

# **Inland Rail A2I RTS & PIR Response**

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Wagga Wagga City Council

## 1 Synopsis

The Wagga Wagga City Council (WWCC) response to the *Environmental Impact Statement* (EIS) was submitted in September of 2022. This has been in the hands of the proponent and the Department of Planning and Environment (DPE) for a period of approximately 14 months. The *Response to Submissions* (RTS) and *Preferred Infrastructure Report* (PIR) documents were published on 14 November 2023 and submissions were required by 6 December 2023. There are 34 files and folders, 709MB of data and we estimate in the region of 6000 pages of report, and these documents are in places, highly technical. It cannot be construed as reasonable to allow the proponent more than a year to respond but WWCC and the general public only 3 weeks. This has all the hallmarks of a “rubber stamping” process as is the fear of the inhabitants of this city.

WWCC has previously advocated for a bypass of the city. This would in turn alleviate all the issues raised below and those raised in the response to the EIS. We have however been informed by Government sources that there is no possibility of such a bypass and WWCC have to make the best of the solution running through the city.

The ARTC Inland Rail (IR) project has quietly been reduced from Melbourne to Brisbane to Melbourne to Parkes. It is not abundantly clear from the outputs provided whether or not the “end state” numbers have been used in all instances, particularly as regards train lengths, numbers etc.

Clear issues have been identified as to wait times at level crossings, due to the operational impacts of the ARTC IR route. Despite this, no mitigation is proposed. The use of new gates and a siren would appear to be the only solution raised. WWCC maintains that grade separation is the only solution to severing the city in half with resultant impacts on the emergency services, the health precinct, general delays and economic impacts.

Clear issues have been raised regarding noise and vibration and yet no mitigation is proposed. A future undated, unfunded study has been proposed post project providing no assurance that anything will be implemented.

The Bomen viaduct has had its speed limit further reduced to 20km/h which has, of course, not been factored into the train speed calculations. The proponent blithely states that the rectification work will be complete by July 2026 and then promptly absolves themselves of all responsibility by stating that it is not their issue. As it has a substantial impact on the city and the project, this cannot just be left to chance.

There are numerous technical issues raised regarding the various studies and these are material to the final outcome and require resolution.

It is the opinion of WWCC that the process has not materially advanced from where it was a year ago.

## 2 Introduction

Wagga Wagga City Council (WWCC) reiterates, as has been previously stated at length, that it continues to support Inland Rail (IR) as a major nationally significant project with the strategic ability to link producers, farmers, and businesses to national and global markets; supplementing and reducing our reliance on road freight, generating new opportunities for industries in our region and the City of Wagga Wagga. WWCC supports the objectives of the proposed Albury to Illabo (A2I) project.

Consistent with the approach taken with all previous project consultations, WWCC has undertaken a critical review of the Inland Rail Albury to Illabo (IR A2I) *Response to Submissions* (RTS) and *Preferred Infrastructure Report* (PIR). The objective of this review has been to ensure the best interests of the Wagga Wagga community continue to be represented and that public concerns raised previously during the *Environmental Impact Statement* (EIS) consultation period have been properly addressed. The findings of this review are documented here for submission.

It is with extreme dismay that the review of the A2I RTS and PIR has revealed the proponents' continued failure to properly assess the future operational impacts of the project, nor adequately address the submissions made by the local community. This document serves to once again highlight these items of concern and raise fundamental issues with the approach taken, for which WWCC seeks proper consideration and mitigation.

As raised previously, WWCC continues to believe the most significant impacts of IR on the Wagga Wagga community are mainly operational. With the majority of the adverse effects on local businesses and services WWCC raised in the submission made to the EIS being insufficiently considered.

The position of WWCC has been, and remains, that all impacts of IR (instantaneous and developing) must be fully assessed and addressed before construction commences as the community will be left with no opportunities for recourse once the IR project has been completed. The risks that the City of Wagga Wagga and the local community will be left with adverse impacts with no avenues for rectification available from any level of government must be mitigated before the project proceeds any further. The most pressing issues are:

1. Failure to mitigate significant impacts on the Wagga Wagga Road network resultant from increased rail operations and level-crossing closures.
2. Failure to mitigate sound and vibration impacts with the currency of the project, instead proposing to address at an unspecified date.
3. Failure of the sound and vibration study to include certain areas covered by the study, namely Lloyd.
4. Failure to include sufficient mitigation measures for the decreased safety of Edmondson Street bridge, which is being raised to a 10% slope with no design redundancy for the road user.
5. Failure to resolve numerous outstanding issues including:

- a. The misrepresentation of WWCC's position regarding Edmondson Street bridge speed limits and design.
- b. Poor consideration of train operations, including speed, numbers and lengths.
- c. Incorrect assumptions regarding the Bomen viaduct's condition.
- d. Reduction in operational assessments to only consider the Parkes to Melbourne portion of Inland Rail.

