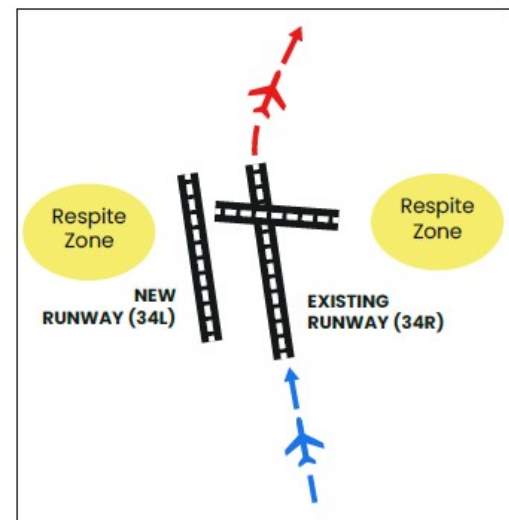
Runways	Arrivals 16L
	Departures 16L
Weather	Southerly wind
Timing	Available 24 hours
Special conditions	N/A
Melbourne Airport respite provided	East and west of airport



Single Runway 34



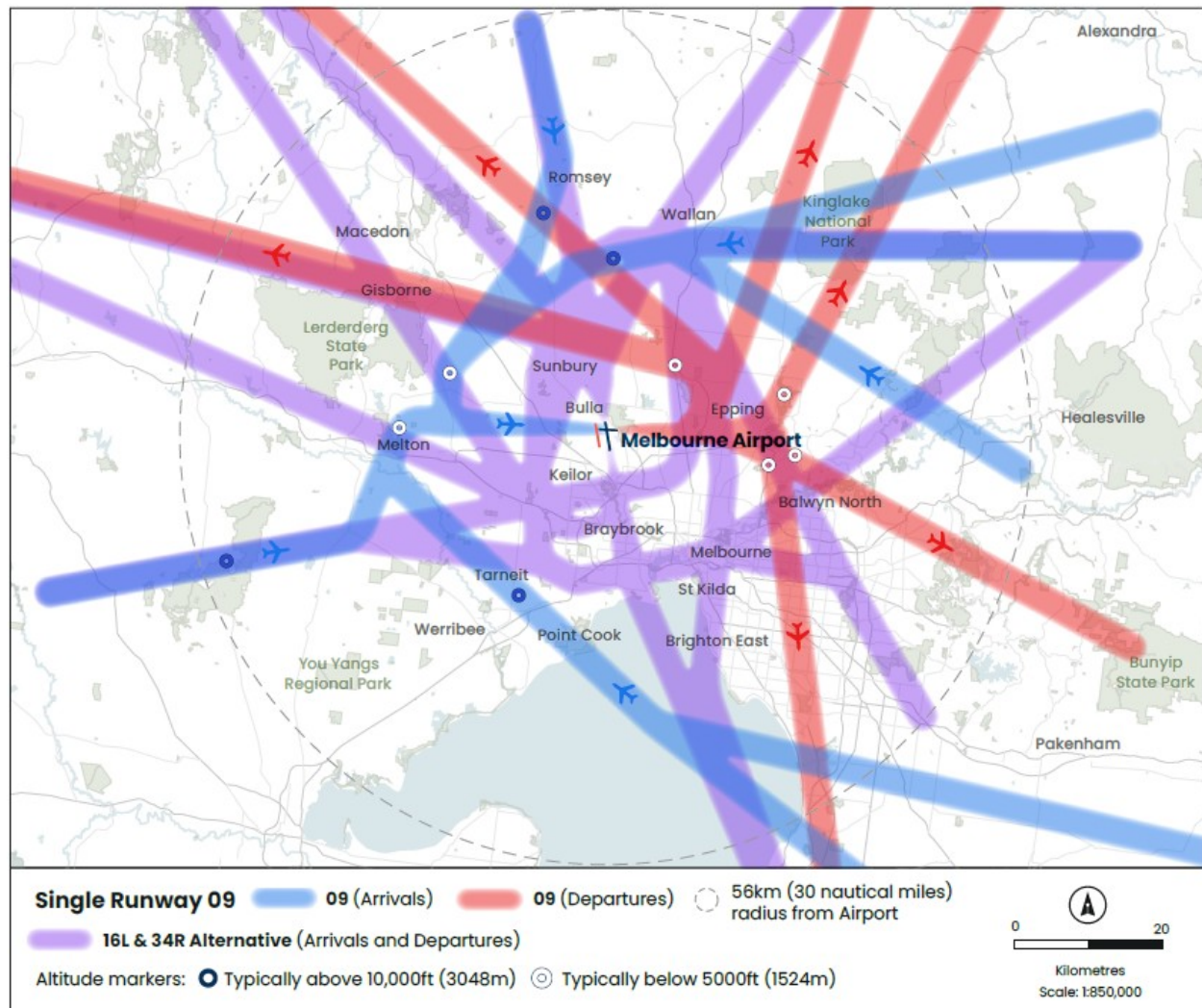
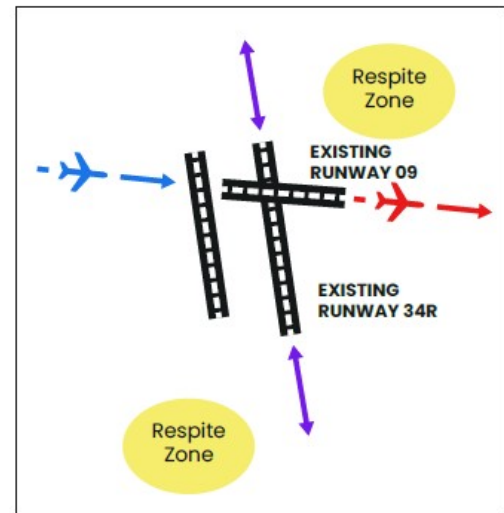
Runways	Arrivals 34R
	Departures 34R
Weather	Northerly wind
Timing	Available 24 hours
Special conditions	N/A
Melbourne Airport respite provided	East and west of airport



Single Runway 09



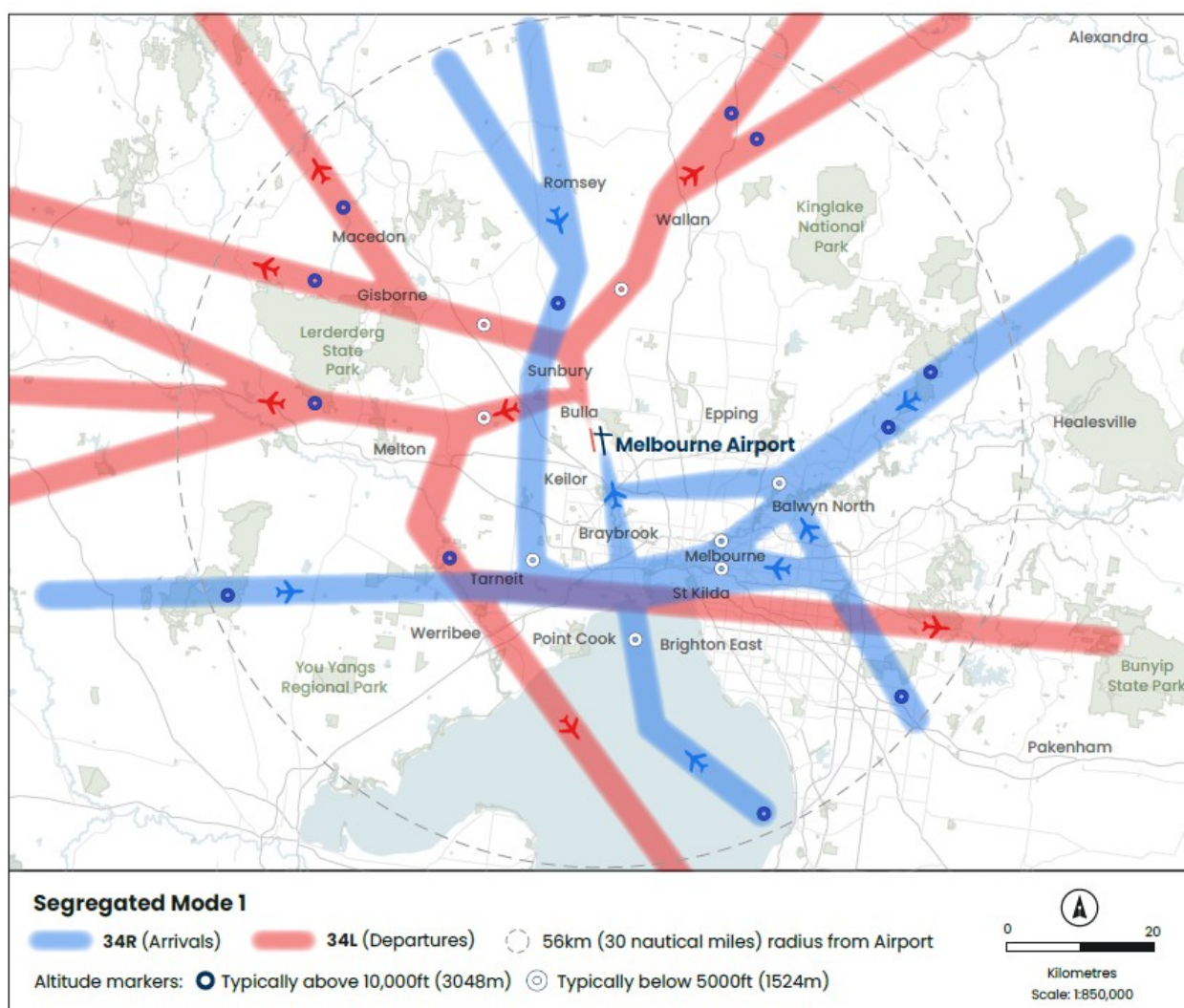
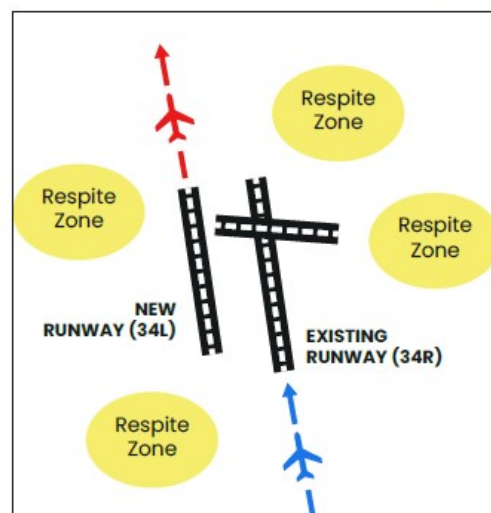
Runways	Arrivals 09
	Departures 09
Weather	Easterly wind (rare)
Timing	Available 24 hours
Special conditions	Larger aircraft may require the long north/south runway for arrivals or departures
Melbourne Airport respite provided	Northeast and southwest of airport



Segregated Mode 1



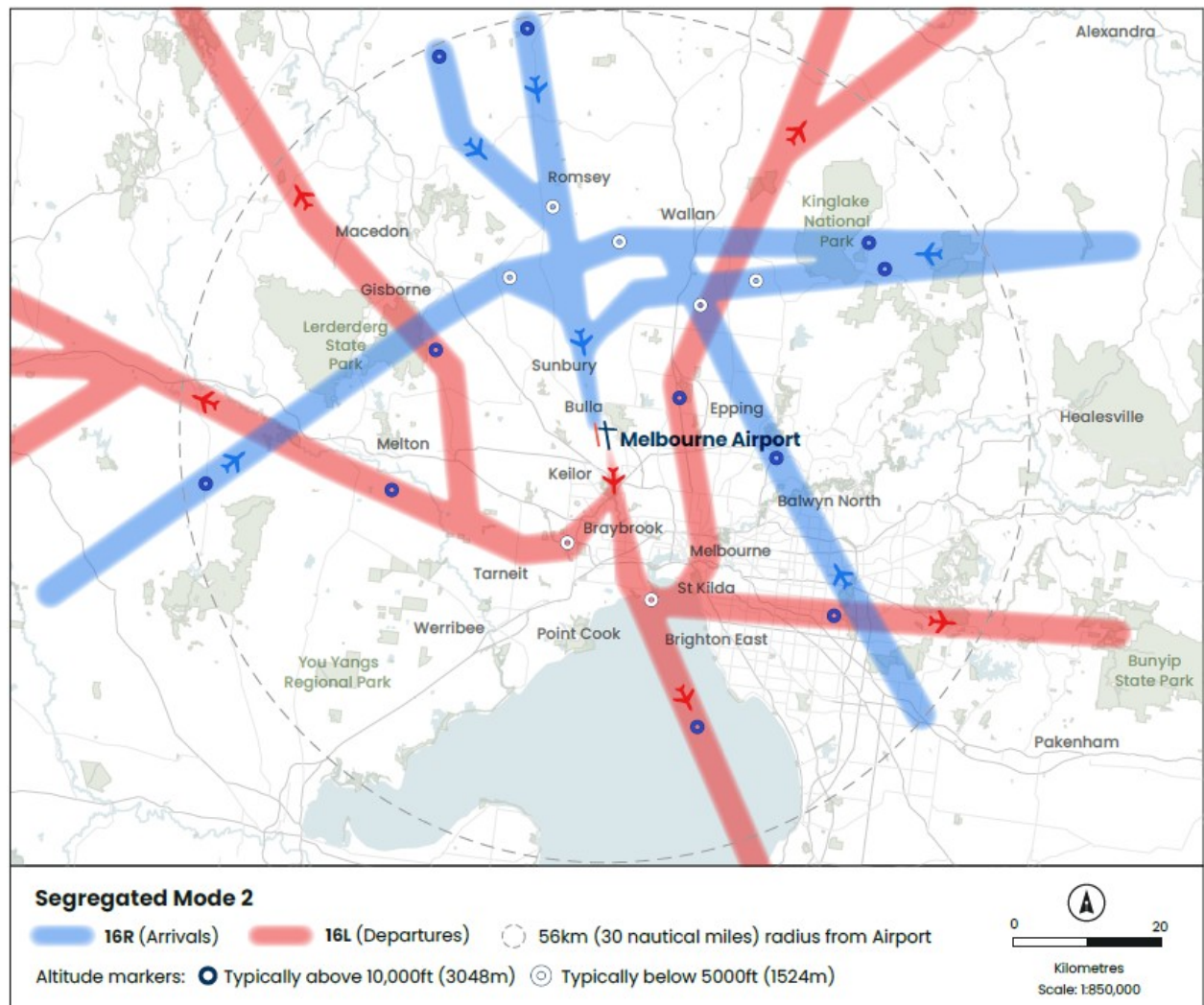
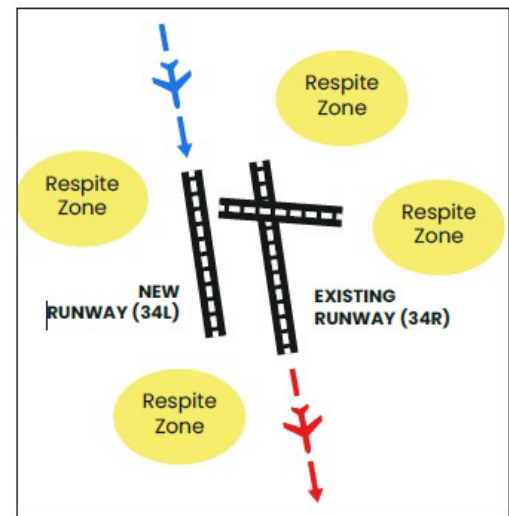
Runways	Arrival 34R
	Departures 34L
Weather	Northerly wind
Timing	Available 24 hours, Expected use 6am-11pm
Special conditions	Some larger aircraft may need to use the airport's longer north-south runway. This means they may sometimes take off to the north from the existing runway (34R) instead of using the new one (34L)
Melbourne Airport respite provided	East, west, northeast and southwest of airport



