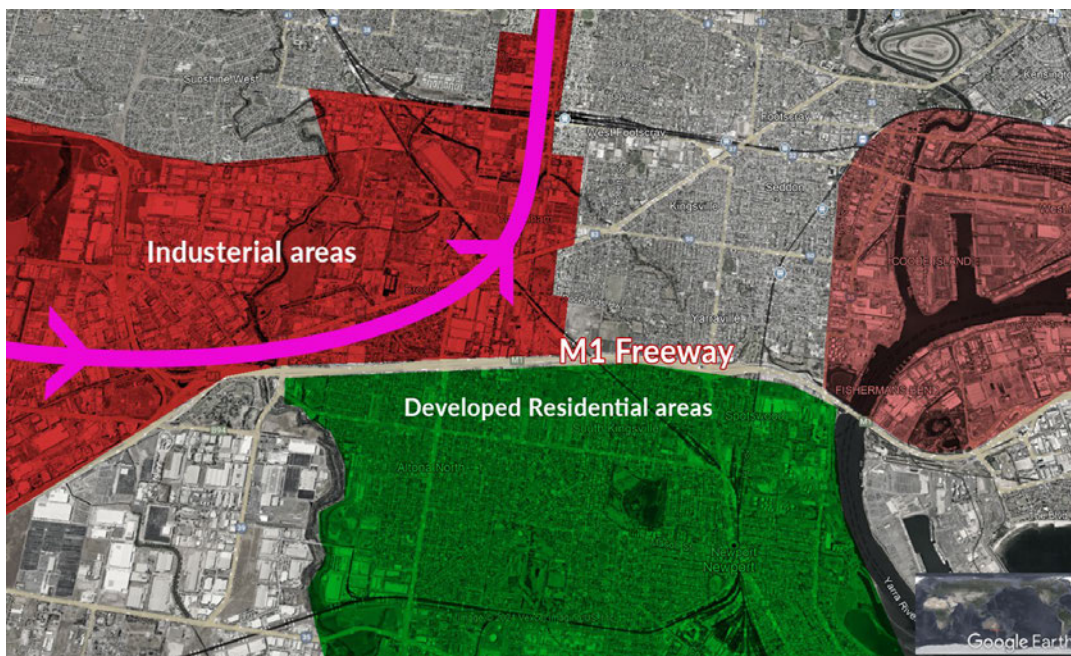


# Request for Review of Airservices Australia's Responses Regarding Flight Path Change Proposal (3015)

By *Dr Anahita Sal Moslehian* PHD, EDAC



Dear Airspace Design Team,

We are writing to respectfully request that you review and reconsider the responses provided to our community's proposal for flight path changes over the residential areas of Newport and South Kingsville (3015). Our proposal, submitted in May 2024, outlined minor adjustments to direct flights over the industrial areas of Brooklyn and Tottenham, as well as the M1 freeway, to minimise the impact on residential areas.

We appreciate the complexity of flight path design and have great respect for ASA's efforts to mitigate noise impact while ensuring safe and efficient air traffic operations. However, the responses we received seem to rely on the same guidelines that led to the initial design and may have overlooked the unique circumstances and evidence we presented in our submission. Our community continues to experience significantly more frequent aircraft noise events than originally estimated—approximately four times higher than what is indicated on the Caportal website—with noise levels exceeding the 60 dB threshold. This is having a profound impact on our mental and physical well-being, greatly diminishing our quality of life.

We understand that further simulation and analysis may be required. However, we sincerely ask you to view this as an opportunity to make a meaningful difference for thousands of people. Given the high volume of aircraft currently using the flight path (sometimes over 200 events per day), altering the design to pass over industrial areas OR introducing a path for the majority of aircraft—those that do not require the same considerations as larger jets like the A380—could reduce the number of noise events for 4,000 residents to fewer than 20 per day.

We have attached further details of our proposal and would be grateful if you could revisit the feasibility of the suggested changes with a fresh perspective. The last 4 pages provide a summary of potential solutions, which, with your expertise, could be analysed to develop a design that mitigates the noise issue.

Your attention to this matter could significantly improve the quality of life for those affected. Thank you for your time and consideration.

Best regards,

*On behalf of the community*

Dr Anahita Sal Moslehian



[Deakin University](#) – Geelong Waterfront Campus  
[School of Architecture and Built Environment](#)

## Airservices Australia's Feedback

Thank you for writing to us and for your patience. Our Airspace Design team have assessed the proposal and unfortunately the requested changes are unable to be implemented. This is due to the location of Newport being in alignment with Runway 34.

Precision landing approaches based on satellite navigation consist of a series of predetermined manoeuvres (by reference to flight instruments) **from the beginning of a defined arrival route to a point from which a landing can be completed.**

Under precision landing approaches for Melbourne Airport, all aircraft arriving via **Runway 34 must track via the waypoint AKDEL.** A waypoint is a geographical location used to define a point on flight path and is defined by geographic coordinates. Unfortunately **Newport/ South Kingsville is located under AKDEL.** I have included the Runway 34 aeronautical procedure chart snippet for reference below (see at the bottom of the 't'), and a map beside it for comparison.

AKDEL is in a very specific location based on runway alignment requirements and distance from the runway (**approximately 10 Nautical Miles/ 18.5km**). Airservices Australia applies the International Civil Aviation Organization (ICAO) Procedures of Air Navigation Services - Construction of Visual and Instrument Flight Procedures in flight path design that guide the distances of procedures, specified altitudes and turn angles. The tighter turns as presented in your proposal cannot be achieved as turns of arrival flight paths are designed to ensure adequate distances for aircraft to be **at precise minimum safe altitudes before commencing their descent into the airport following a 3 degree glide slope.**

## Our Responses

We appreciate the explanation of key terms used in the aviation sector, and for outlining the guidelines, which are primarily focused on operational efficiency and conservative safety considerations. **However, we would like to further elaborate on 10 key points in response to the provided feedback** (text highlighted in blue show the key arguments from the provided feedback):

### 1. Required Distance:

The ASA's calculations are based on the required distances for an aircraft to descend at a **3-degree angle from 2,500 feet**, with an estimated distance of approximately 10 Nautical Miles (18.5 km).