### 3 Issues with the approach of project proponents

It is made plainly evident by the responses to the EIS submissions put forth by IR, that there is still a clear, fundamental disconnect between what the proponents believe the scope of the IR project to be and the responsibilities they have to assess and address the impacts of A2I.

Based on the responses in the RTS and PIR, IR has made it clear they still believe they are only required to consider the impacts of the IR project directly where construction works are to be undertaken to accommodate double stacked trains. WWCC made it clear in their response to the EIS that the IR project is imposing a significant change of use on the entire line and therefore the impacts must be assessed along the full rail corridor. This has been done selectively and with no determinable outcome for the following:

1. Sound and vibration study: This has now, at WWCC's insistence, been conducted for the full length, but is however incomplete as outlined below and provides no solutions to the issues raised. In fact, it states that a review will be done on completion of the project and decisions taken then as to what to do to mitigate noise. We find this unacceptable.
2. Impacts on travel times at rail crossings have clearly indicated the acceleration of decline in levels of service at a number of important intersections, due to the IR's operational impacts. Despite this, IR continue to take the myopic view that they are building for "now" and not the "future". To quote Melvin Maylin in the Daily Advertiser of 29/11/2023 "*My own opinion is when it comes to resource allocation you build what you can afford that's appropriate for now, you don't build the wish list for 15 to 20 years into the future.*" The impact of what is being built for the "now" is going to have a material effect on the future, which is being ignored. Grade separation at Docker/Bourke Street is the only logical solution.
3. Severing the city from north to south will cause, not only inconvenience, but a very real threat to life in that emergency services will be cut off from their destination. Residents and emergency services will be stranded in the southern portion of the city, cut off from hospitals and medical facilities in the north.
4. Despite repeated affirmation that WWCC does not have a hand in setting speed limits on roads (solely the ambit of TfNSW). The report deliberately misrepresents WWCC's position in this matter in stating that we have "approved a 50km/h design and a 50km/h signposting". Further to this blatant misrepresentation the report does nothing to address the requests made to provide detail on mitigation methods to reduce the risks on the Edmondson Street bridge. In short, the only safeguards left to the road user is the ability of their vehicle to withstand an impact.

## 4 Specific issues relating to the PIR and RTS

### 4.1 Reduced scope of operation

In response to the Independent Review of Inland Rail the project has been amended with reduced operational train numbers for 2025 and 2040: 3 additional trains in 2025 and 6 additional trains in 2040 (difficult to tell, as we only have outputs without all of the inputs). This is in response to the amended priorities of the project which now focus on completion of the Melbourne to Parkes portion by 2027 and deferral of the Parkes to Brisbane portion. This is a significant change to the original proposed operations of 6 additional trains in 2025 and 10 additional trains in 2040. These amended train numbers represent a 50% reduction in Inland Rail operations. WWCC assert that train numbers and lengths from a Brisbane to Melbourne operational scenario be considered for the 2040 operational assessments as this is still a likely case of operation. Failure to do so means that the full impacts of operation, especially on traffic and transport, will not be considered properly in this assessment. This gives rise to the following clarifications required:

6. Is there a mechanism to re-evaluate the full effect of the whole project at some future time? Or is this achieving the outcomes required by stealth?
7. If no future evaluation is to take place why are the end state rail numbers, both in number and length of train, not being used in these studies?
8. As this portion of the project (Parkes to Brisbane) has been quietly deferred, when will it be completed?

### 4.2 Sound and vibration

The sound investigation has missed numerous existing sensitive receptors. Following the Rail Infrastructure Noise Guidelines (RING), other sensitive receivers such as schools, educational institutions and child-care centers (“OED”), have a different sound limit to residential buildings at 45 dBA (internal). Therefore, it is critical that facilities such as these are identified:

1. A whole new development in Lloyd has been missed in their investigation, including a childcare facility not being accounted for.
2. A preschool on Higgins Avenue is missing.
3. Any other development near the railway made in the last 2 years.