Segregated Mode 2



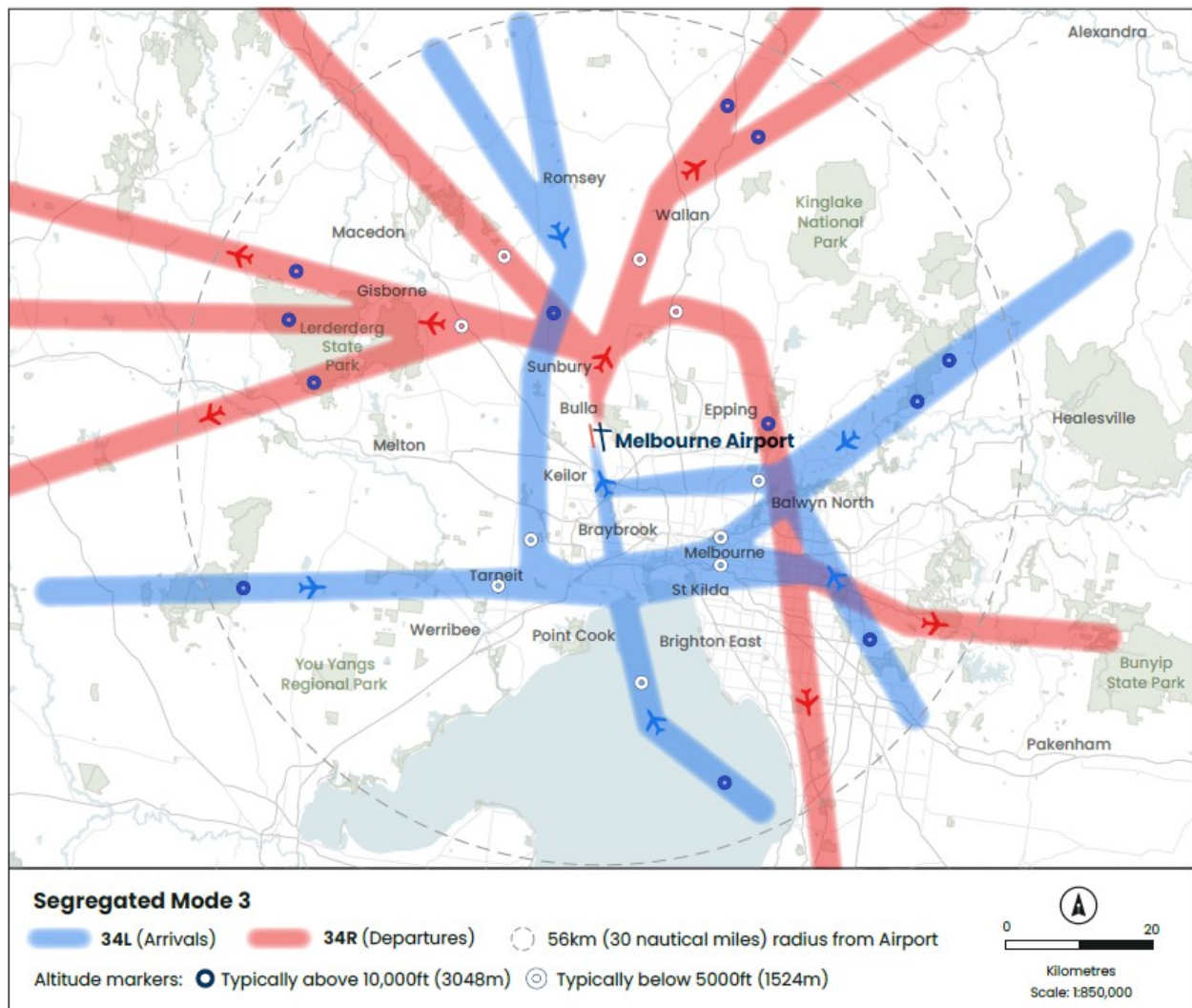
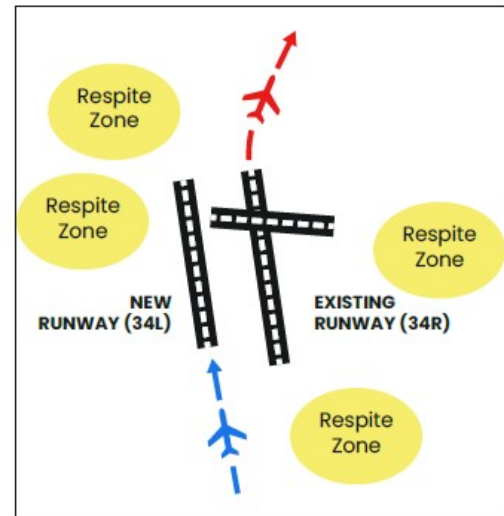
Runways	Arrivals 16R
	Departures 16L
Weather	Southerly wind
Timing	Available 24 hours Expected use 6am-11pm
Special conditions	N/A
Melbourne Airport aircraft respite	East, west, northeast and southeast of airport



Segregated Mode 3



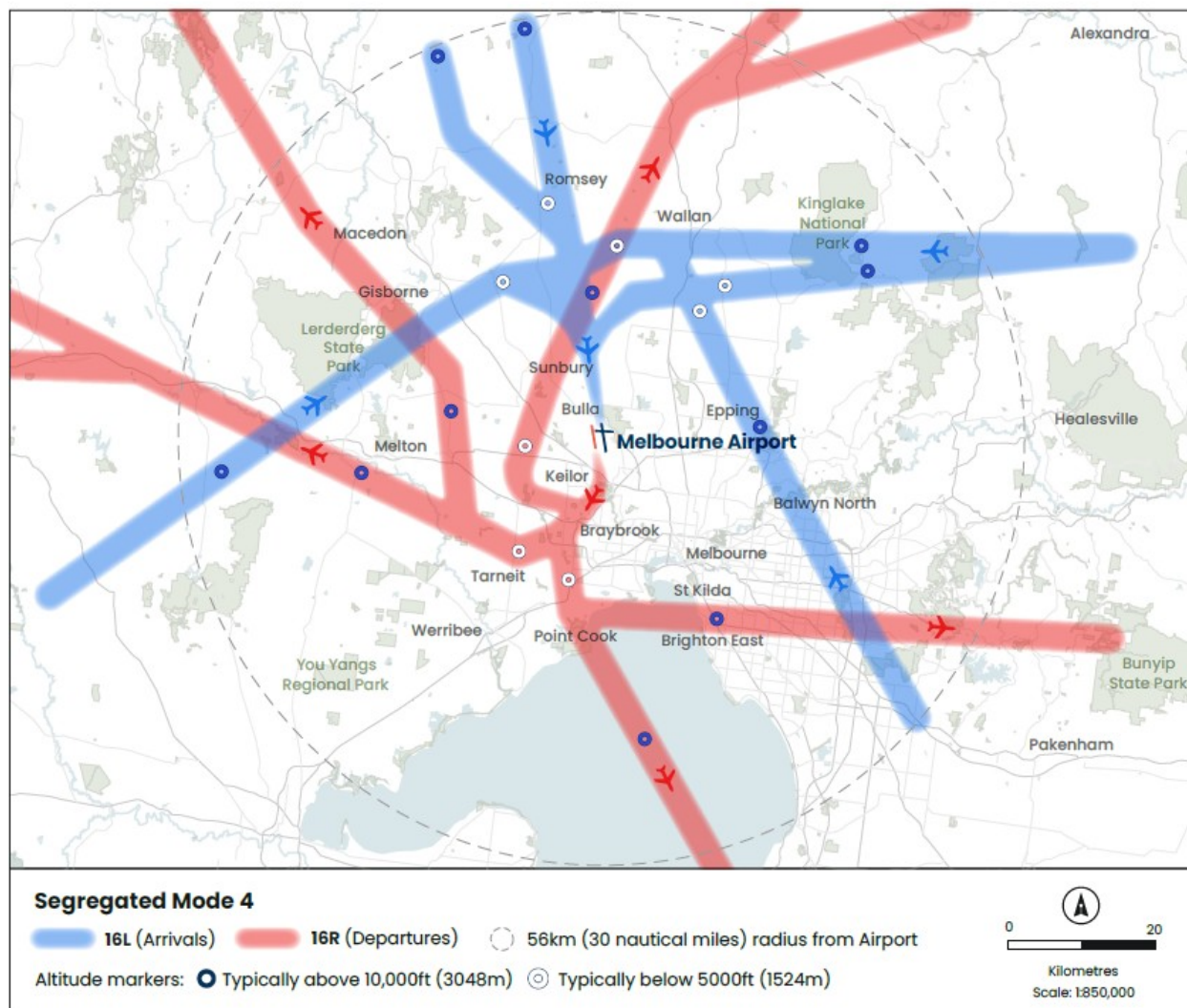
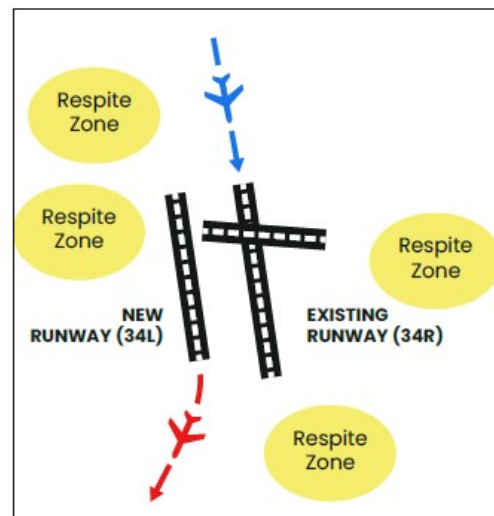
Runways	Arrivals 34L
	Departures 34R
Weather	Northerly wind
Timing	Available 24 hours Expected use 6am-11pm
Special conditions	N/A
Melbourne Airport respice provided	West, east, northwest and southeast of airport



Segregated Mode 4



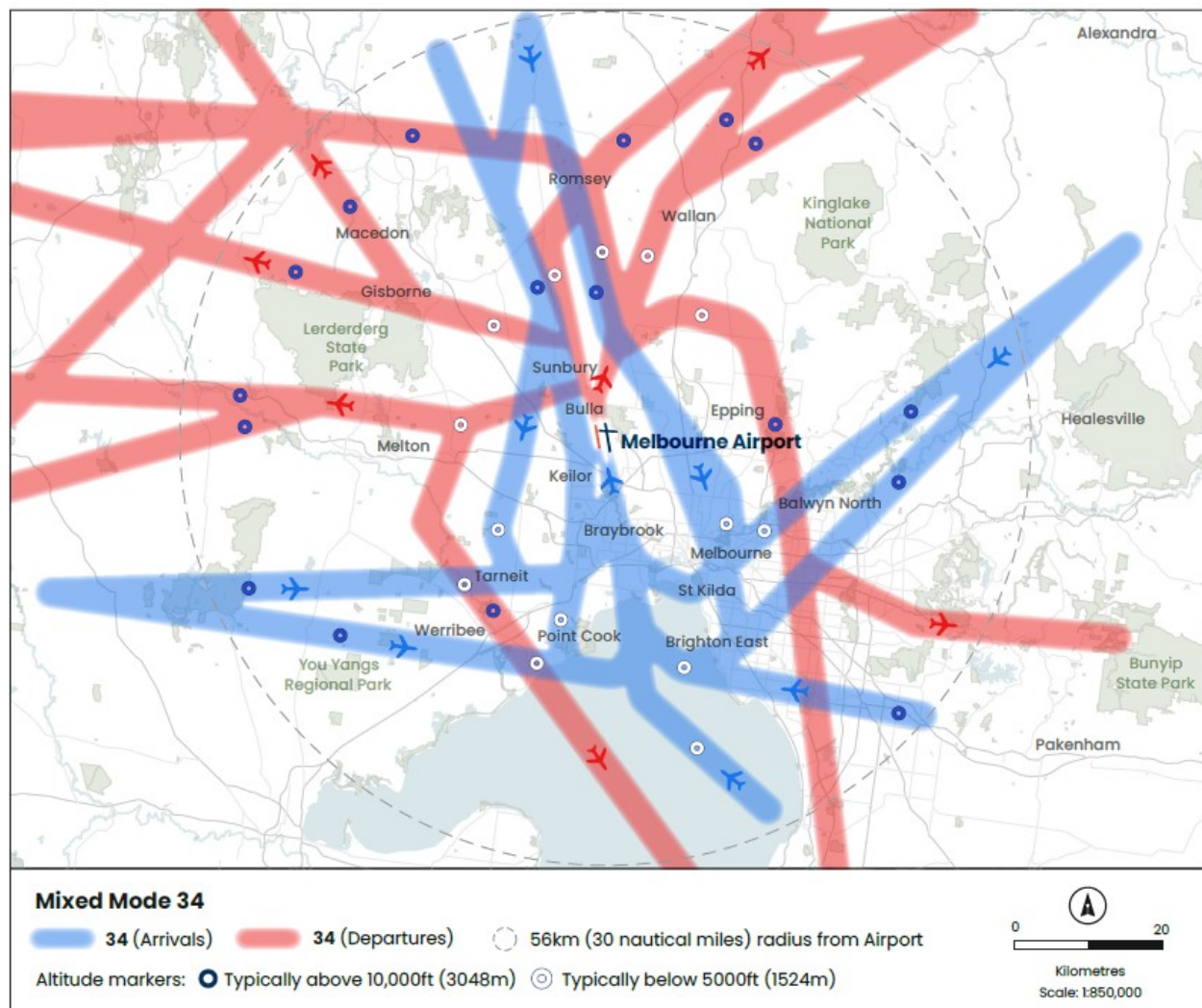
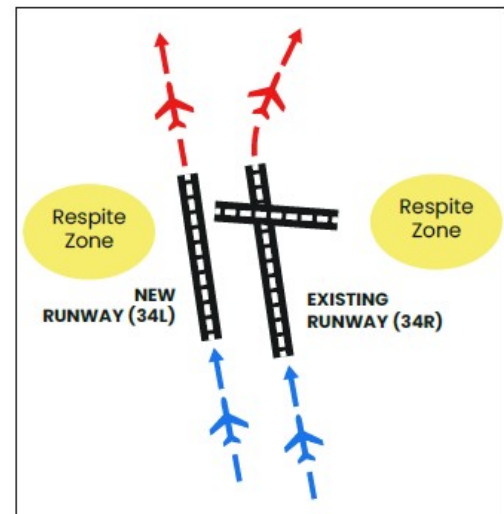
Runways	Arrivals 16L
	Departures 16R
Weather	Southerly wind
Timing	Available 24 hours Expected use 6am-11pm
Special conditions	Some larger aircraft may need to use the airport's longer north-south runway. This means they may sometimes take off to the south from the existing runway (16L) instead of using the new one (16R)
Melbourne Airport respite provided	East, west, northwest and southeast of airport



Mixed Mode 34 (High Capacity)