Yet, the calculations show that the required distance for a descent from 2,500 feet should be 14.54 km, which is notably less than the provided estimation.

$$\text{Distance}_1 = \frac{2500}{\tan(3^\circ)}$$

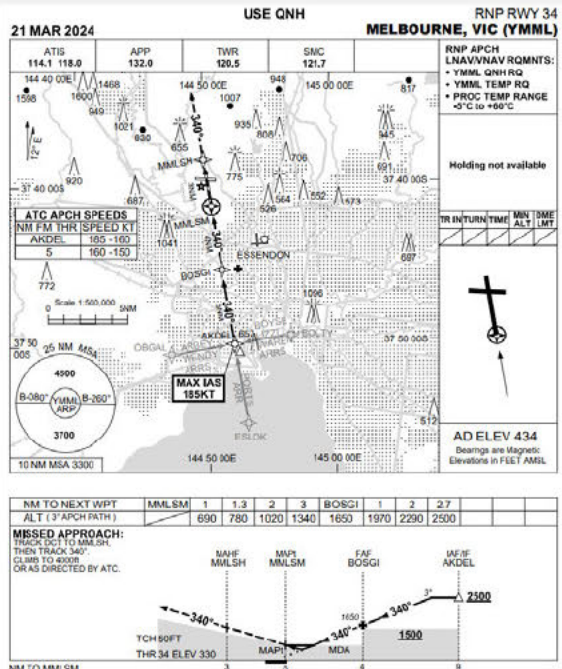
### 2. Reduced Flight Altitudes over the past few years:

Two years ago, the flight altitudes over our area **decreased by 500 feet without any changes to the flight paths.** If the same path could accommodate flights at 500 feet higher, it seems feasible that a minor adjustment of 2 km in the flight path could allow for a safe landing.

#### *Altitude Discrepancies:*

Additionally, a quick review of random flight data from our archives shows that **several aircraft are at much lower altitudes** at their turning point - the AKDEL waypoint. In this case, if the altitude is reduced to 2,300 feet (rather than the 2,100 feet we often observe – see screenshots below), the required distance for descent would decrease to 13.38 km—approximately 5 km less than the provided estimation.





### 3. Comparison with East-West Runway:

We mapped circles with the radius of the turning point distance towards the East-West Runway and replicated the circle by placing the centre at the beginning of Runway 34. This revealed significant differences (see Figures 1 and 2). We are curious to understand why the situation for the North-South Runway differs from that of the East-West Runway.

The geographical conditions are similar, with the notable exception that the North-South runway is significantly longer. Additionally, Runway 34 is used for landings when there is northerly wind, which significantly assist the landing process.

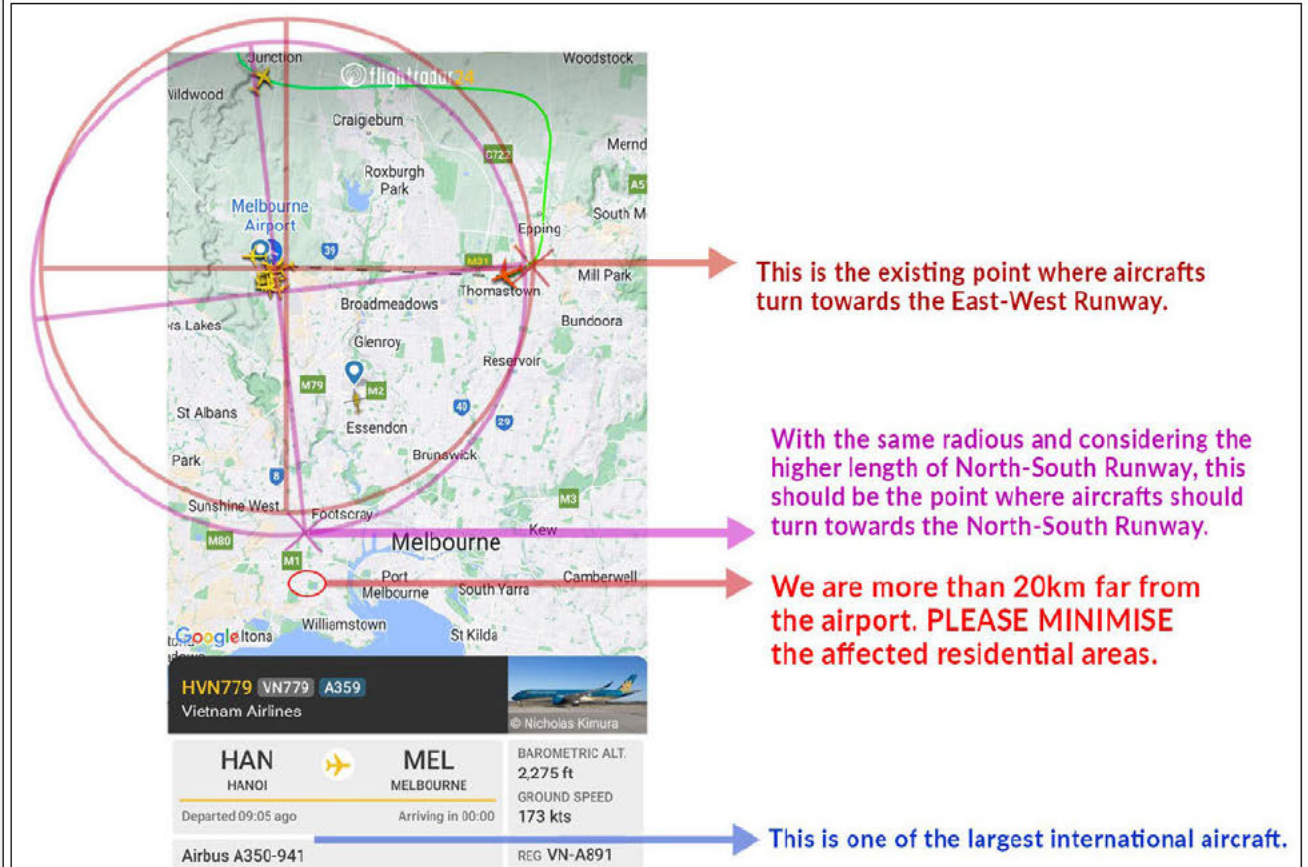


Figure 1: Comparison of the turning point location for the North-South Runway versus the East-West Runway



We also duplicated and rotated the exact flight path used for the East-West Runway, aligning it with Runway 34. This adjusted turning point passes over industrial areas and the M1 freeway, which could help mitigate noise impacts for over 3,000 dwellings.

While we understand this is a simplified approach, we hope it highlights the potential for reconsidering the current flight path.