The concept sound wall map excludes many houses and a childcare building on Higgins Avenue, Day Street, Reddoch Drive, Langdon Avenue, Mason Street, and Holmes Street, even though the rail noise map highlights this area as significantly worse than anywhere else in the city, and well exceeds the 60db nighttime noise limits. The sound investigation considers the speed of the trains based on the existing

speeds of trains, but it is unclear if the sound model prediction includes the restricted speed limit on the Bomen viaduct being removed by the supposed future works fixing the issue.

The speed profile used for the sound modeling shows that no train ever goes below 30km/h, therefore it is unclear if the noise from a stopped train has been considered (appendix D part 1, figure 5 to 8). Reference is also made here to the Bomen viaduct section below for enforced speed restrictions.

Concluding this the study does not state that the sound wall will be built, but that a future undated, unfunded study will be carried out to decide what needs to occur:

9. When will this study be conducted? Why is the work not being planned for now? How will it be funded once the project is complete? What guarantees does WWCC have that anything will be done post project?
10. There is a problem identified and the study needs to be completed and implemented as part of the project with the required sound attenuation works as identified.
11. While the RING guidelines identify peak decibel levels, they ignore noise load. How are the effects of a substantial increase in db. per hour being considered?

### **4.3 Edmondson Street Speed Environment**

The RTS incorrectly states that “Council [have] confirmed the Edmondson Street speed environment as proposed by ARTC (50km/h design speed and 50km/h posted speed) was consistent with Austroads guidelines and is acceptable”. WWCC’s letter to Inland Rail, dated, 25th September 2023, makes clear that WWCC does not have the authority to nominate speed zones for any roads, as this is the responsibility of TfNSW and therefore cannot agree or reject to a modification of speed-zoning. Instead WWCC will assess the design of Edmondson Street Bridge for safety against Inland Rail’s proposed design speed. The operating speed and any departure from standard speed-zoning policy will need to be determined and implemented by TfNSW.

WWCC has previously noted that the design factors specified in the Edmondson Road bridge design drawings and design report (grade, stopping sight distance, crest K-value), all of which are at an absolute minimum for compliance, when combined, create an unforgiving and uncomfortable road system with little to no design redundancy. WWCC understands that the risks associated with this approach are planned to be addressed through a site-specific safety assessment, which is to be completed as part of reference design and will include appropriate mitigations to ensure that a reduction in road safety through the bridge reconstruction does not occur. WWCC has continually asked to see these mitigation measures though have been told to wait for the report as part of the detailed design.

In terms of the pedestrian bridge upgrades, there are several factors that have been raised by WWCC. The design must ensure accessibility and safety is incorporated. Proposed pedestrian footbridges, as designed with accessible ramps, shall also include the provision of lifts for the benefit of those in the community who need it and may not be able to traverse the ramps.

12. When will the proposed mitigation measures be presented? Or will this be another factor, like sound and vibration, that is unfunded and postponed to an undetermined future date?

13. What Crime Prevention Through Environmental Design (CPTED) measures are incorporated on the footbridge as this is adjacent to a school?

#### 4.4 Traffic and Transport

Traffic and transport impacts remain as the core issue of concern for WWCC. The EIS, on public exhibition in late 2022, contained limited traffic modelling which showed significant construction and operational impacts. Especially concerning level crossing closures, queue lengths and delay to emergency services. At the time WWCC highlighted these impacts and made clear that significant unmitigated operational impacts on the city cannot be tolerated.

As part of the RTS/PIR, IR have been asked to complete additional traffic modelling using a calibrated microsimulation traffic model. WWCC accepts this improved methodology and has assisted IR in providing a copy of the city traffic model. For construction impacts, IR have clearly established acceptable thresholds of impact and proposed several mitigation strategies to ensure impacts are within acceptable limits (traffic light optimisation and new road markings). However, for the operational assessment (2025 and 2040) IR have failed to establish acceptable thresholds for impact and have failed to propose a single substantial item of mitigation for these impacts. The proposed operational impact mitigations are entirely limited to an engagement plan and educational campaign to assist the City of Wagga Wagga to 'live-with' the documented impacts. It should be noted that this modelling accounts for the reduced scope of operation resultant from the deferral of the Parkes to Brisbane portion of Inland Rail. Should this portion be in operation by 2040 the operational traffic & transport impacts will be greater than reported.

The impacts resultant from operation are significant, especially for the 2040 operational scenario. For the 2040 operational morning peak the below intersections see a reduction in service compared with the base 2040 model.