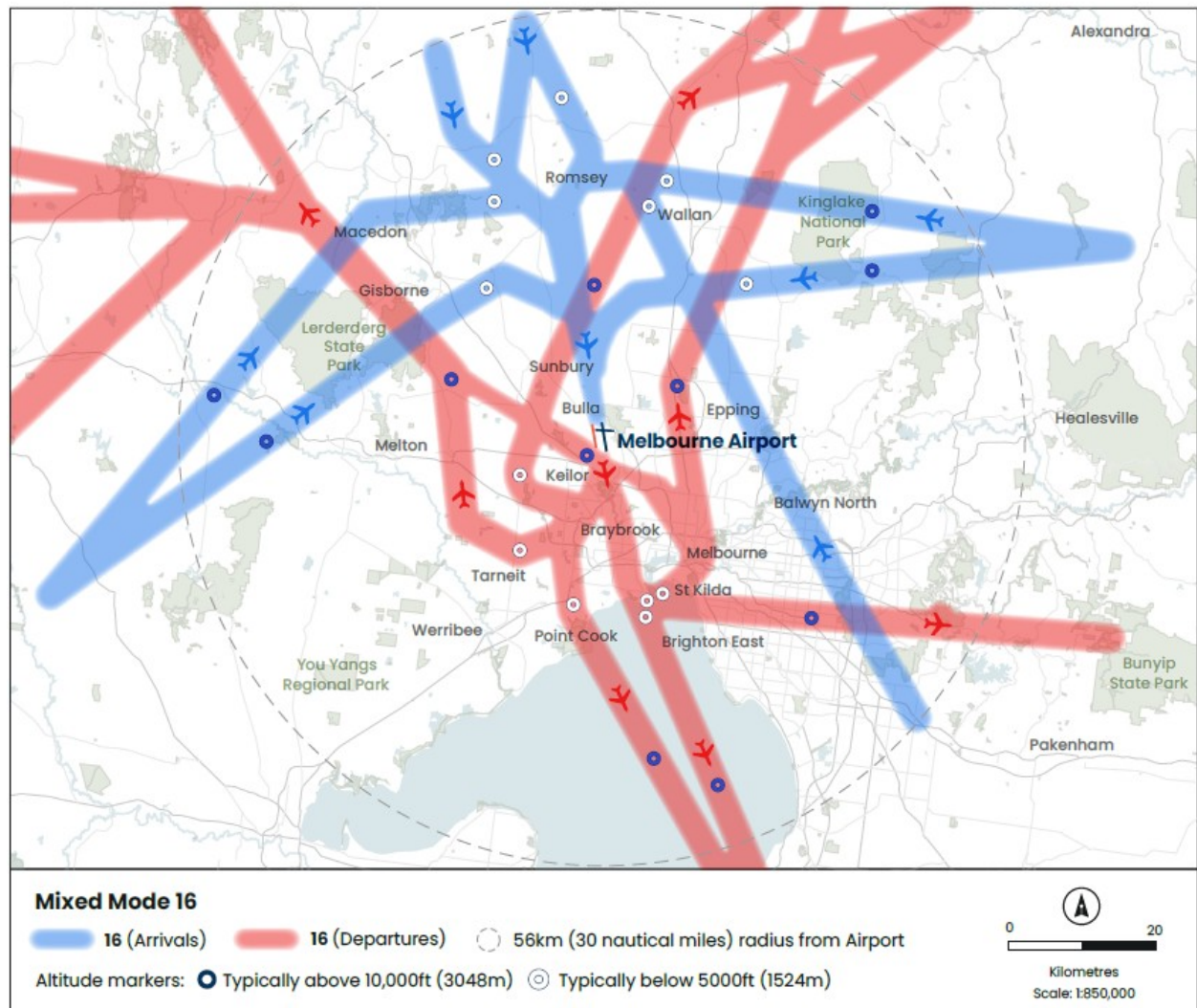
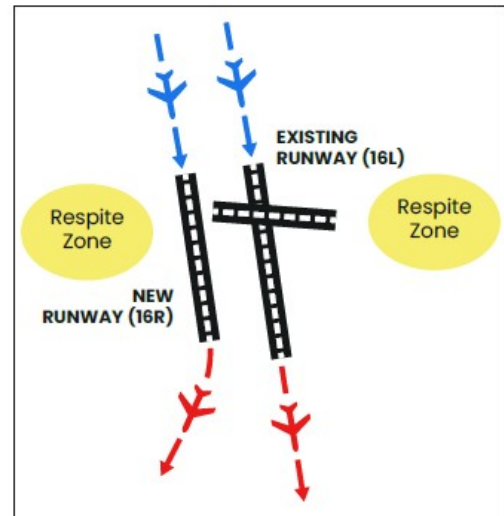
Runways	Arrivals 34R & 34L
	Departures 34R & 34L
Weather	Northerly wind
Timing	During high demand periods
Special conditions	Runways are operated in 'independent parallel mode' meaning aircraft can land and depart side-by-side at the same time
Melbourne Airport respite provided	East and west of airport



Mixed Mode 16 (High Capacity)



Runways	Arrivals 16R & 16L
	Departures 16R & 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
Melbourne Airport respite provided	East and west of airport



Airspace

This section addresses the review and potential amendment of airspace classifications and sectorisation arrangements within the Melbourne terminal area. As part of the NSP and associated operational changes, it is essential to assess whether current airspace and sector boundaries remain appropriate for safely and efficiently managing forecast traffic flows.

Any changes to classifications or sectorisation will be driven by the need to provide regulatory compliant containment of new flight paths that support noise sharing, reduce complexity in airspace design and provide controllers with structures that support effective workload management. The overarching objective is to maintain a balance between safety, operational efficiency and the flexibility required to deliver consistent noise sharing outcomes.

Consultation with Airservices, airlines/operators, general aviation and defence stakeholders forms a central part of this process to ensure interoperability with adjacent civil and military airspace.

The overall structure of controlled airspace supporting the M3R system remains largely unchanged from today. As explained in the M3R MDP, Section C2.5.15, two specific areas to the north and south of Melbourne Airport may require targeted adjustments to ensure safe and efficient integration of the new runway operations with existing traffic flows and airspace users. These expected refinements are anticipated to be limited in scope and will be subject to further technical assessment and consultation with stakeholders. Increasing the size of the lower limit (LL) 2500 feet (FT) and 3500 (FT) Class C steps, predominantly over Port Phillip Bay and north of the airport between Romsey and Kilmore, would facilitate protection of runway 16 and 34 independent parallel runway operations, in accordance with the International Civil Aviation Organization (ICAO) ruleset.



Figure 2 Existing airspace (Blue) and potential airspace changes (Purple)

Airspace to the North

The airspace to the north of Melbourne Airport was originally designed to accommodate arrivals onto single runway 16. With the inclusion of Independent Parallel Runway Operations (IPRO) as part of the M3R system, the existing northern airspace structure does not provide sufficient containment for the STARs and instrument approach procedures. Adjustments to the northern airspace will therefore be required to ensure compliance with separation standards and to support the safe and efficient management of parallel runway arrivals.

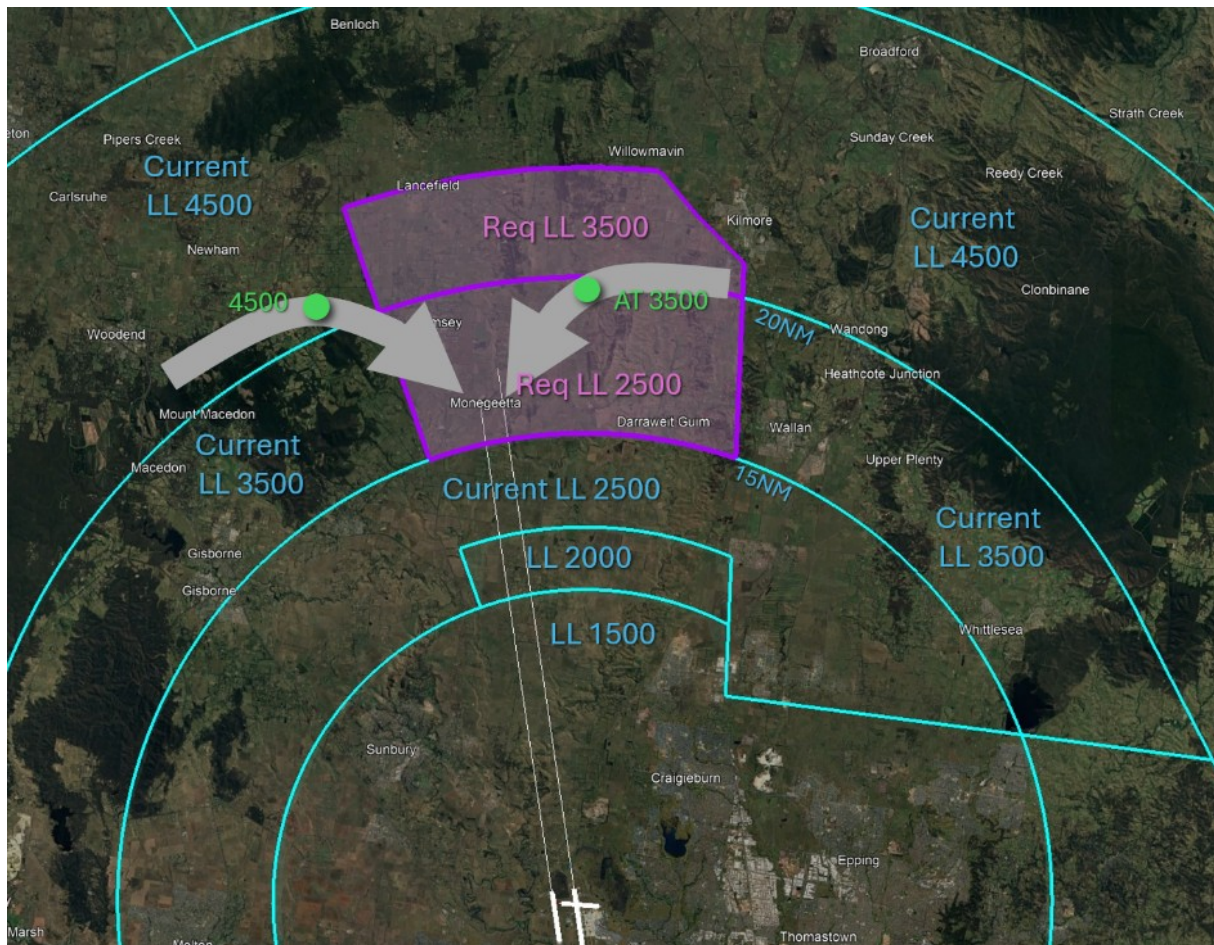


Figure 3 showing current and required step changes to the north with indicative aircraft altitudes on 16R and 16L independent parallel arrivals.

Figure 4, below, shows a representative subset of 2024 Essendon and Moorabbin aircraft tracking under the controlled airspace steps to the east of Melbourne. This inland route, which runs between Sugarloaf Reservoir and Kilmore, is one of the primary VFR corridors linking the Melbourne Basin with northern Victoria and is frequently used by both northbound and southbound traffic.



Figure 4 Essendon and Moorabbin 2024 radar tracks

The current LL of Class C airspace is 3500ft for the majority of the VFR route, this would be reduced to LL 2500 to the west of Wallan for aircraft heading northwest. This is followed by a LL reduction to 3500 west of Kilmore as shown above.

The northeast corner of the LL 3500FT has been designed to protect current VFR traffic Outside Controlled Airspace (OCA) via Kilmore to maintain 4500FT.

Airspace to the South

The airspace to the south of Melbourne Airport was originally designed to accommodate arrivals onto single Runway 34. With the inclusion of IPRO as part of the M3R system, the existing southern airspace structure does not provide adequate containment for the STARs and instrument approach procedures. Adjustments to the southern airspace will therefore be required to ensure compliance with separation standards and to support the safe and efficient management of parallel runway arrivals.

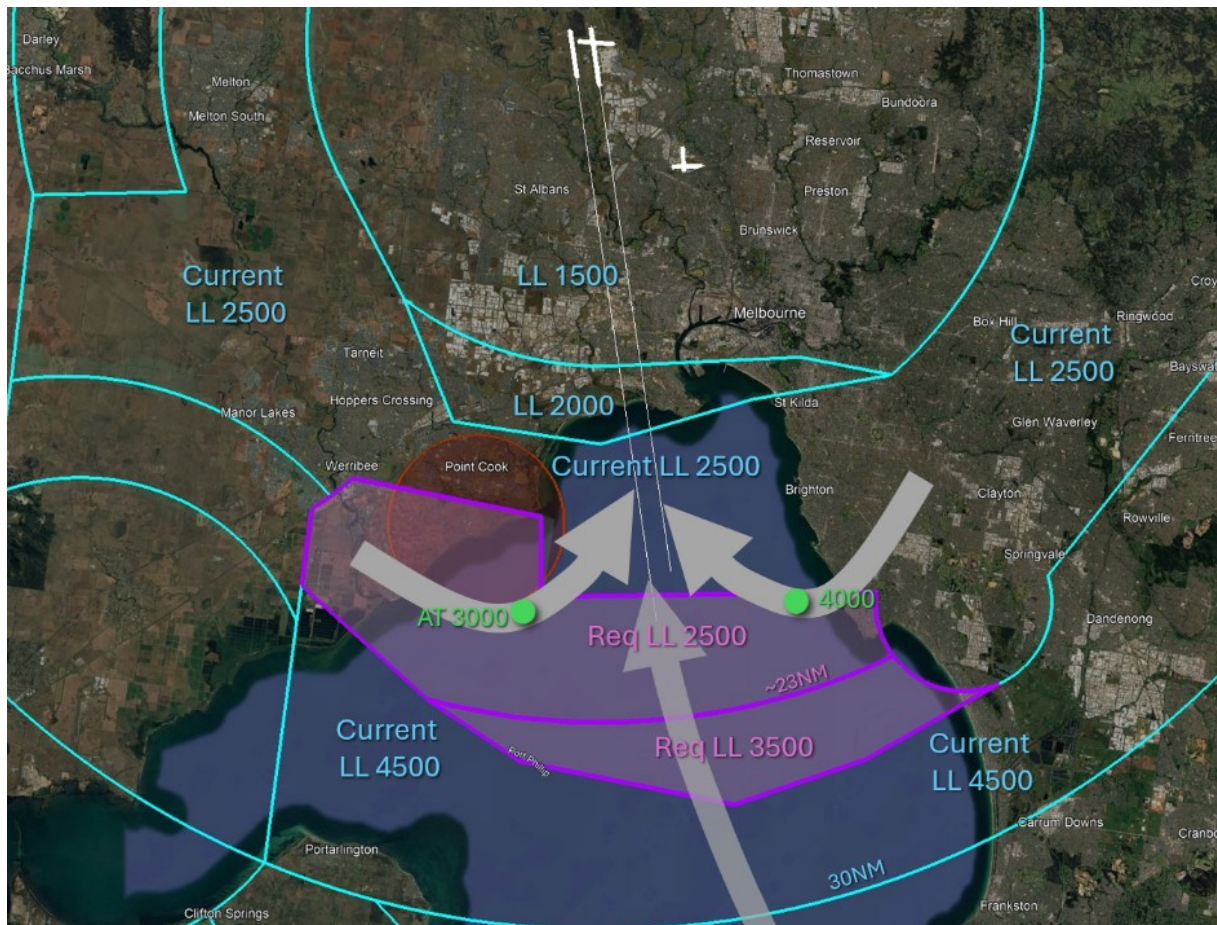


Figure 5 showing current and required step changes to the south with indicative aircraft altitudes on 34R and 34L independent parallel arrivals.