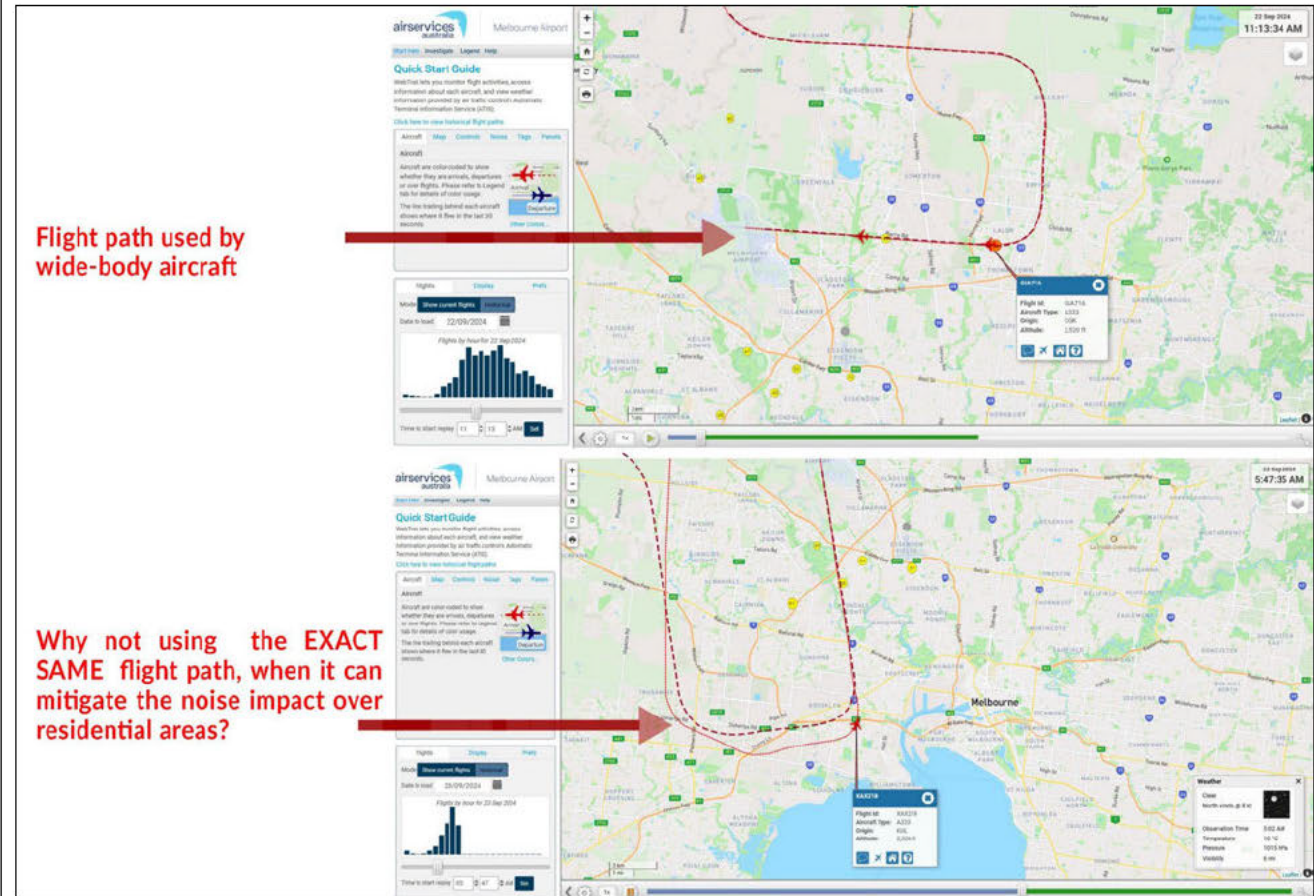


Figure 2: Please consider using the same approach for the North-South flight path design



There are arrival procedures that join the final runway aligned segment closer to the airport. These are called Required Navigation Performance - Authorisation Required (RNP-AR) approaches. An RNP-AR approach provides an extremely high degree of navigational accuracy for both Air Traffic Control (ATC) and the pilot. RNP-AR approach paths allow a continuous curved path prior to a much shorter final approach section aligned with the runway. Only authorised aircraft flown by suitably qualified pilots are assigned RNP-AR approaches by ATC.

While there are RNP-AR approaches from the north (Runway 16), an RNP-AR for Runway 34 is not practicable from the western side due to vertical (height) separation required with high volume of departure flight paths to the west (Runway 27 departures) and northwest (Runway 34 departures). Arrivals would need to be kept higher than the departures which in turn require longer track miles through a longer turn to achieve the glide slope required in their descent. An RNP-AR for Runway 34 is not practicable from the eastern side due to traffic management with Essendon Airport flight paths.

We are sorry this is not the outcome you had hoped for, but we hope the above information helps in understanding the constraints and considerations around flight path locations.

**4. Considering the context (industrial areas) along with the prescriptive 3-degree requirement:**

We would like to clarify that our proposal does not request the implementation of RNP-AR approaches or significantly shorter flight paths. Instead, we are suggesting a modest reduction of approximately 2 km by taking nearby industrial areas into account. This adjustment would help alleviate the burden on the community by redirecting flight noise over industrial zones, offering a more balanced approach.

**5. Feasibility of a closer turning point for 90% of aircraft:**

If the turning point MUST be in a 18km distance (although it is not the case for the E-W Runway), then we kindly request that you explore the provision of two flight paths. By doing so, one path could be designated for larger jets (A380, A350), while the other could accommodate the majority of aircraft that do not require the same level of consideration for safe landing (meaning much fewer noise events for residents). This approach would allow for a more tailored solution that acknowledges the health and well-being of our community, rather than relying solely on the most conservative option generalised for all days. Thank you for your understanding and consideration.

**- Feasibility of a closer turning point from West:**

It is evident that aircraft are directed toward Runway 34 when there is a northerly breeze or wind to avoid landing with a tailwind. While departures occur from Runway 27, this does not happen during strong northerly winds, when we experience over 200 events per day. In these cases, all aircraft take off from the north, and the concern re the need for "vertical separation due to a high volume of departure flight paths to the west and northwest" may not apply under these conditions.

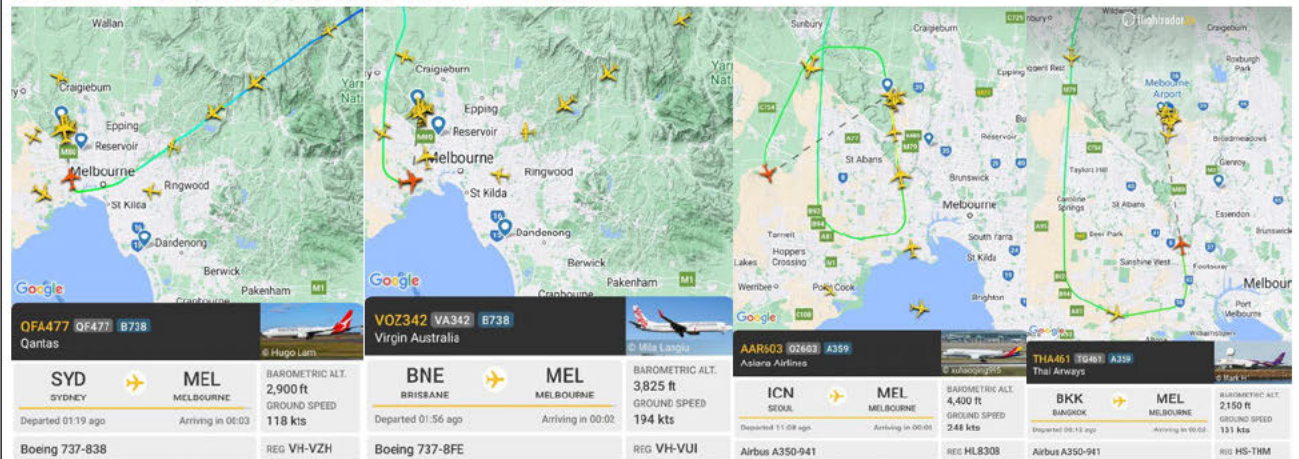


Figure 3: Demonstrating HIGH VOLUME of arrivals towards Runway 34, and no departure from the West



Moreover, inconsistent flight approaches raise concerns about the necessity of long-distance alignments with runways when closer turning points are demonstrably safe and feasible under similar conditions. If certain aircraft can safely land using more efficient, shorter approach routes, it is unclear why other planes of the same model are required to align from significantly farther distances, especially when weather and wind conditions are comparable.