1. **Bourke Street / Coleman Street B to D (>100% delay increase)**
2. Pearson Street / Dobney Avenue (North) A to B (+46% delay increase)
3. Fernleigh Road / Bulolo Street A to B (+39% delay increase)
4. Docker Street / Meurant Avenue B to C (+21% delay increase)
5. **Docker Street / Chaston Street B to D (+79% delay increase)**
6. Bourke Street / Athol Street B to C (+100% delay increase)

The modelling also shows that for Fernleigh Road level-crossing the average delay would increase by 7% and for Docker Street level-crossing average delay would increase by 13%. The modelling showed a peak queue length of 436m in the Northbound Lane of Bourke Street, stretching back to Urana Street roundabout and yet no delays at adjoining roads within the queue length. The modelling showed delays at level crossing as below:

Fernleigh Road



1. 2025 – 4.21 minutes (AM peak), 2.61 minutes (Midday), 2.81 minutes (PM peak)
2. 2040 – 4.12 minutes (AM peak), 2.63 minutes (Midday), 2.83 (PM peak)

#### Docker Street

1. 2025 – 5.17 minutes (AM peak), 3.56 minutes (Midday), 2.99 minutes (PM peak)
2. 2040 – 6.46 minutes (AM peak), 3.40 minutes (Midday), 12.77 minutes (PM peak)

The study has not adequately considered the impact of increased emergency response times in Ashmont when Fernleigh Road level crossing is closed. The report claims that level crossing is unlikely to be used by residents to access the hospital and the area can be serviced by emergency vehicles from the hospital rather than the Ambulance Station but provides no evidence to support this or indeed any logic as to why this should be the case. The report disregards all aged care facilities south of the rail line including those immediately adjacent to the Bourke Street / Docker Street crossing. Suggesting no mitigations required to address level crossing congestion because alternative emergency vehicle routes exist is not a practical solution. It requires the foreknowledge of crossing closures and does not consider if those alternative routes can be accessed through the congestion.

ARTC / IR continue to view the scope of the project as individual, discrete infrastructure works required to accommodate double-stacked trains. This scope fails to properly capture the change of use for existing infrastructure that does not need to be modified and therefore does not properly consider all wider-reaching impacts of this project.

What is clear is that, either through NSW DPE or IR, the requirement to address operational traffic and transport impacts is completely absent from this process. The significant traffic and transport impacts identified through the agreed upon methodology have been left standing by IR, without any threshold or assessment framework in place and without any proposed mitigation. WWCC cannot accept the reduction in service, to the core transport infrastructure of the city, which this assessment has revealed. Appropriate operational impact thresholds must be identified, and appropriate mitigation strategies identified.

14. Significant operational impacts on traffic, relating to level-crossing closures, have been identified in the assessment. However, no thresholds or mitigations have been proposed for these impacts.

## 4.5 Traffic Modelling Methodology

The analysis of the updated traffic modelling presented by ARTC IR completed by our Traffic Engineer has raised numerous questions relating to the results and methodology that require clarification.

The PIR establishes thresholds for increase in delay times and traffic volumes that trigger the need for mitigation when breached. We note that a 10% threshold has been used to compare the results of the “with construction” and “without construction” model



scenarios. It is not clear why 10% has been adopted as the appropriate threshold. Similarly, a 20% threshold has been used to assess intersection delay times, again without any justification. Reference should be made to the source, if any, or the methodology of deriving these thresholds.

Within the various modelled scenarios, a 1% per annum increase in light vehicle traffic has been assumed. This is consistent with the approach taken for previous traffic modelling in Wagga Wagga completed prior to 2020. However, the region has experienced significant changes in demographics and sudden and rapid growth in population in subsequent years. As such, it is the position of WWCC that the 1% per annum growth rate is no longer appropriate and a 1.5% linear rate should be adopted.

Concerns previously raised by WWCC regarding the impact on overall network performance during the closure of the Edmondson Street bridge appear to have been confirmed. The results of the 2024 Construction scenario show significant exacerbation of traffic delays over the 2024 Base model with notable decreases in Level of Service (LOS) for all surrounding intersections, including major arterial junctions. The mitigation measures proposed to address these impacts appear to be entirely ineffective, having little to no impact on reducing the projected queue lengths or delay times.