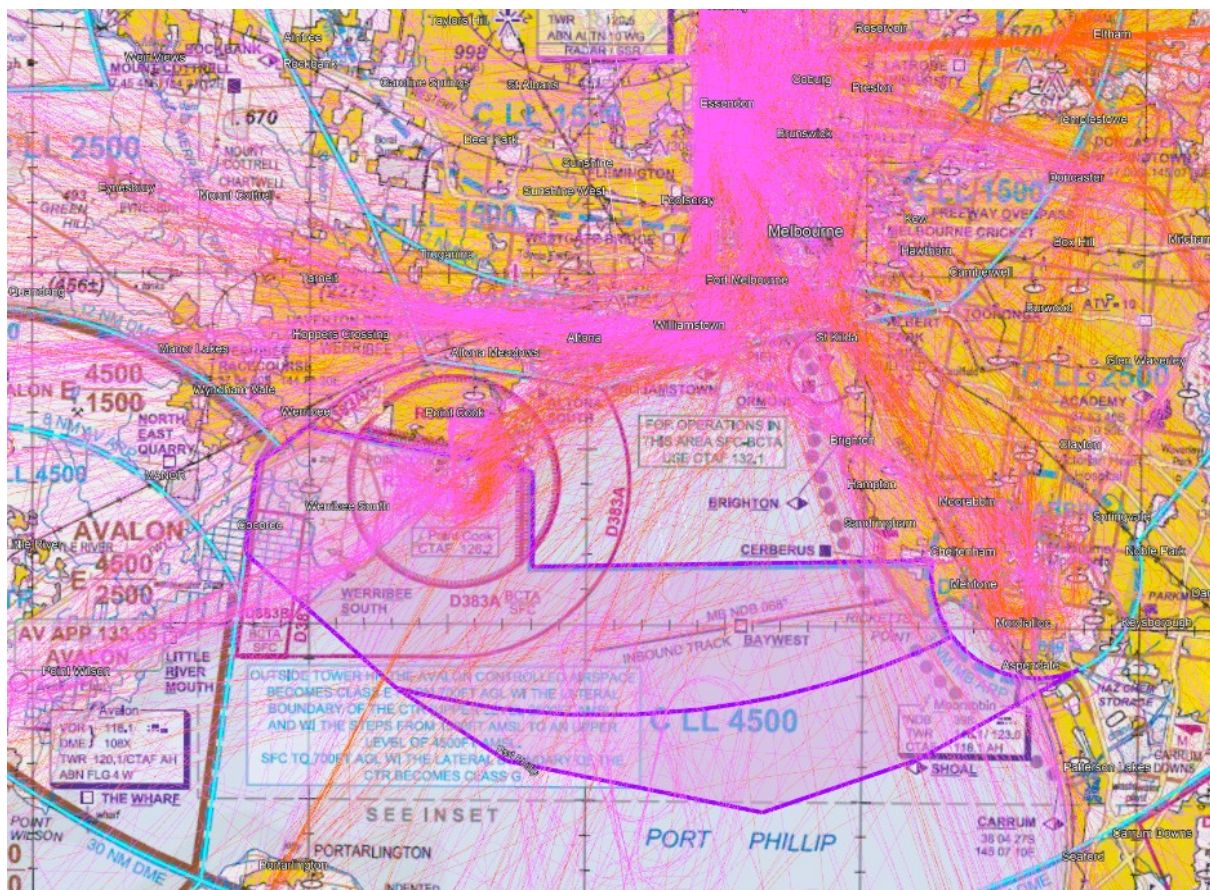


Figure 6 Historic aircraft tracks in Port Phillip Bay using the published VFR route with proposed airspace in purple.

The current established VFR tracking patterns around the coastline of Port Phillip Bay as shown by the historic orange and pink tracks in the image above, has consistent flows of recreational and training flights using this route. These operations are not expected be affected by the proposed changes, as the existing airspace steps remain unchanged, and the published VFR routes on the VTC will continue to be available without modification. There is a similar situation to the west of point cook airspace, where aircraft are seen to be tracking at or below 2500FT during the short transit to Avalon.



Figure 7 Historic aircraft tracks showing Avalon to Moorabbin flights through proposed airspace in purple.

Radar analysis from 2024 indicates that some VFR flights operate directly between Avalon (YMAV) and Moorabbin (YMMB), typically at altitudes between 1,500 and 4,000 feet AMSL. In future, to avoid entering the altered controlled airspace, these flights would need to remain at or below 2,500 feet AMSL.

Potential amendments to controlled airspace in the vicinity of Moorabbin Airport (YMMB) would require a corresponding adjustment to the initial altitude of the NDB-A arrival procedure. This would be managed through a subdivision of the Minimum Sector Altitude (MSA), ensuring that instrument traffic remains vertically contained while allowing VFR operations to continue to transit outside controlled airspace.

Any adjustments to the NDB-A procedure would be designed to minimise disruption to this traffic, with refinements clarifying vertical containment and reducing the risk of interaction between VFR routes.

As part of this engagement process, it is important to confirm the current and anticipated future usage of the NDB procedure at Moorabbin. If the NDB remains in active use by operators or training schools, this should be reflected in the feedback provided, as it will directly inform the future design.

Point Cook

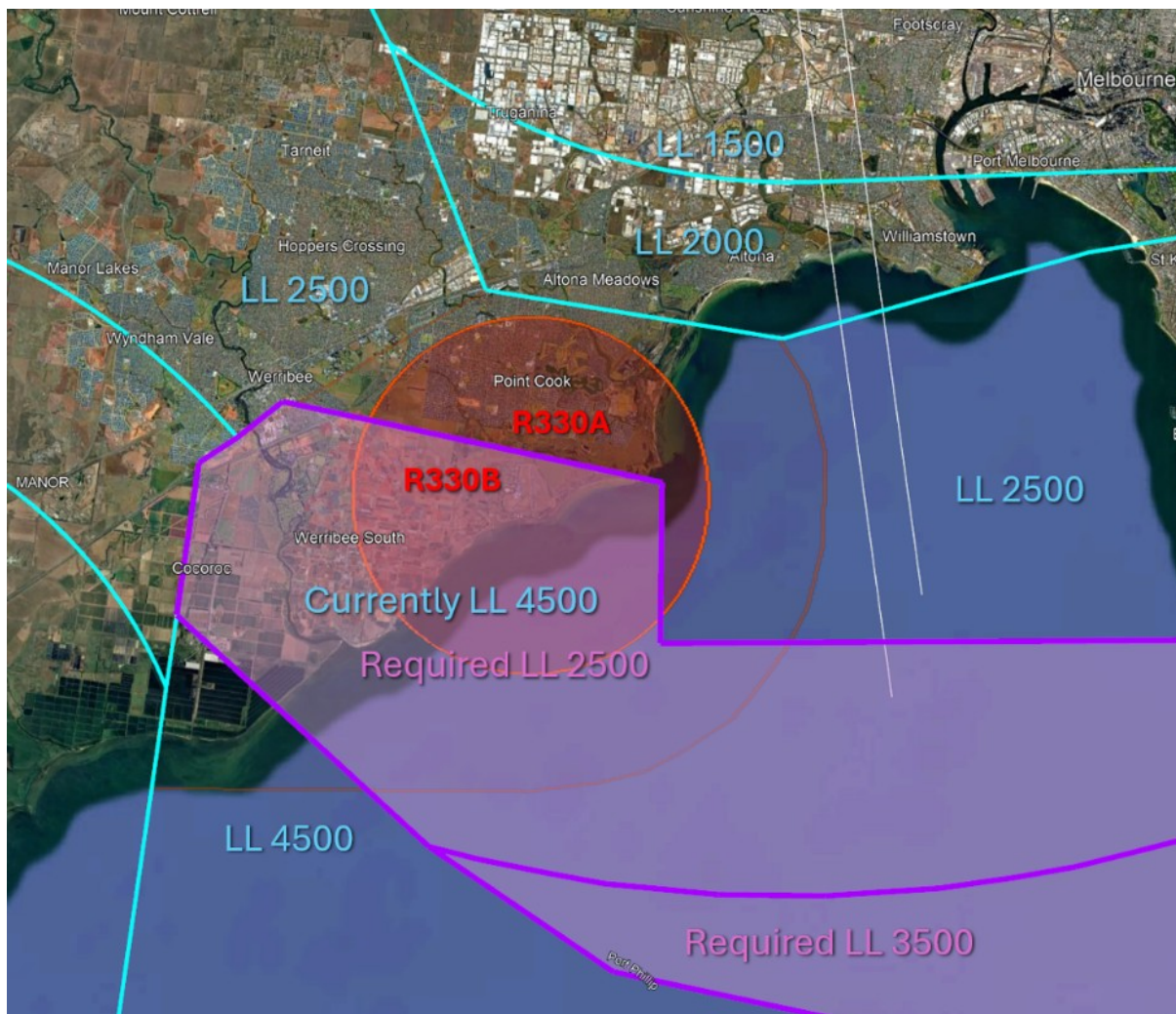


Figure 8 Point Cook Restricted Airspace

The Point Cook area is associated with restricted airspace R330A (SFC-2500) and R330B (SFC-4500), which overlay the aerodrome within a 3 NM radius of the aerodrome reference point. These restricted areas extend from the surface to the base of controlled airspace and are activated by NOTAM to support military flying activities and special events such as flying displays. Point Cook is also encircled by Danger Area D383A/B, which extends from the surface (SFC) up to the base of the control area (CTA) and is typically active during daylight hours, or as modified by NOTAM.

When R330A is inactive, VFR transit is available at 2,500 ft AMSL within 3 NM of Point Cook, or alternatively by remaining outside the 3 NM boundary, subject to weather conditions.

Proposed changes to accommodate Melbourne Airport's new third runway and associated independent parallel runway operations would see the controlled airspace above R330B lowered to LL 2500FT.

Mixed Mode operations on Runway 34 require the introduction of additional controlled airspace. Further feedback and design iterations are needed to clarify how Point Cook operations can be accommodated within the lowered CTA Class C airspace when other runway modes are in use.

Avalon

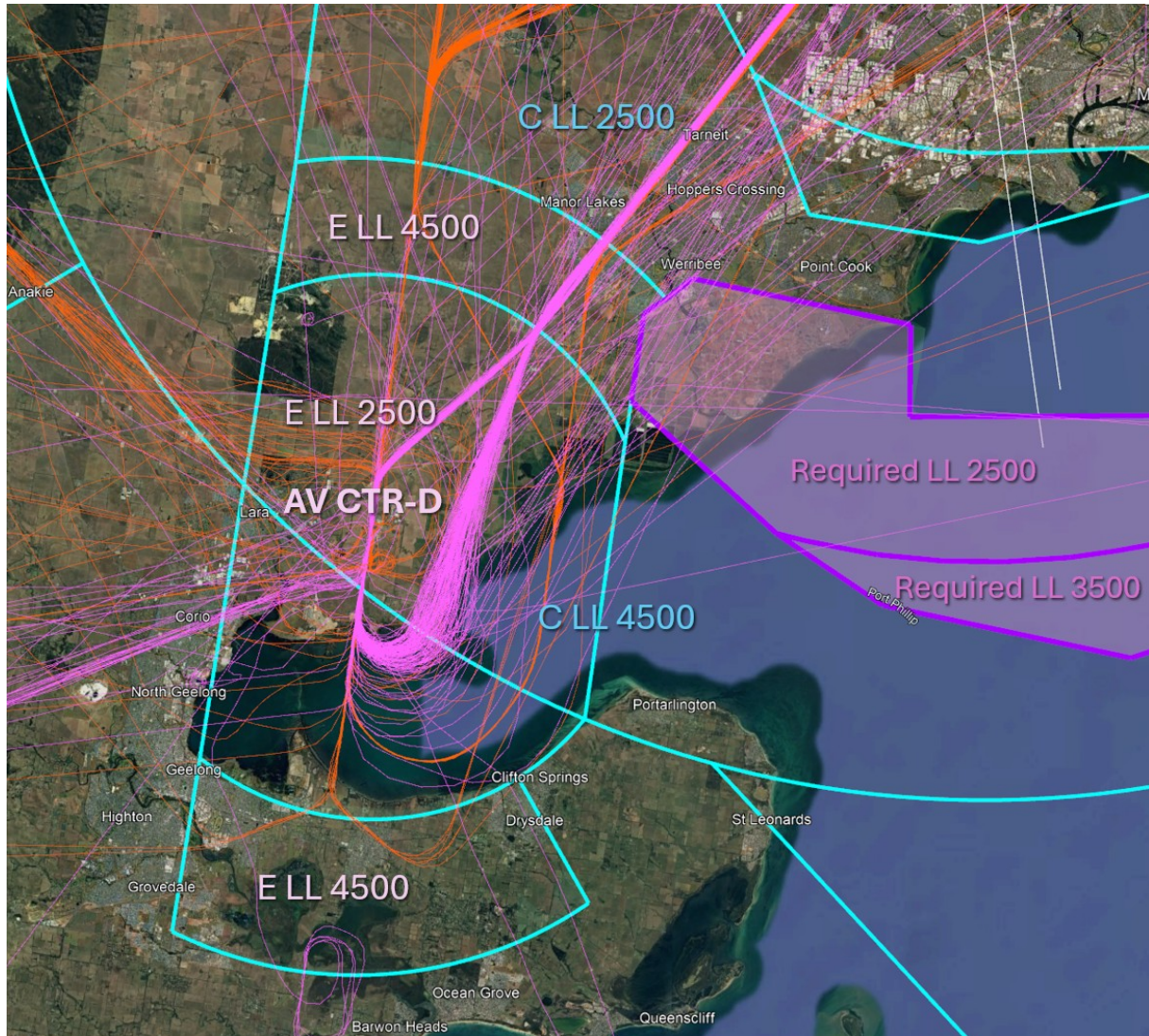


Figure 9 Avalon traffic – Orange arrivals and magenta departures.

Operations into Avalon are often complementary with Melbourne's mode due to the similar direction of the main runways.

The potential extended 2500 and 3500FT airspace change east of Avalon is not expected to impact Avalon operations, the vast majority of flights using Avalon operate in controlled airspace. Traffic management for RWY 36 at Avalon during Mixed Mode RWY 34 at Melbourne has been considered and will form part of future iterations of the design.

For general aviation activities operating out of Avalon, a reduction in the base of controlled to may affect flights transiting across the bay to Moorabbin as noted in Figure 7, however northeast flights along the coastline were assessed as operating at or below 2500FT currently.



Melbourne and Essendon complementary modes.

Operating modes at Melbourne Airport (YMML) and Essendon Fields (YMEN) are primarily dictated by weather and traffic demand at Melbourne. Determining the specific mode is driven by the priority order of runway use as documented in the Noise Abatement Procedures (Airservices Australia).

Further coordinated management of traffic between Melbourne and Essendon airports is the form of the Essendon Slot Scheme (ESS). The Scheme is generally used manage airspace capacity and ensure safe separation during Instrument Meteorological Conditions or when non-complementary runway modes are in use between the two airports.

Runway modes Melbourne Airport and Essendon Fields

The following section details the name, runways in operation and the mode usage from 2024 of all current modes for Melbourne and Essendon Fields.

CROSS RUNWAY 1

YMML 16L Arrivals, 27 (+16L) Departures – **Current NAP Priority:** Day 1st/5 – Night 1st/5

YMEN 26 Arrivals, 17 (+26) Departures.