For example: *If an A320-232 could land safely on the 8th of September 2024 at 1:50 PM, using a turning point this close to the airport, and just 5 minutes earlier under the same wind conditions, why did another A320-232 have to be aligned with Runway 34 from 18 km away?*

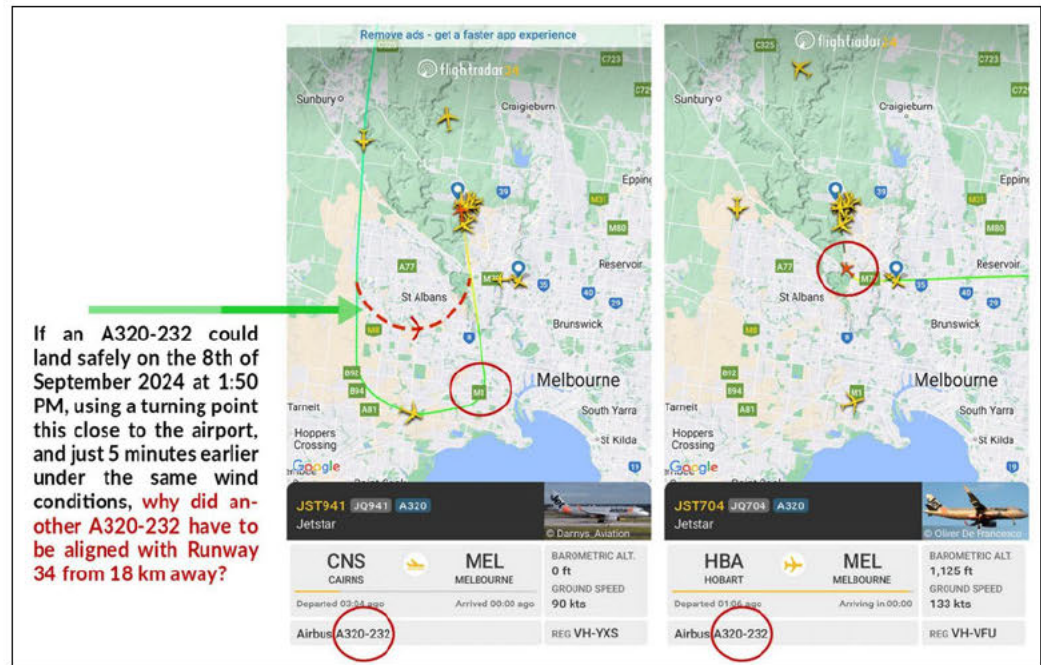


Figure 4: Demonstrating two inconsistent design approaches for one type of aircraft

We kindly request that you consider the needs of the residents affected by the flight paths and explore the provision of another flight path over industrial areas (highlighted in red in Figure 4, OR the suggested adjustment to the current path).

## 6. Feasibility of much closer turning points from the East

It is evident that turning towards the runway from the east is also feasible. Yet, it appears that the health and wellbeing of residents are being given less importance, as the response simply states that it is not possible.

While we understand the need for aircraft to align with the runway before landing, we have observed that similar aircraft occasionally turn towards Runway 34 from the eastern suburbs at a point much closer to the airport, which results in fewer affected residential areas (Figure 5). We respectfully request a re-evaluation of the flight paths for the western suburbs to achieve similar noise mitigation benefits (Figure 6).

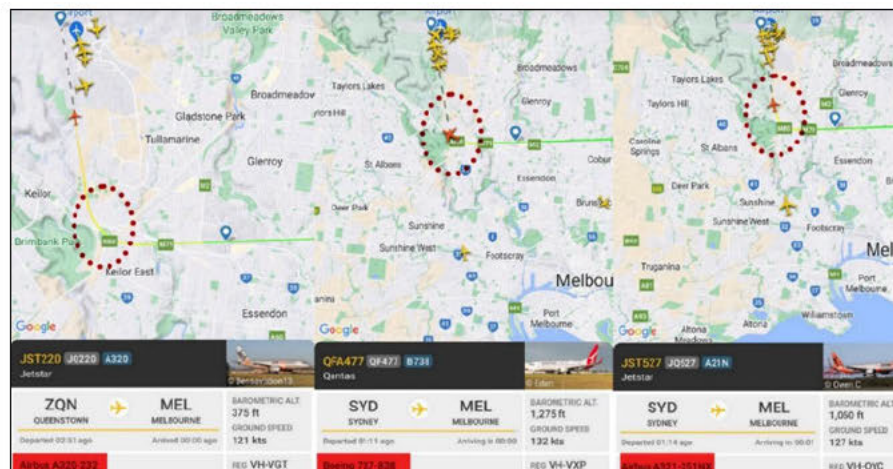


Figure 5: The turning point towards the Runway 34 from the Eastern suburbs – for A320 and B737

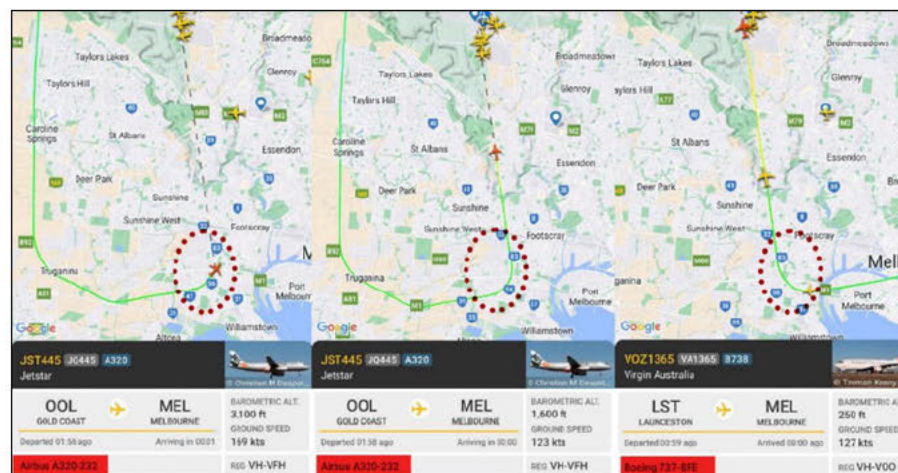


Figure 6: The turning point towards the Runway 34 from the Western suburbs – for A320 and B737



## 7. Noise Sharing and Impact on Residents

It seems that the current approach favours a single path for all aircraft types, primarily for operational efficiency. As a result, residents in our area are subjected to hundreds of flights overhead.