In the modelling of queue lengths and delay times resulting from level crossing closures, the PIR utilises a derived average level crossing closure time. WWCC takes a number of issues with this approach. While we note the report states the average to be taken from level crossing closure times provided by ARTC for the month of June, WWCC requires further clarification of exactly what data was used in the calculation and how the average was reached. Specifically, how long were the trains used in the calculation? Were closure times for only 1.2km trains included? Further, WWCC takes issue with the use of an average closure time as opposed to the worst case as it presents the IR project in a more positive light while deceptively minimising the true impacts.

The results of the Docker Street / Bourke Street and Fernleigh Road level crossing modelling presented in the report show the expected queue lengths for the 2025 construction and 2040 operational horizons. These queue lengths are seen to be significant, up to 436m at Docker Street / Bourke Street as noted previously, and the proposed signal optimisation strategies proposed in the PIR are not expected to address the issue in any meaningful way. However, WWCC notes the mention of additional potential mitigation measures in the PIR. Such strategies should be developed during the design phase and be presented to WWCC prior to construction commencing.

It is noted that the SIDRA model has been updated with traffic count data undertaken in June 2023. The report states that for intersections located within Wagga Wagga the micro-simulation model will be used to assess impacts. It is unclear from the results presented whether or not these impacts have actually been assessed as part of the PIR or if they will be assessed later as part of some future study. As part of the traffic modelling, ARTC IR have undertaken an assessment of the construction impacts on the Morgan Street corridor during the 2025 horizon. It is however unclear what the purpose of this assessment is when all other links that are expected to be impacted by construction traffic are excluded from the report.

The report claims that it is difficult to specify a typical train speed given the number of variables involved. This being the case, logically it should also be difficult to calculate level crossing closure times, delay times and queue lengths. Yet ARTC IR seemingly have no issues arriving at their results for these factors and concluding the resulting impacts on the surrounding community is negligible.

15. A reassessment of queue lengths and delays at level crossings should be undertaken with a likely worst case closure duration and with a revised growth rate of 1.5% annually. This in turn is seen to impact on queue lengths and travel times thereby resulting in deterioration of Level of Service (LOS) at some major intersections.
16. The methodology and reasoning behind the use of the 10% and 20% thresholds used in assessing the impact of delay times should be fully explained.
17. What was the data set used to determine the average crossing closure times? Have all trains less or greater than 1.2km in length been excluded?
18. All potential mitigation strategies should be fully developed prior to the commencement of construction and presented to WWCC and the community of Wagga Wagga to be given the opportunity to provide feedback.

#### **4.6 Consideration of Bomen viaduct condition**

WWCC re-affirm that further consideration be given to the potential impacts caused by speed restrictions on the Bomen Viaducts regarding likely train speeds through Bourke Street / Docker Street crossing and resultant level-crossing closure times. Inland Rail's Response to Submissions (RTS) states *"The viaduct across the Murrumbidgee River has a temporary speed restriction of 40 km/h. However, this temporary speed restriction, which would be removed once rectification works (that do not relate to Inland Rail) to the viaduct have been completed, is anticipated to occur by mid-2026."* Inquiries have revealed that a 40 km/h speed restriction has now been in-place for at least four consecutive years on portions of the Bomen viaducts and as of November 2023, this restriction has been reduced to 20 km/h for all trains. The current restriction encompasses *Viaduct No. 4* between the Oura Road rail overpass and the Murrumbidgee River rail bridge. Considering the stated rectification date of July 2026, this temporary speed restriction represents a significant period of non-typical operation: 7-years.

The Bomen viaducts were constructed in 1901 and have now been in continuous operation for 122 years. They represent an ageing piece of infrastructure critical to the operation of Inland Rail. It is essential that this infrastructure and its condition be appropriately assessed within the scope of the project. To resolve this item of concern, WWCC suggest that Inland Rail provide further information regarding the nature of the track-geometry fault, the extent and complexity of the corrective actions required on the viaduct to remove the restrictions, and sufficient information to demonstrate the likely removal of speed restrictions by the stated date of July 2026. If speed restrictions are likely to stay in-place longer than the stated period WWCC suggests that level-crossing closure times be used in traffic modelling which are representative of train

speeds at the Bourke Street / Docker Street crossing considering acceleration from 20km/h or 40km/h beyond the speed restriction, not the 80km/h freight line speed.

19. The dismissal of this issue as not being the responsibility of ARTC IR is not an acceptable solution. Simply accepting the lifting date as being July 2026, without any further research or assurance and indeed concrete plans for the upgrade/replacement does nothing to allay the fears of even further reductions in the speed limit to 10km/h. When is this work due to be executed, has it been budgeted and when is it due for actual completion?