Mode combination usage in 2024: 24.4% (time not movement based)

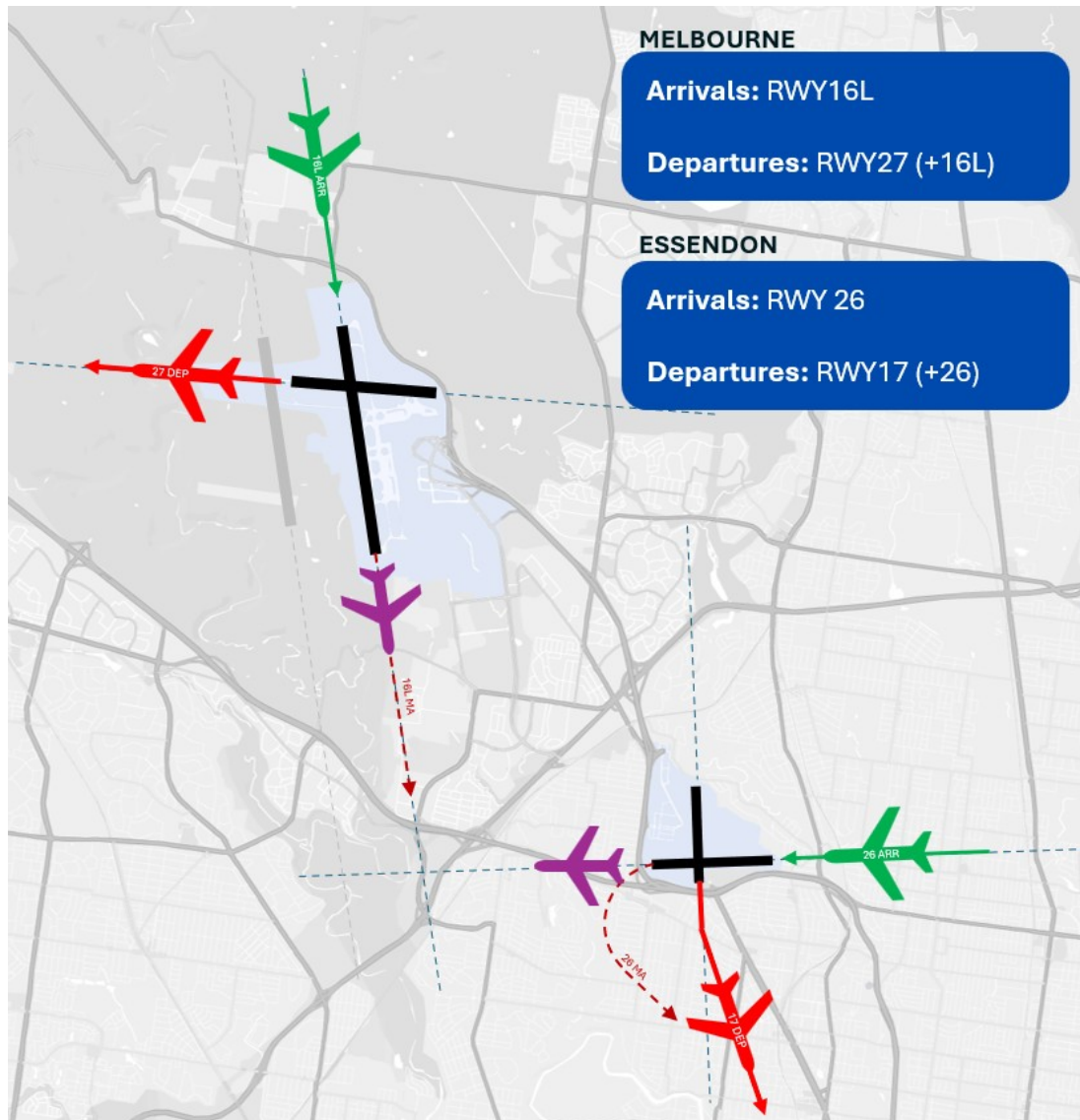


Figure 10 Cross Runway 1 – Arrivals in green, departures in red, alternative operations in purple.

This mode provides clear and consistent separation between Essendon and Melbourne operations. However, the missed approaches (shown as dashed lines) for RWY 16L arrivals at Melbourne and RWY 26 arrivals at Essendon are in conflict, requiring arrivals to operate dependently. Departures, by contrast, can operate independently from either aerodrome. Large aircraft that must use each aerodrome's longer runway are shown in purple on the diagram and represent dependent operations in conflict. For Melbourne, RWY 16L accounted for 16% of departures in this mode, while at Essendon, RWY 26 was used for 15% of departures.

CROSS RUNWAY 2

YMML 27 (+34R) Arrivals, 27 & 34R Departures – Current NAP Priority: Day 1st/5 – Night 2nd/5

YMEN 26 Arrivals, 26 Departures (SRO26)

Mode combination usage in 2024: 6.5%

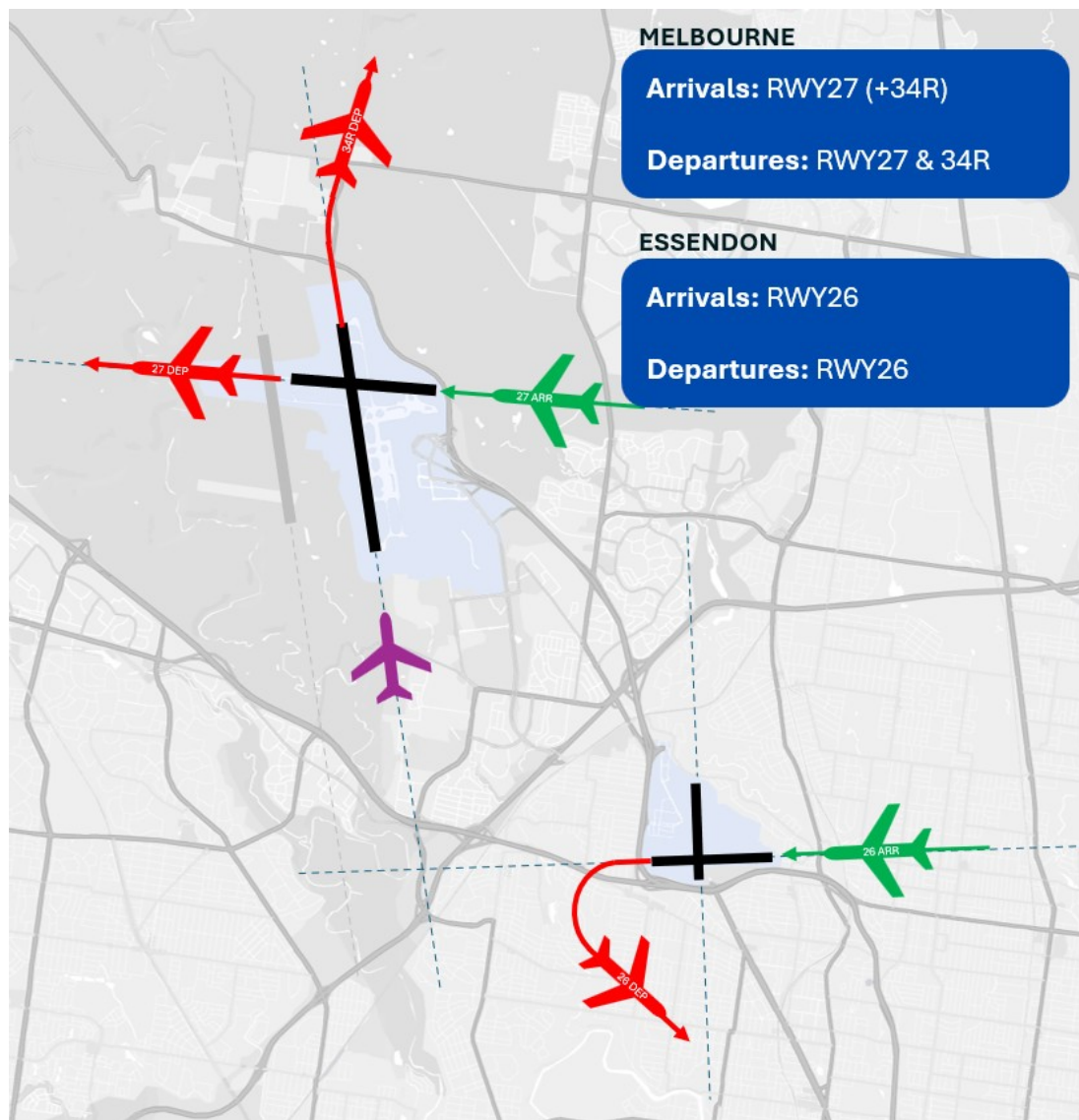


Figure 11 Cross Runway 2 – Arrivals in green, departures in red, alternative operations in purple.

In this mode, all standard operations are procedurally separated and can operate independently. The exception is Melbourne arrivals that require the longer arrival runway (34R), which remain dependent on concurrent Essendon arrivals and departures. In 2024, around 25% of Melbourne arrivals in this mode utilised RWY 34R.

CROSS RUNWAY 3

YMLL 09 (+16L) Arrivals, 16L Departures – **Current NAP Priority:** Day 2nd/5 – Night N/A

YMEN 17 (+26) Arrivals, 17 Departures.

Mode combination usage in 2024: 1.0%

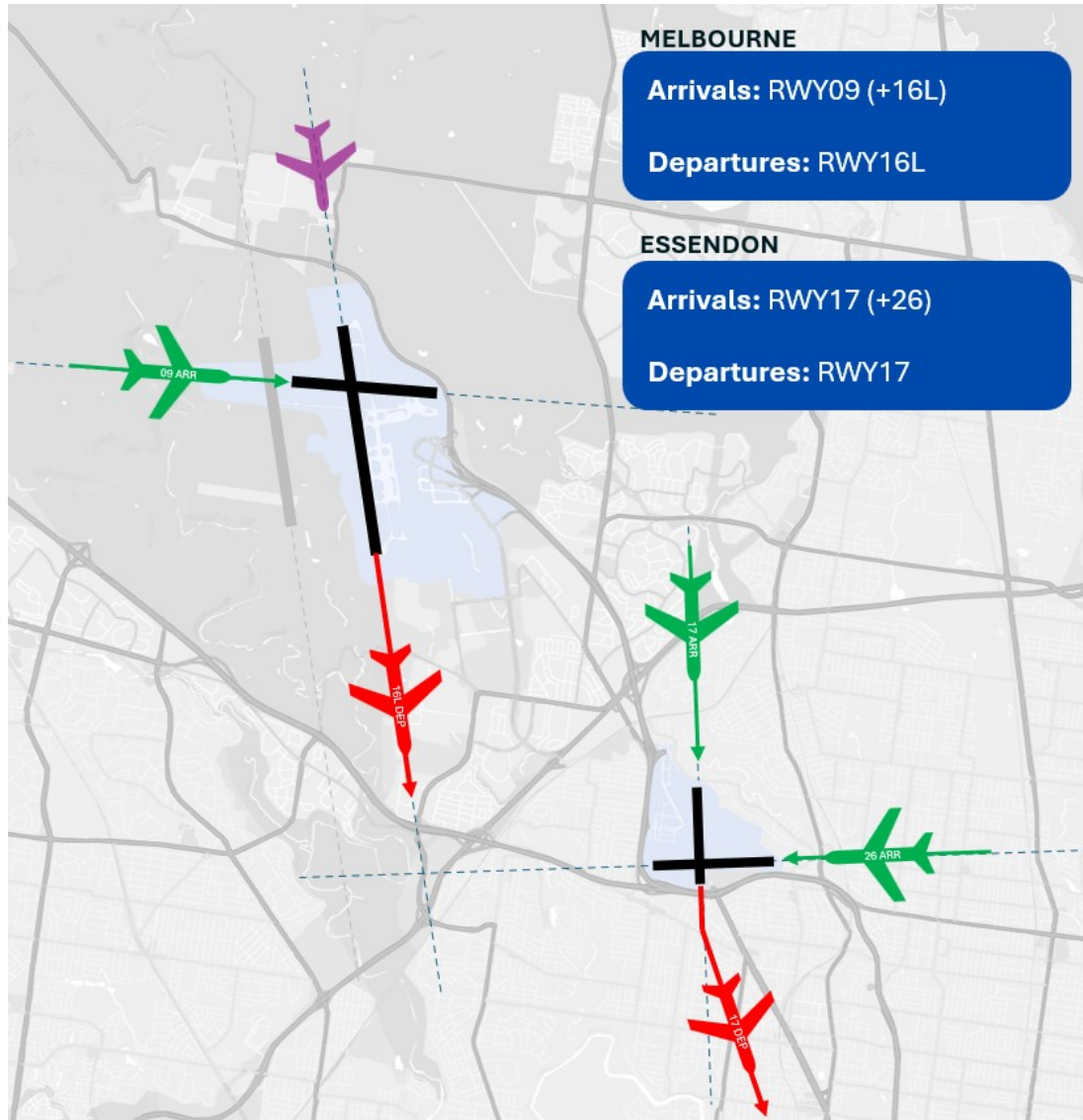


Figure 12 Cross Runway 3 – Arrivals in green, departures in red, alternative operations in purple.

This mode represents the second daytime priority and is not used overnight. This mode provides separated operations at Melbourne as 16L departures utilise an intersection departure south of RWY09, allowing for a high capacity.

High-Capacity Landing (LAHSO)

YMML 27 & 34R Arrivals, 27 (+34R) Departures – **Current NAP Priority:** Day 1st/5 – Night N/A

YMEN 35 & 26 Arrivals, 35 (+26) Departures.

Mode combination usage in 2024: 0.7%

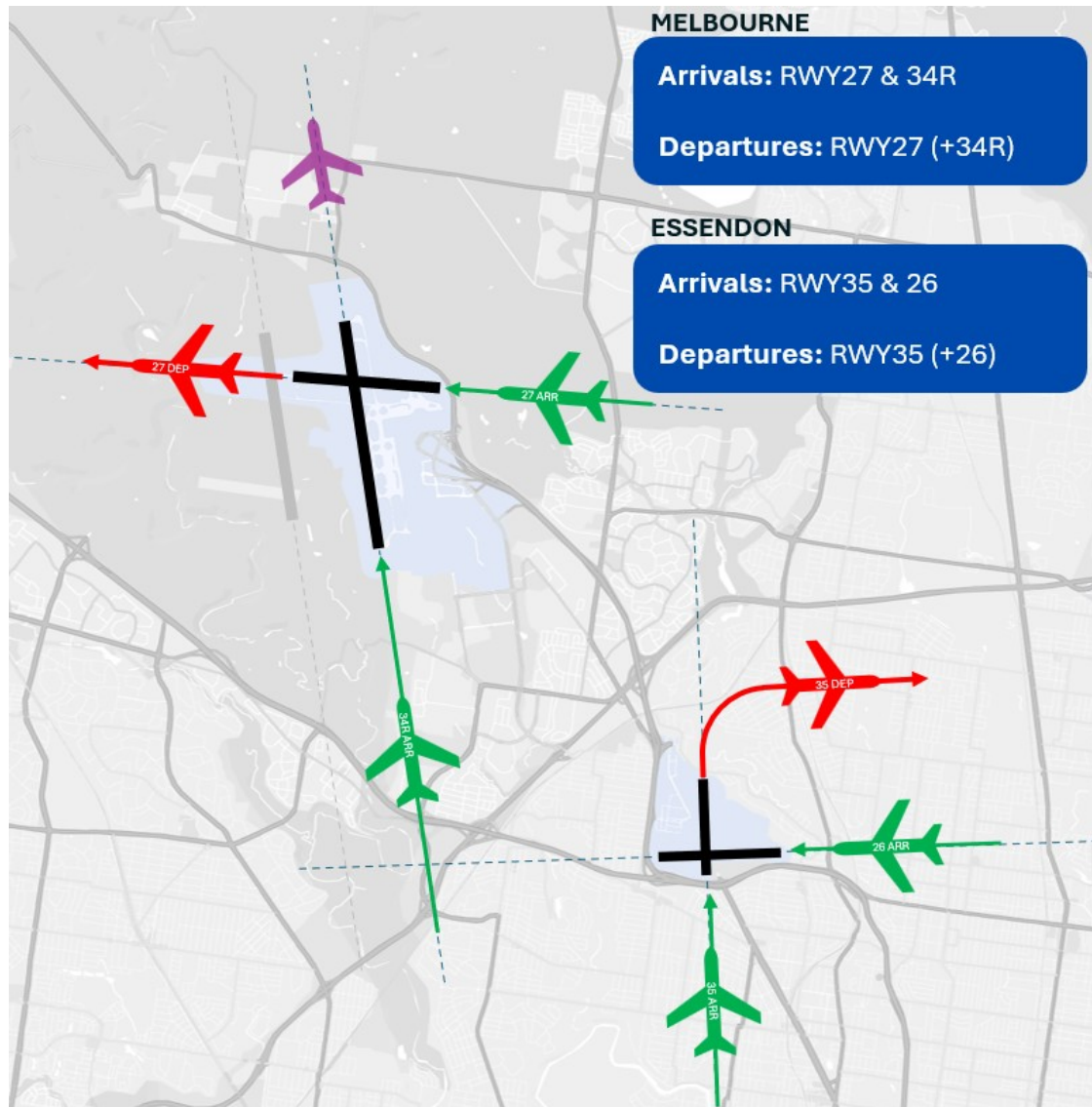


Figure 13 High-Capacity LAHSO mode – Arrivals in green, departures in red, alternative operations in purple.