- Isn't noise sharing one of the fundamental principles of Airservices Australia? Why is this principle not being implemented in our area?
- Why must we endure more than 200 flights during dry days with northerly winds, which occur very frequently?

Residents of East Melbourne have also reported over 100 flights in their submission for Sanat Inquiry to Aircraft Noise. Those flights arriving from Sydney alone. Adding international flights, as well as flights from Perth, Brisbane, Adelaide, and Tasmania, could mean that we are dealing with over 200 events per day. It is impossible to count them all as they pass over every 2-5 minutes, one after the other. Please see the following screenshots:

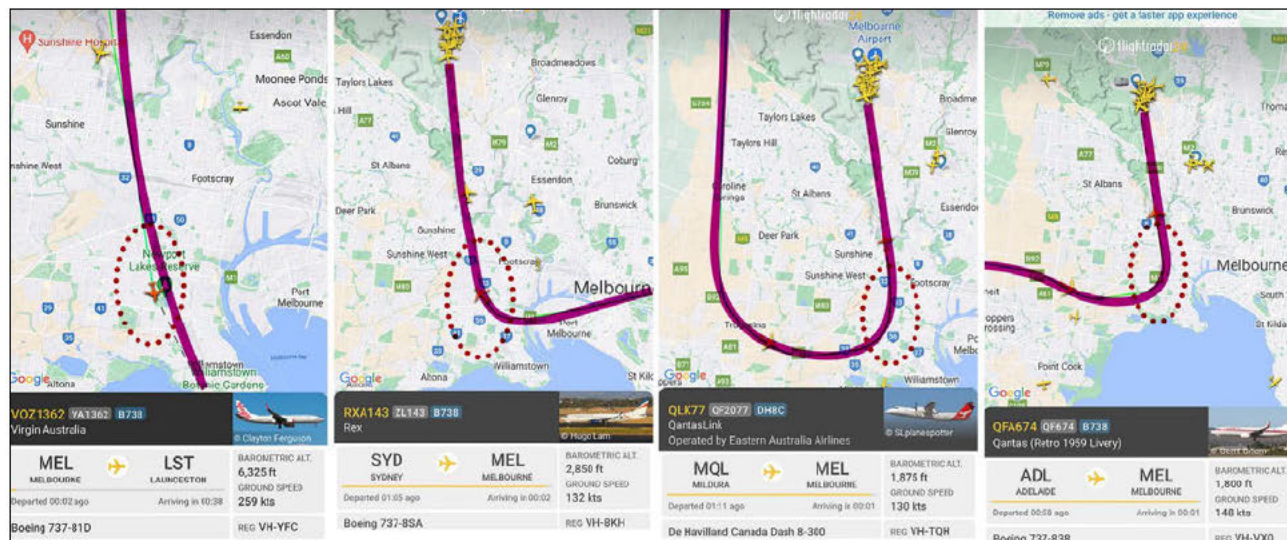


Figure 7: The four main flight paths from the east and west merge over one residential area - far from the airport

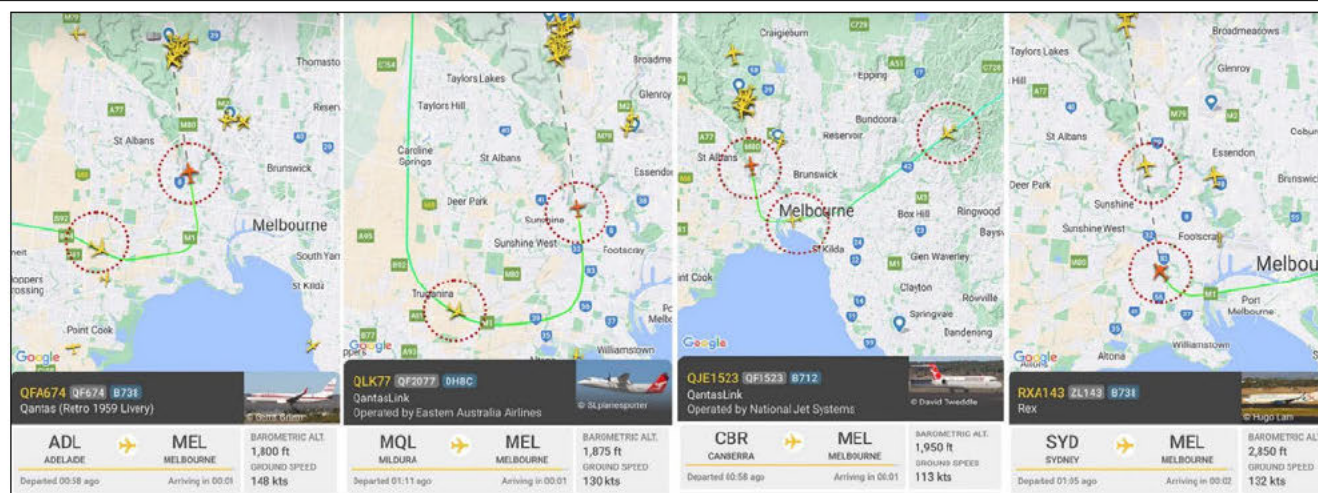


Figure 8: Four random screenshots, showing the constant use of only two pathways during Northerly wind