This mode is referred to as **LAHSO** (Land and Hold Short Operations). It enables Melbourne to sustain a high arrival rate. During LAHSO, Essendon typically nominates RWY 35, where visually separated arrivals can be managed effectively.

Single Runway - 27

YMML 27 Arrivals, 27 Departures – **Current NAP Priority:** Day 3rd/5 – Night 3rd/5

YMEN 26 Arrivals, 17 & 26 Departures.

Mode combination usage in 2024: 3.1%

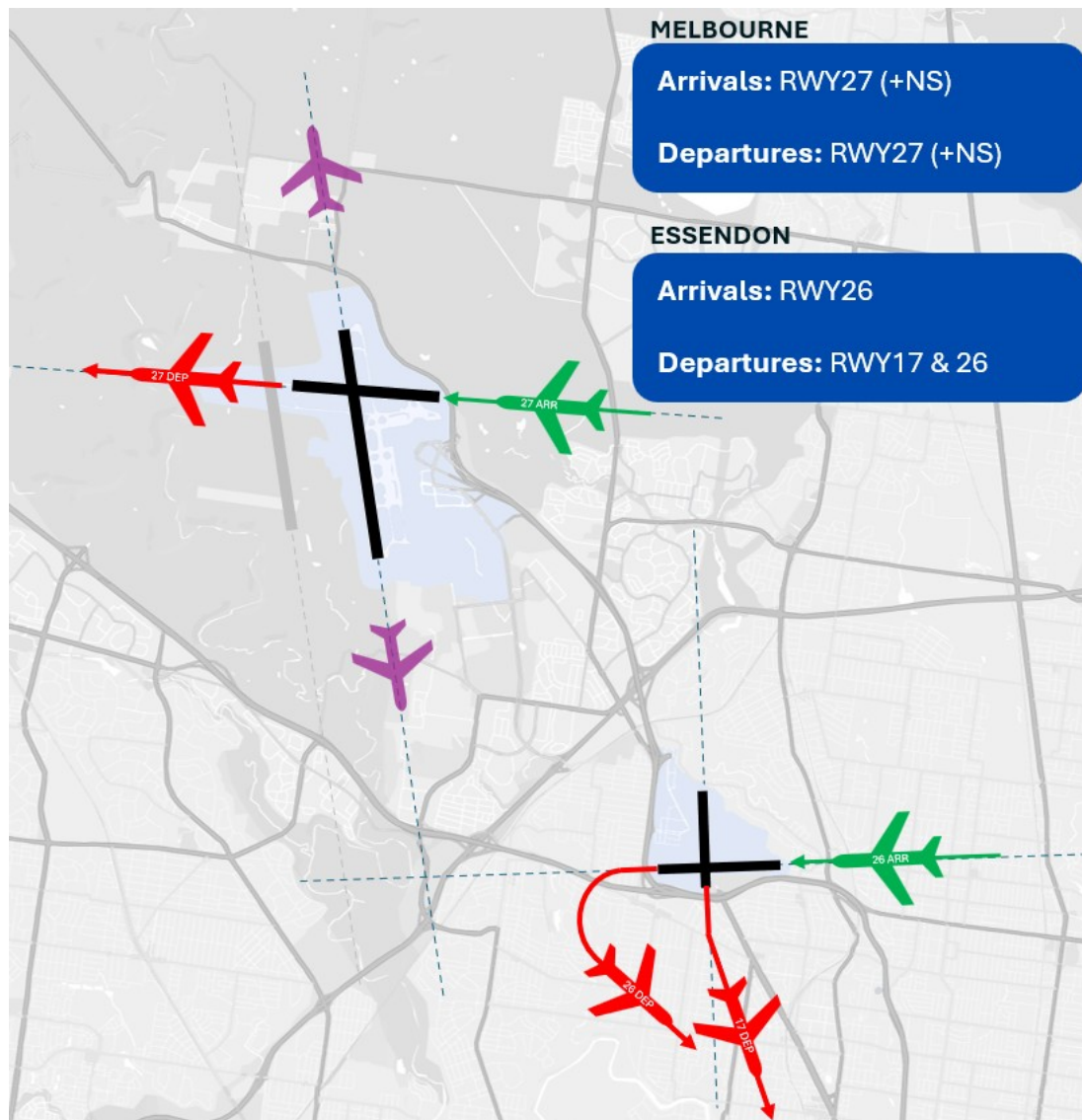


Figure 14 Single runway 27 – Arrivals in green, departures in red, alternative operations in purple.

Single runway 27 is used during periods of strong westerly winds. This mode provides separated operations with Essendon on runway 26. Operations that require a longer runway would operate north or south at Melbourne dependent on the prevailing wind (these operations are 9% of arrivals and 14% of departures at Melbourne). Essendon often uses RWY17 departures in this mode which also remains clear of all Melbourne operations.

Single Runway - 34(R)

YMML 34R Arrivals, 34R Departures – Current NAP Priority: Day 4th/5 – Night 4th/5

YMEN 35 Arrivals, 35 Departures.

Mode combination usage in 2024: 13.6%

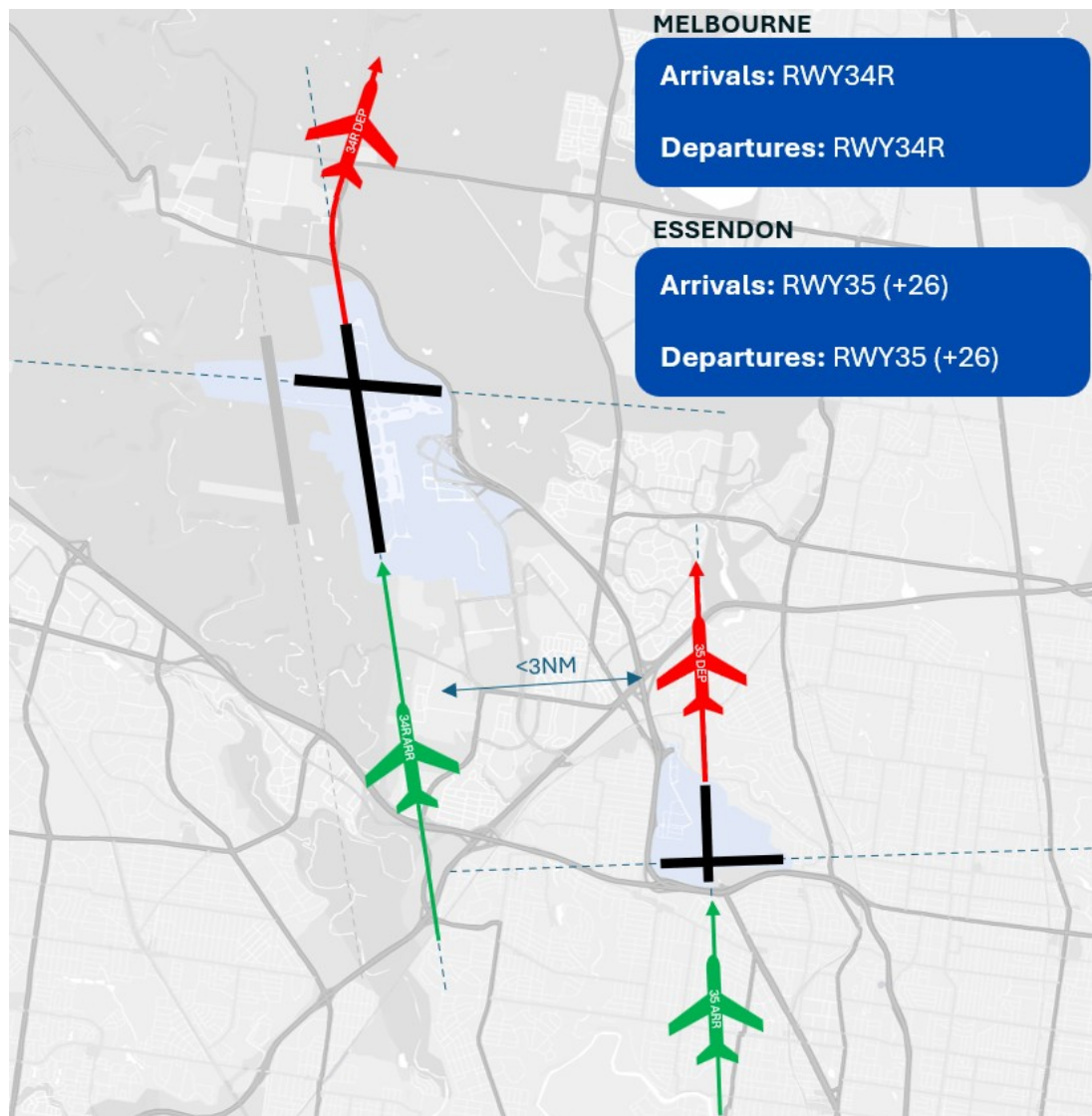


Figure 15 Single runway 34R – Arrivals in green, departures in red.

Single runway 34R is a common mode used 13.6% of the time in 2024. Used in northerly winds, with aircraft using Melbourne's longest runway. In this mode Essendon would typically operate RWY35, with some operations requiring RWY26 for the ILS approach or longer departure run.

Single Runway – 16(L)

YMML 16L Arrivals, 16L Departures – Current NAP Priority: Day 4th/5 – Night 4th/5

YMEN 17 & 26 Arrivals, 17 Departures.

Mode combination usage in 2024: 12.4%

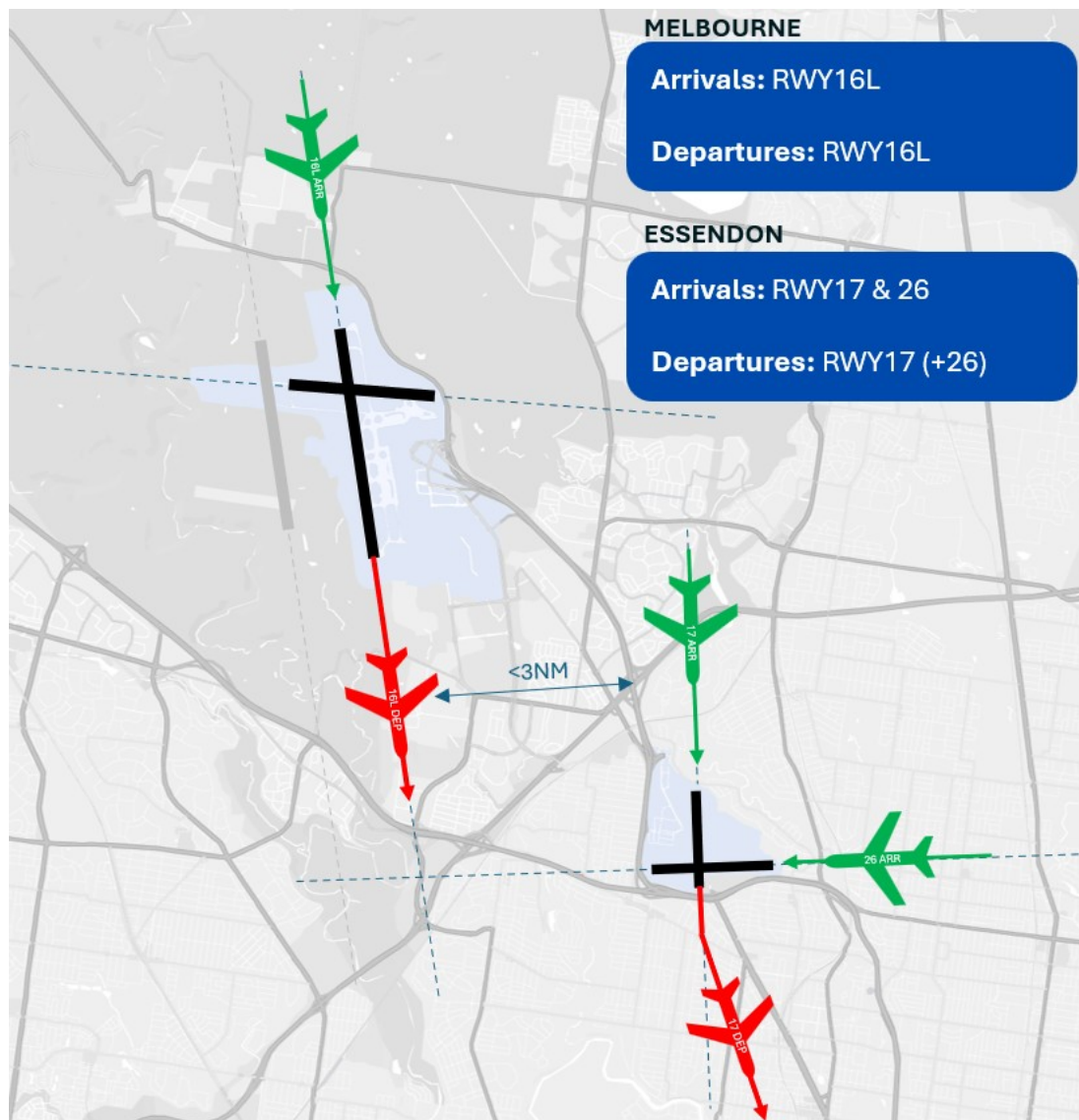


Figure 16 Single runway 16L – Arrivals in green, departures in red.

Single runway 16L operations at Melbourne occur during southerly winds. This is common during a morning peak for the majority of the year except winter where northerly winds are more common. In this mode Essendon's complimentary mode uses 17 for arrivals and departures, with some operations requiring RWY 26 for arrivals or departures.

Single Runway – 09

YMML 09 Arrivals, 09 Departures – **Current NAP Priority:** Day 5th/5 – Night 5th/5

YMEN 08 Arrivals, 08 Departures.

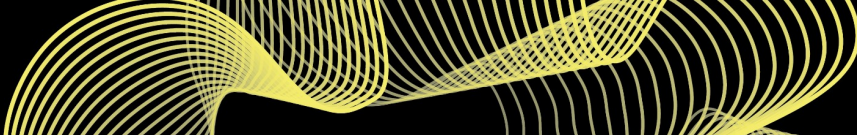
Mode combination usage in 2024: 0.1%



Figure 17 Single runway 09 – Arrivals in green, departures in red, alternative operations in purple.

Prevailing easterly winds in Melbourne are quite rare. Single Runway 09 at Melbourne is used less than 1% of the time. 10% of arrivals and 21% of departures use the main longer runway at Melbourne.

Future Operating Modes (Post M3R, including 34L/16R)



The M3R MDP identified Runway 09/27 not as a preferred operating mode, but as a contingency option to support operations in strong wind conditions. As part of the M3R approval conditions, however, the continued use of Runway 09/27 is required following the opening of the third runway at Melbourne Airport.

As a result, the operating modes outlined in the MDP did not incorporate the noise sharing opportunities currently available through the cross-runway system. The NSP would retain cross-runway Modes 1, 2 and 3, while further consideration of high-capacity LAHSO operations in favour of alternative opportunities provided by the parallel runway system will need to be determined.

In addition, the existing single-runway modes for 34R and 16L would be replaced during daytime operations by segregated modes. Under this configuration, one runway would be dedicated to arrivals and the other to departures.

Retained from current modes:

- Cross Runway 1
- Cross Runway 2
- Cross Runway 3
- Single Runway 27
- Single Runway 09
- Single Runway 34R (night only)
- Single Runway 16L (night only)

Modes introduced through the M3R MDP and NSP:

- SODPROPS (night only)
- Segregated Mode 1
- Segregated Mode 2
- Segregated Mode 3
- Segregated Mode 4
- Mixed Mode 34
- Mixed Mode 16

Additional modes available post M3R (not operational priority):

- Semi-Mixed 34 Arrivals
- Semi-Mixed 34 Departures
- Semi-Mixed 34 Arrivals
- Semi-Mixed 34 Departures
- Single Runway 34R
- Single Runway 34L
- Single Runway 16R
- Single Runway 16L

SODPROPs

YMLL 16R Arrivals, 34R Departures

YMEN Closed.

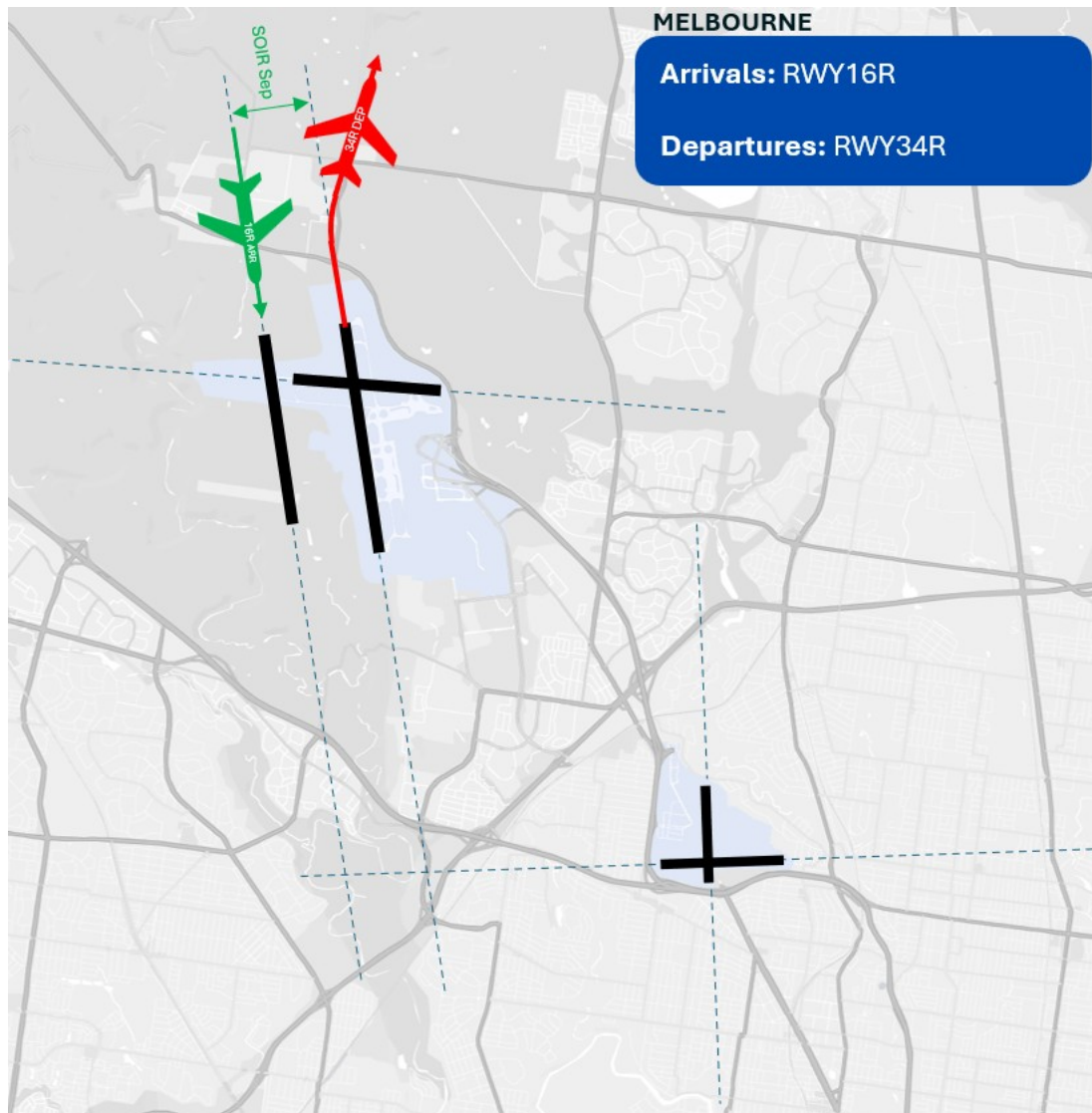


Figure 18 SODPROPs – Arrivals in green, departures in red.

SODPROPs – Simultaneous Opposite Direction Parallel Runway Operations would be the priority mode for use overnight. This mode is not suitable for daytime use due to the low traffic capacity and strict meteorological conditions. For this mode wind must be <5Kts, Visibility >8Km and the runway must be dry.

Segregated Mode 1

YMML 34R Arrivals, 34L Departures

YMEN 35 (+26) Arrivals, 35 (+26) Departures.

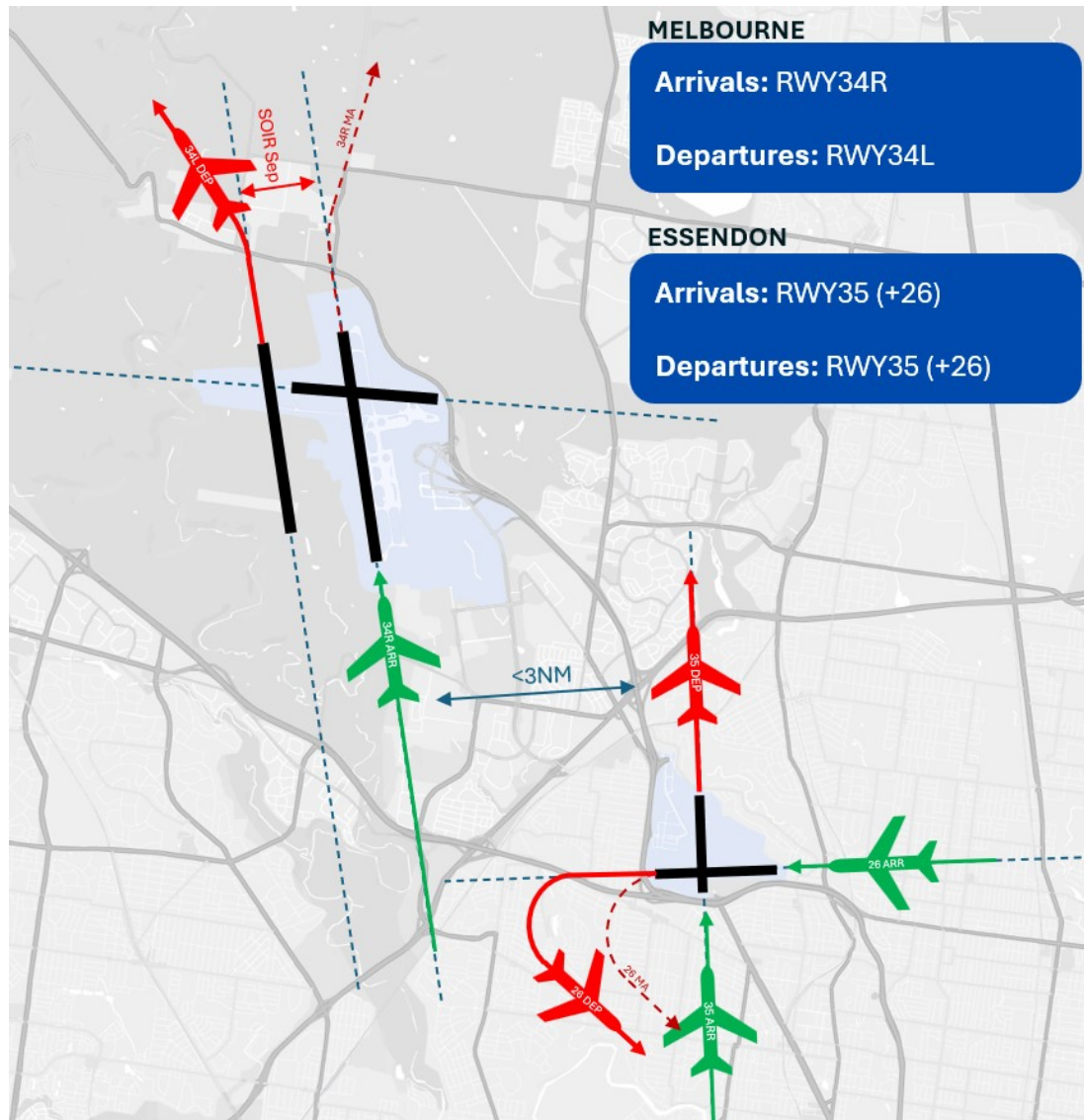


Figure 19 Segregated mode 1 – Arrivals in green, departures in red.

Segregated Mode 1 – This mode would be used in northerly winds using the current runway for arrivals and new runway for departures in Melbourne. The most complimentary mode at Essendon would be RWY35, with operations separated similarly to today. Larger operations and IMC arrivals into Essendon Fields airport would require use of RWY26.

Segregated Mode 2

YMML 16R Arrivals, 16L Departures

YMEN 17 (+26) Arrivals, 17 (+26) Departures.

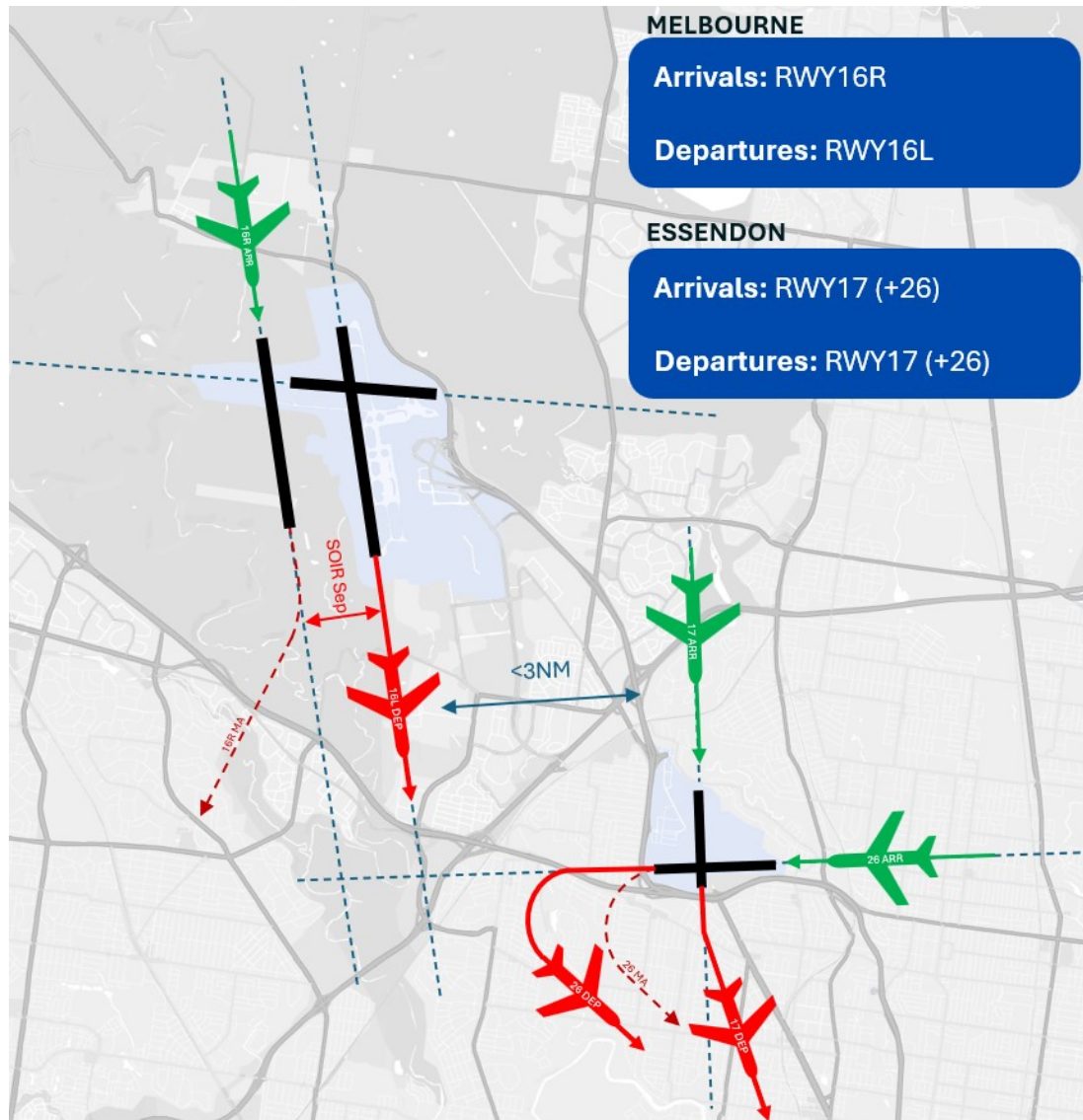


Figure 20 Segregated mode 2 – Arrivals in green, departures in red.

This mode would be used in southerly winds using the current runway for departures and new runway for arrivals in Melbourne. The most complimentary mode at Essendon would be RWY17, with operations separated similarly to today.

Segregated Mode 3

YMML 34L Arrivals, 34R Departures

YMEN 35 (+26) Arrivals, 35 (+26) Departures.