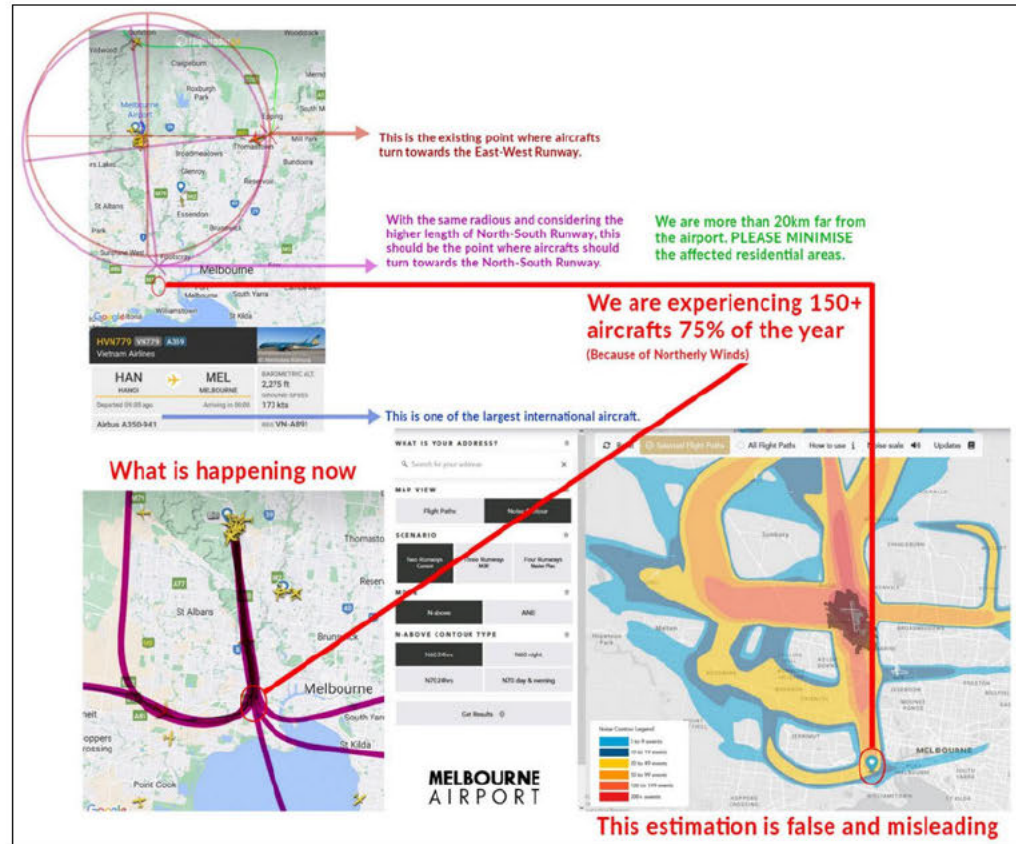


Figure 9: All flights are merging over one residential area 18km away from the beginning point of Runway 34



	<p><b>8. Crosswind landing</b></p> <p>Despite the ability of all aircraft, especially wide-body jets, to safely land in crosswinds, they are still directed towards residential areas and land on Runway 34 even with less than 5 km/h northerly breeze. Given that landing from the west or north could potentially reduce noise impact for residents, it is unclear <b>why this approach is not currently utilised.</b></p> <p>The Melbourne Airport MDP report on page 63 states, "To maximise airport capacity, use of the existing east-west runway will be limited to when weather conditions (primarily wind speed and direction) preclude use of the parallel runways." However, if <u>crosswind landings</u> are feasible, it raises the question of <b>why the airport does not currently consider this approach to minimise noise impact on residential areas?</b></p>
<p>Flight path design is a <b>complex process</b> that must ensure <b>safety as the first priority</b>, and then seek to balance the efficiency and <b>operational needs</b> of the range of stakeholders, minimise the <b>environmental impacts</b> of aircraft operations, and provide <b>equity of access to airspace</b>. Consideration is also given to the effect of the flight path change on the broader air traffic management network performance.</p>	<p><b>9. Complex problems need robust analysis of various variables</b></p> <p>Complex problem means many factors are affecting a situation and considering those factors and variables at the same time is difficult and needs a <b>systematic thinking, robust analysis of variables, and trying to address the issue from a human-centred approach.</b></p> <p>The current design approach results in decisions that prioritise a narrow set of variables, <b>with an overemphasis on conservative safety factors and operational efficiency, without addressing the real issue at hand.</b></p> <p>This method completely disregards the fact that there are residents <b>living in their homes</b> directly under these flight paths. It reduces complex, lived environments to mere objects on a map, with no distinction between different areas' uses and functions. Moreover, despite identifying multiple factors, there is no mention of the impact on residents and communities who are subjected to constant aircraft noise, day and night, in areas where there has been no prior indication or assessment of this disturbance.</p> <p>We beg you to consider us in your design and analysis. Please consider this proposal as an opportunity to explore alternative solutions.</p>

The Major Development Plan for Melbourne Third Runway is pending approval from the Department of Infrastructure. Subject to approval, Airservices will conduct community engagement on any [changes to flight paths from the new runway in the coming years](#) in line with our national Community Engagement Standard.

**10. PLEASE consider our daily lives - waiting for a comprehensive redesign of the third runway in 2-3 years is too late due to the severity of the issue in our community:**

The Third Runway is a separate project—we live here now. This is our home, and we deserve peace. This is a significant responsibility, and your decisions have the power to greatly impact our daily lives, for better or for worse.



**4,210 dwellings can be saved!**

Figure 10: Redesigning the flightpath could make a difference for more than 4,000 individuals waken up every night and morning multiple times by the aircraft noise