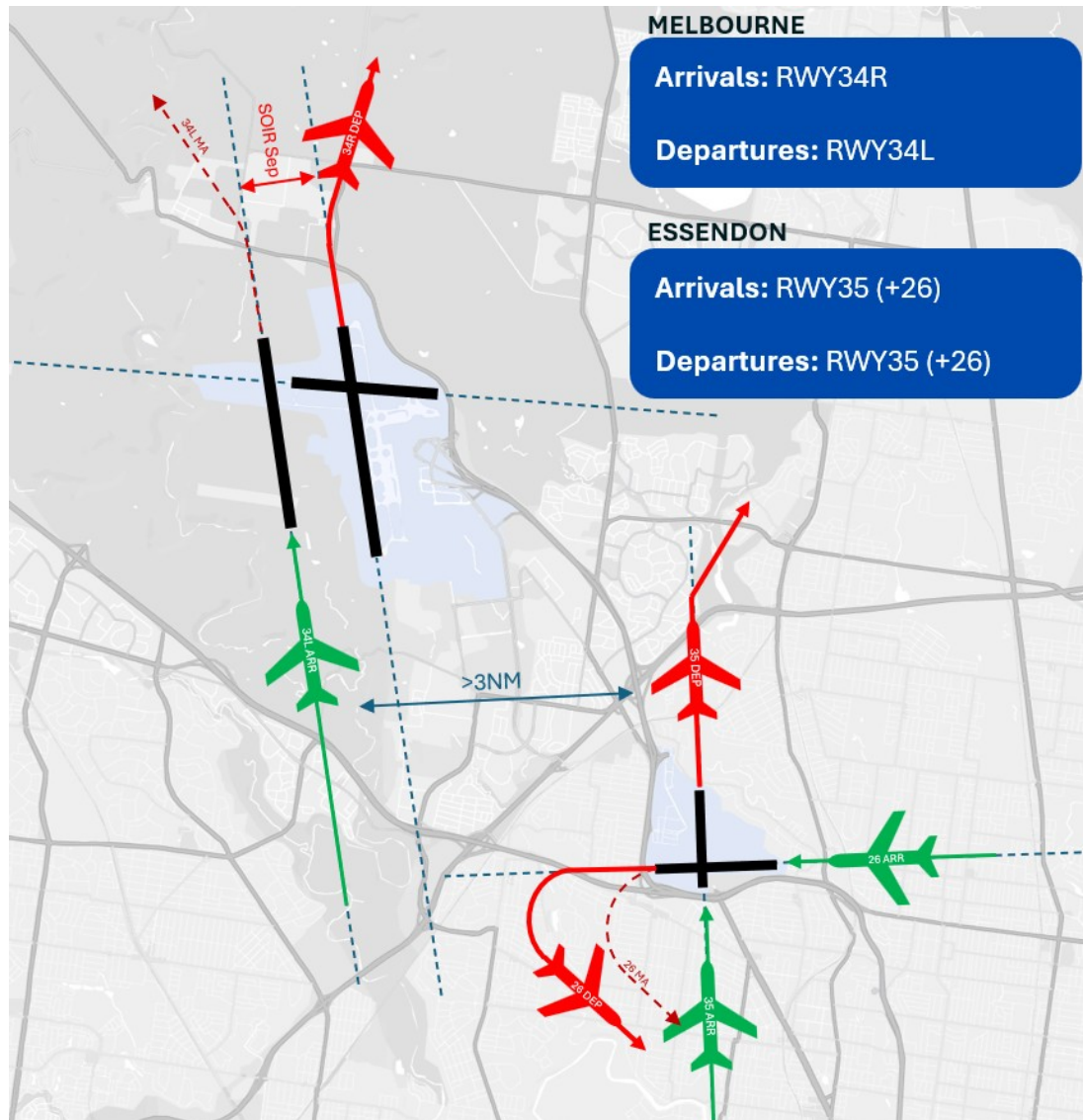


Figure 21 Segregated mode 3 – Arrivals in green, departures in red.

This mode would be used in northerly winds using the current runway for departures and new runway for arrivals in Melbourne. The most complimentary mode at Essendon would be RWY35, >3NM separation between 34L arrivals and Essendon runway 35 operations allowing mostly independent operations. Larger operations and IMC arrivals into Essendon would require use of RWY26.

Segregated Mode 4

YMML 16L Arrivals, 16R Departures

YMEN 17 (+26) Arrivals, 17 (+26) Departures.

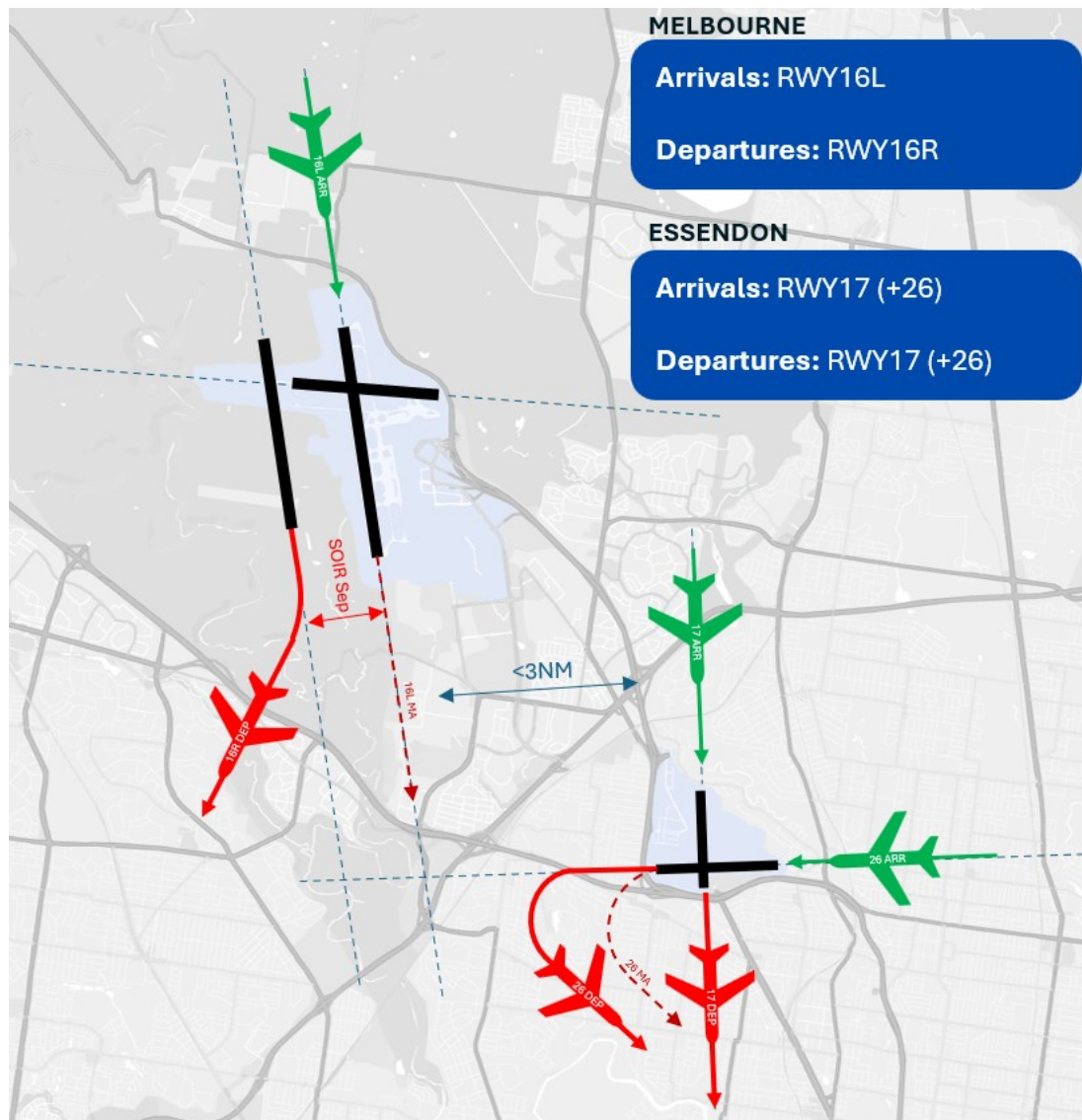


Figure 22 Segregated mode 4 – Arrivals in green, departures in red.

This mode would be used in southerly winds using the current runway for arrivals and new runway for departures in Melbourne. The most complimentary mode at Essendon would be RWY17, >3NM separation between 16R departures and Essendon runway 35 operations allowing mostly independent operations, however a 16L missed approach must still be considered and separated. Larger operations and IMC arrivals into Essendon would require use of RWY26.

Mixed Mode 34

YMLL 34R&L Arrivals, 34R&L Departures

YMEN 35 (+26) Arrivals, 35 (+26) Departures.

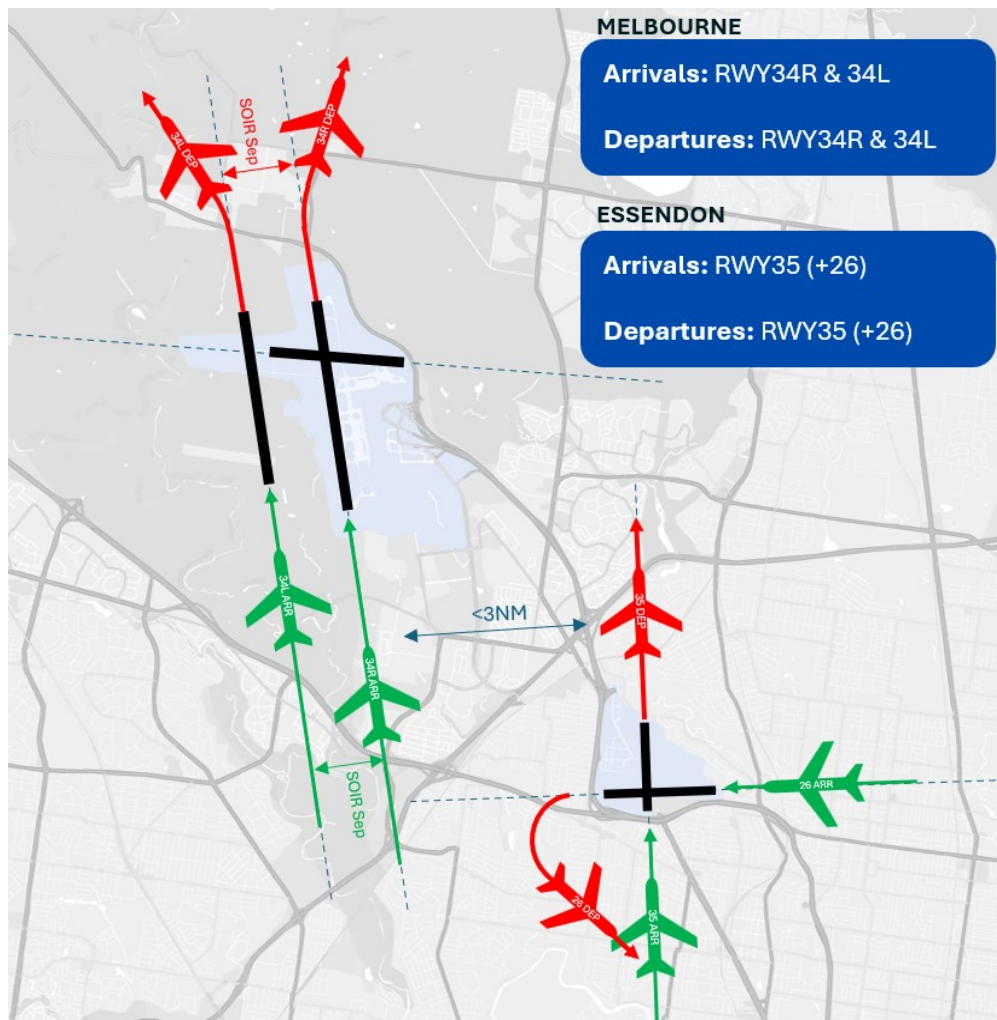


Figure 23 Mixed mode 34 – Arrivals in green, departures in red.

Mixed mode RWY 34 would be applied during northerly wind conditions when traffic demand at Melbourne is high. In this configuration, both parallel runways are used concurrently for arrivals and departures.

The requirements for IPRO would be established in accordance with ICAO Document 9643 (SOIR).

Mixed Mode 16

YMML 16R&L Arrivals, 16R&L Departures

YMEN 17 (+26) Arrivals, 17 (+26) Departures.

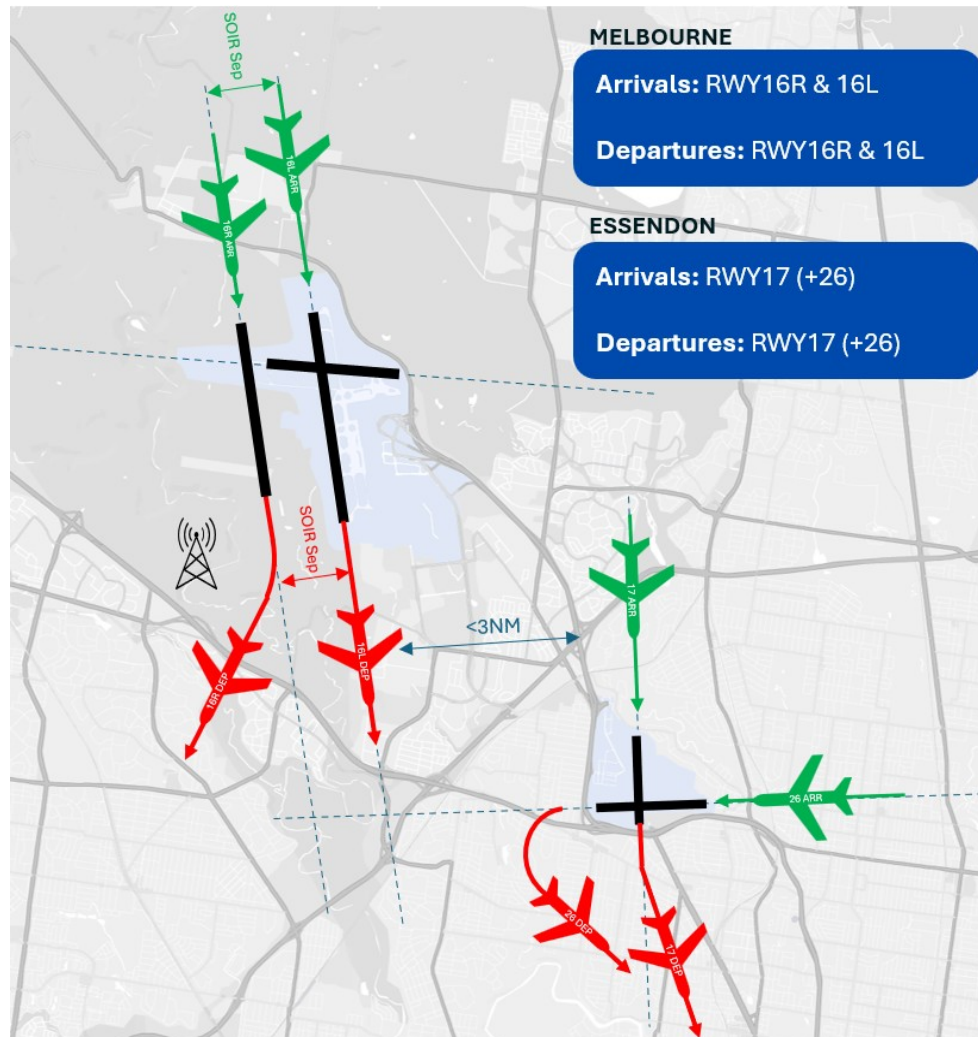


Figure 24 Mixed mode 16 – Arrivals in green, departures in red.

Mixed mode RWY 16 will be applied during southerly wind conditions when traffic demand at Melbourne is high. In this mode, both parallel runways are utilised for a combination of arrivals and departures.

The operational requirements for Independent Parallel Runway Operations (IPRO) will be defined in accordance with ICAO Document 9643 (SOIR).



Summary

Initial Industry engagement conducted by Trax is intended to engage airlines, operators and pilots of changes proposed to the Melbourne basin to facilitate Melbourne Airport's new third runway and the associated Noise Sharing Plan.

Through this engagement we are seeking to understand:

- Operations that occur under controlled airspace that may be affected by the adjustments drafted to contain new parallel approaches
- The operational impact of runway mode alternation over differing time periods
- Operational benefit of the introduction of Instrument Flight Procedures at Essendon Fields airport such as a Runway 35 RNP-Z arrival if possible and/or Standard Instrument Departures.
- If operators/pilots plan to continue regular use the Moorabbin NDB approach
- Operational impacts to the Point Cook training areas and the effect of lowering the Class C airspace.
- Other aviation activities not covered in this report that may be affected by proposed airspace or flight path changes
- Can Trax and/or Melbourne Airport provide additional information to assist your understanding of associated impacts to your aviation activities in the Melbourne basin
- Other general concerns or feedback on the engagement material.

Trax will be hosting a number of in-person and online information sessions to gather feedback and understand your operation as part of the first phase of engagement. These sessions will be posted on the link below and also via CASA's AVSEF website.

[Melbourne Airport – Major Projects Hub – Noise Sharing Plan – Aviation Industry Engagement](#)

<https://www.avsef.gov.au/>

All feedback and information about your operation is to be sent to engagement@ghd.com, please leave contact details if we need to contact you for further information.