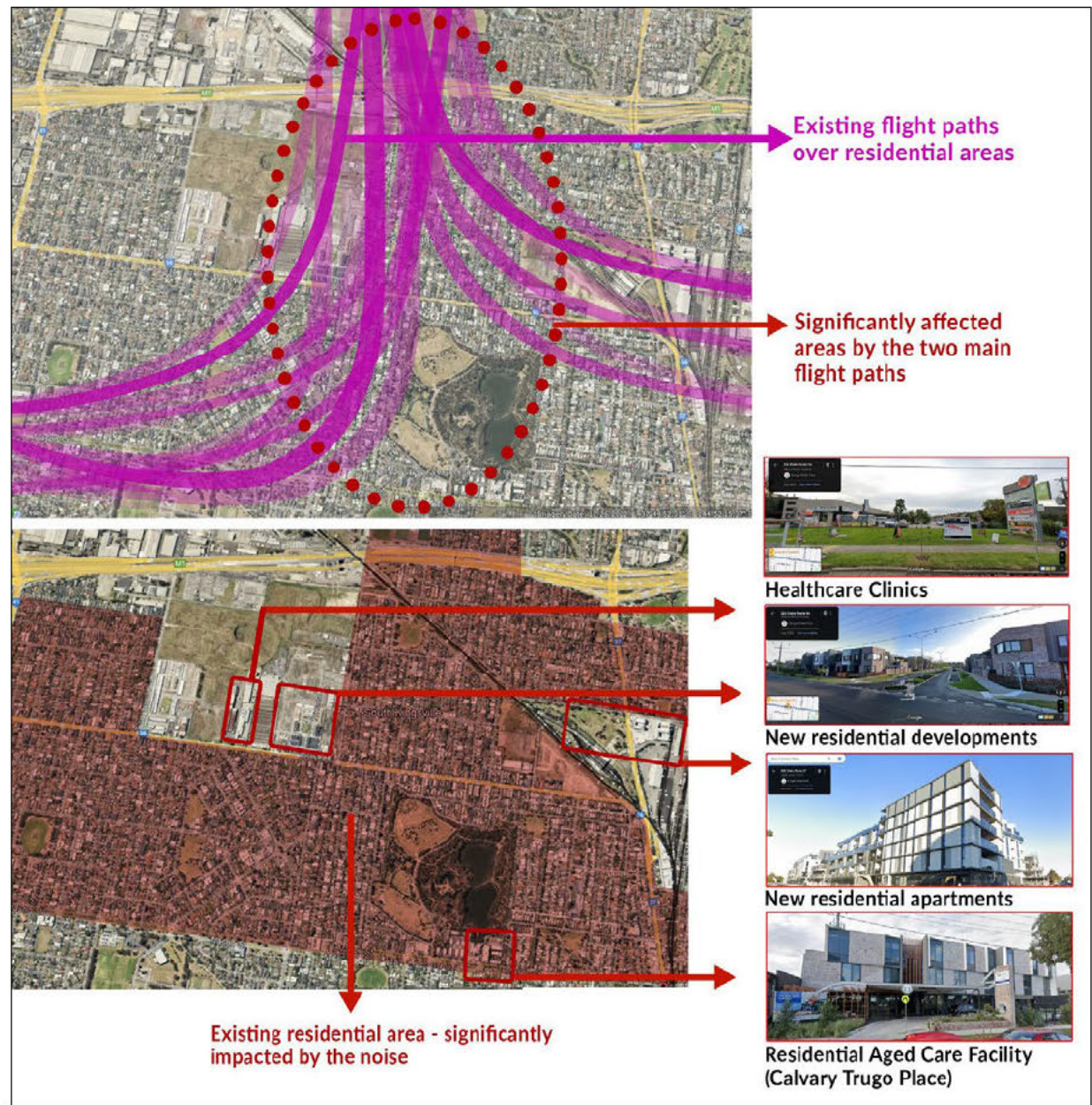


Figure 11: current flight paths over the new and existing residential areas



**A summary of our proposed solution:**

Suggestion 1: As shown in Figure 12, this report proposes a **minor adjustment** to the current flight path, diverting aircraft over the **M1 and industrial areas**. The redirecting aircraft over the industrial areas of Laverton North towards the industrial areas of Brooklyn and Tottenham, and then directing them towards Runway 34.

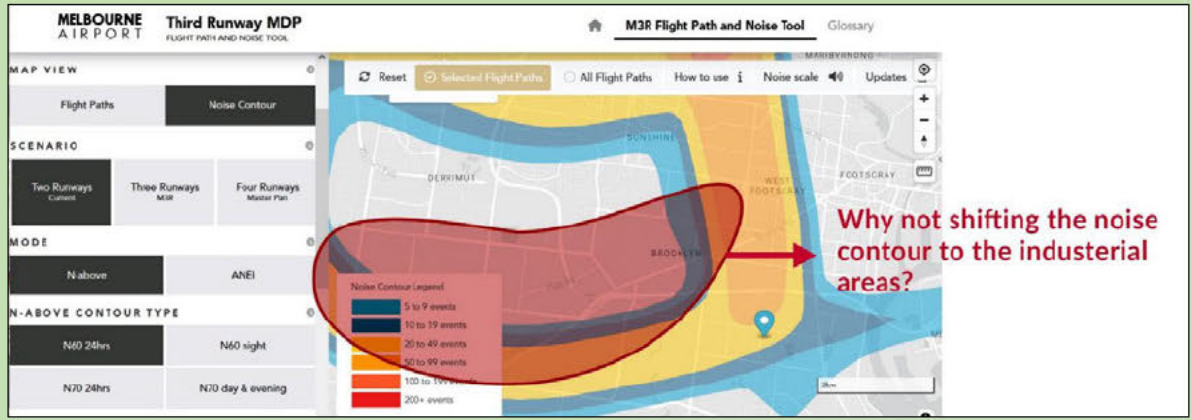
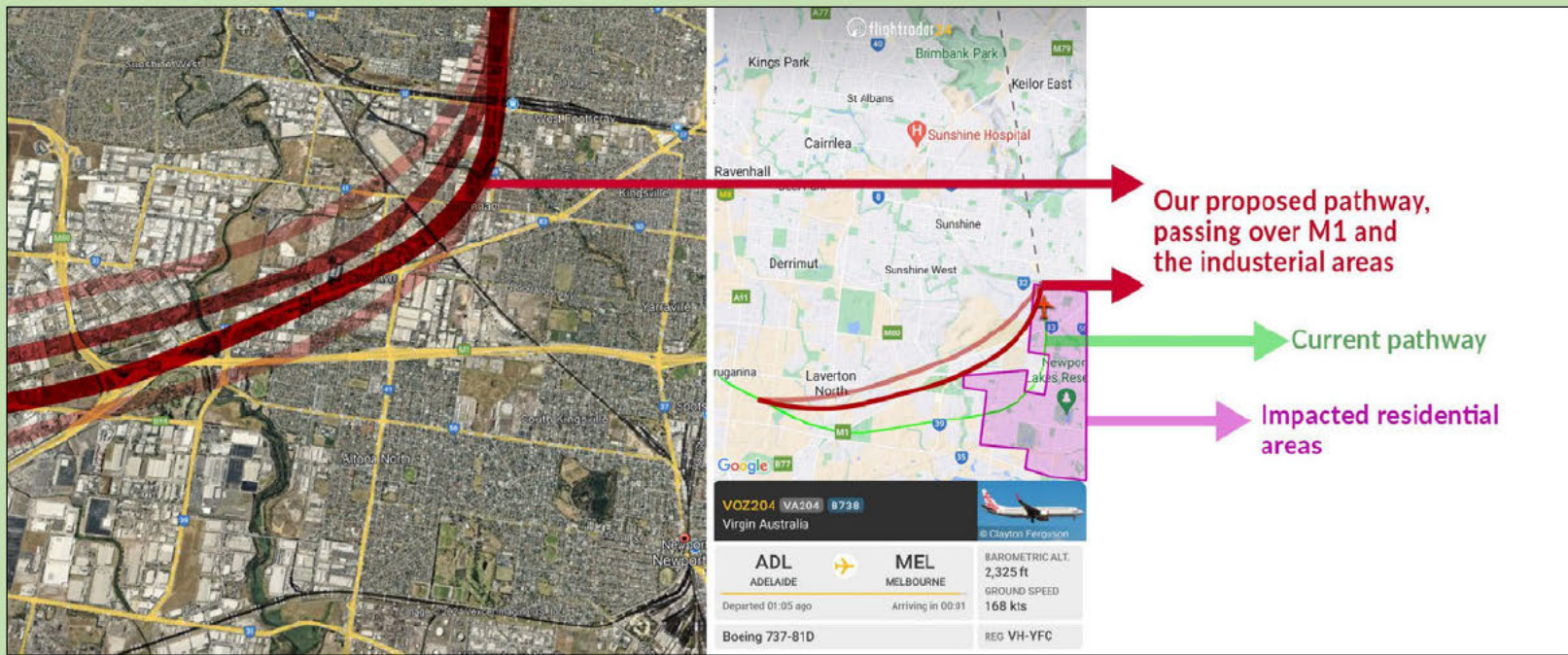
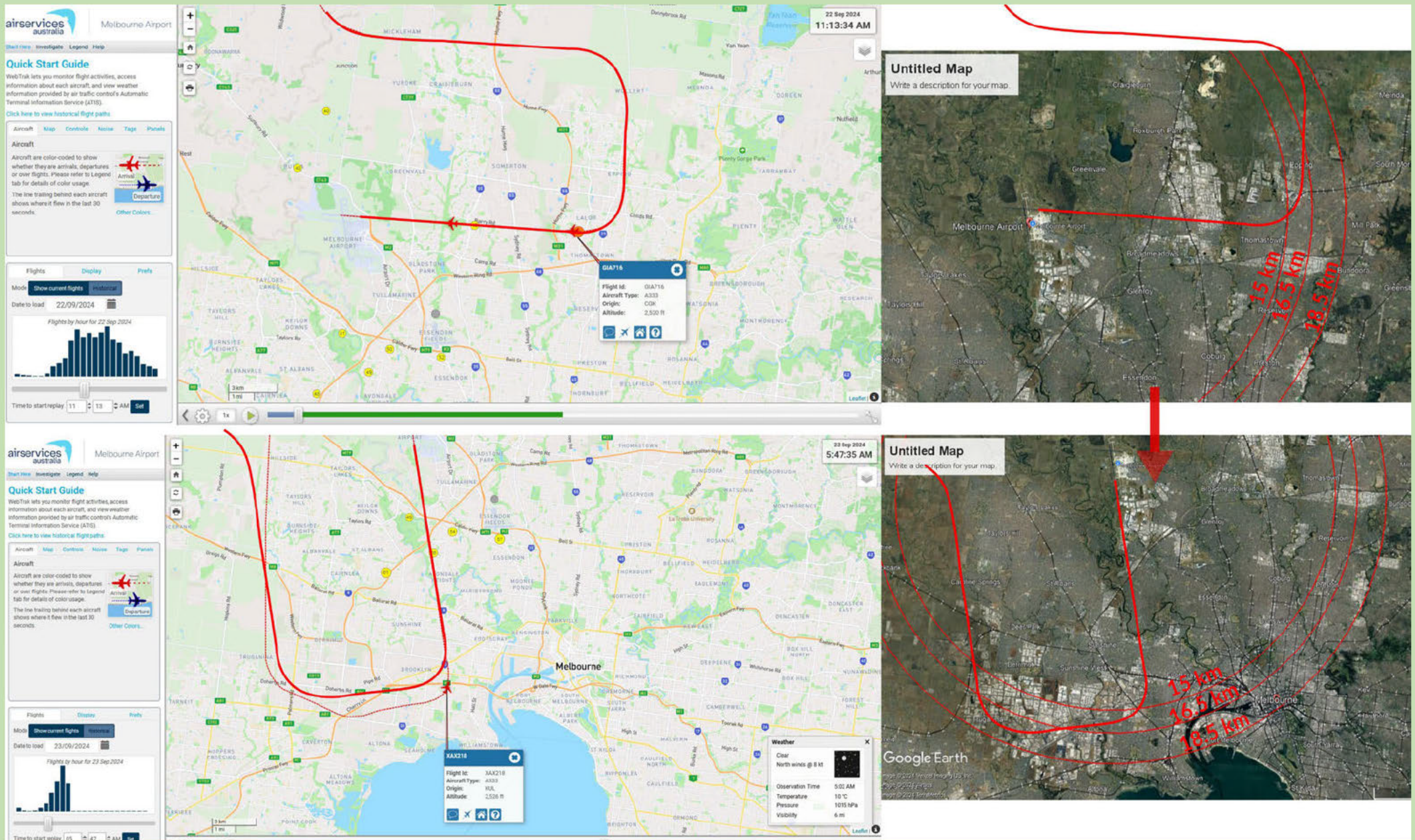


Figure 12: Shifting the turning point slightly to the industrial areas and M1





**Figure 13: Taking the same approach used for the design of East-West Runway: as shown in the diagram, if we replicate the same flight path, the turning point will be at a 15-16 km distance from Runway 34, instead of 18.5 km. This adjustment allows the flight path to overfly the industrial zone, minimizing the impact on residential areas. Please consider introducing this path for the majority of aircraft landing on Runway 34.**



Suggestion 2: As shown in Figure 14, we propose a second minor adjustment to the current flight path, directing aircraft over the **West-Gate bridge and M1** – residential areas. Although the changes may seem minimal, they will reduce the noise impact for many residents in the area.

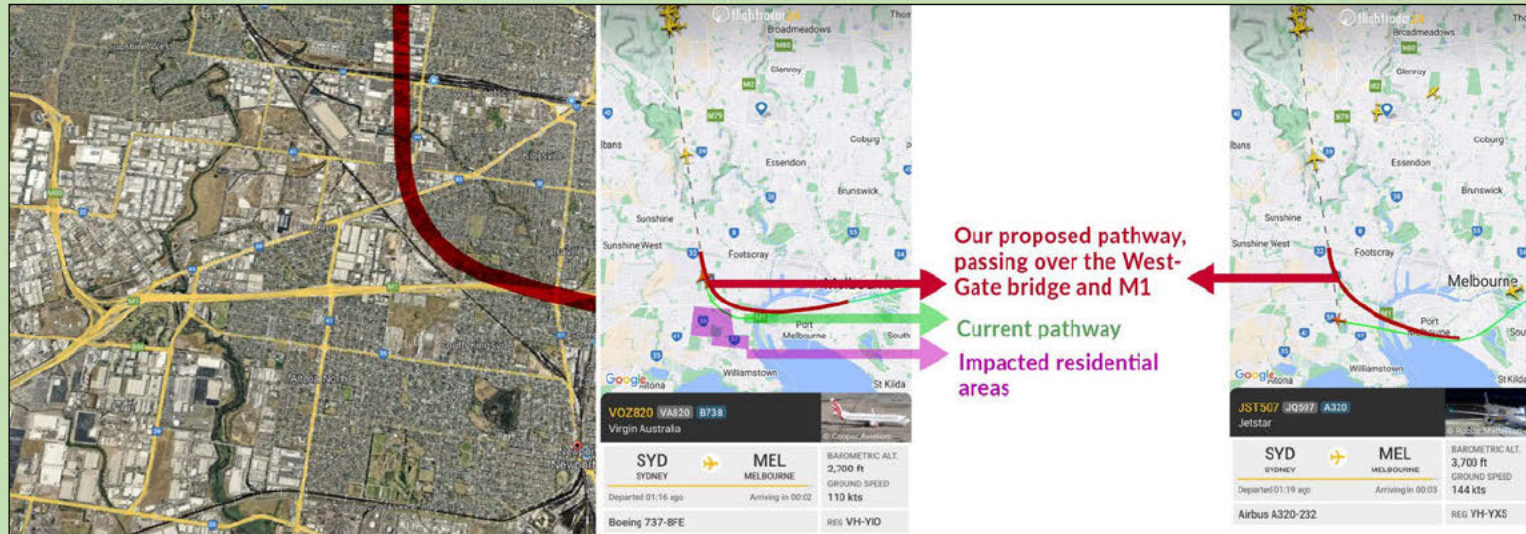


Figure 14: Shifting the turning point slightly to the West-Gate bridge and M1