

FLYING MINUTE: SUBMISSION TO MAIN ROADS WA ON THE REVISED WESTERN AUSTRALIA TRAFFIC SIGNALS APPROVAL POLICY AND PROCESS

By Max Bushell, Senior Policy Advisor, Road Safety and Infrastructure

RECOMMENDATION

That State Council endorse the Submission to Main Roads WA on the Revised Main Roads Western Australia Traffic Signals Approval Policy and Process.

RESOLUTION 242.FM/2024

CARRIED

Executive Summary

- This submission is a response to a request for review of the Main Roads Western Australia Traffic Signals Approval Policy and Process.
- This submission supports three existing policy positions.
- This Policy and Process has historically been controversial, so WALGA undertook a consultation process with Local Governments to develop a submission reflective of current issues relating to this Policy and Process.
- Diverse issues were raised by Local Governments, including concerns around the accommodation of non-motorised users, the preference for roundabouts, design requirements, and the relationship of the Policy and Process to the Structure Planning Process, among others.
- Generally, Local Governments would like more control over the selection of intersection type to reflect community and strategic transport goals and planning documents.
- The Infrastructure Policy Team approved the recommendation that the submission be provided to State Council for endorsement at its meeting on 29 July.

Attachment

- Traffic Signal Approval Policy – WALGA Submission
- Detailed comments on the Policy and Process are provided in the attached spreadsheet: Traffic Signals Approval Policy – WALGA Feedback

Policy Implications

This submission will create a new policy position, outlining the Local Government perspective on the Main Roads Traffic Signals Approval Policy and Process.

The submission is aligned to the following existing Advocacy Positions:

- 5.3.5 Active Travel to Schools
- 5.3.6 Pedestrian Crossings
- 5.2.7 Road Safety Strategy

Background

Main Roads WA released a draft Revised Traffic Signals Approval Policy and Process (TSAP) for review on 21 May 2024. The WALGA Infrastructure Team initiated a comprehensive review of the policy during June 2024; this review identified significant issues with the Policy and Process and highlighted the need for more extensive consultation with Local Governments.

Consultation

In recent years, Local Governments in WA have voiced serious concerns on various elements of this policy, which are not addressed in the revised draft. WALGA invited the following Local Governments to provide comment. This list was compiled based on the presence of traffic signals in these Local Governments.

- All Perth Metro Local Governments
- Karratha
- Geraldton
- Kalgoorlie
- Northam
- Bunbury
- Busselton
- Dardanup
- Collie

The consultation process took place over June-July 2024. This submission is due to Main Roads on 15 August, which is too soon to be tabled at the next Ordinary State Council meeting.

The Infrastructure Policy Team considered this item at a meeting held on 29 July and approved the recommendation that the submission be provided to State Council for endorsement.

Comment

The WALGA review and feedback from Local Governments highlighted some significant issues in this draft version of a new Main Roads WA Traffic Signals Approval Policy and Process, which are summarized below.

- Roundabouts – The strong preference for roundabouts does not always align with Local Government strategic goals and may place an undue financial burden on Local Governments in instances where other intersection options are less costly or provide other net benefits. The requirement to prove a roundabout is not feasible should be removed and a process implemented whereby the best option for the asset owner can be selected.
- Non-Motorised Users – Signalised intersections provide a safe place for non-motorised users to cross and it is essential that non-motorised users be accommodated safely and comfortably at intersections. Treatment options to support better pedestrian/bicycle networks should be actively considered and encouraged in this Policy and Process. Roundabouts should safety accommodate non-motorised users with priority.
- Intersection Performance Metrics – These metrics, e.g. intersection Level-of-Service, should be considered in light of Local Government strategic transport planning documents and with due consideration to the priorities of various transportation modes.

- Bureaucracy/Complexity – This Policy and Process should be simplified as a general rule and should avoid the use of overly bureaucratic and technical language. Additionally, workflows should be developed for simple and complex projects, keeping Local Government strategic transport planning goals in mind.
- Design Requirements – Various modeling software should be allowed to support reducing costs and ensuring a broader scope of expertise is present in Local Government.
- Local Government Asset Ownership – The policy should acknowledge that Local Governments are in the best position to make decisions regarding the development of intersections under their control and should have priority advising powers over the type of intersection selected for implementation.
- Relationship to Structure Plans - The Policy and Process should be very clear on how the TSAP process relates to the Structure Planning process and should honour previous decisions and plans, e.g. approved arrangements under Development Contribution Plans. Where traffic lights are proposed and supported (including by ministerial approval), this should be honoured, while timeframes should be amended (from two years to four years) to align with the planning system. Once Structure Plans have been finalized, the selected signal type should not be subject to change except by agreement.

Broadly, Local Governments would like more control over the selected signal type/intersection design to better align with their strategic community goals and transport plans and would support a simplified and less bureaucratic Traffic Signals Policy and Process.

FLYING MINUTE OUTCOME

Poll created: 31/07/2024 at 10:30

Poll closed: 07/08/2024 at 23.59

The submission was endorsed.

Following feedback from State Councillors during the Flying Agenda process, the following changes to the submission were made:

- Included the following bullet point under the "Non-Motorised Users" heading: *Roundabouts should be designed to slow road users with raised plateaus and with at-grade pedestrian crossings on each leg of the roundabout where appropriate. Infrastructure for bicycles should not end at the roundabout, but should continue through the roundabout.*
- More detail added to the following bullet point: "Pedestrian and bicycle counts are often less available than vehicular counts *and pedestrians are less likely to cross when it is unsafe to do so*, which systematically leads to vehicles being prioritised over non-motorised modes. This policy should support moving people safety, rather than prioritising vehicular movements."

WALGA Review of Main Roads Western Australia Traffic Signals Approval Policy and Process

About WALGA

The Western Australian Local Government Association (WALGA) is an independent, member-based, not-for-profit organisation representing and supporting the WA Local Government sector. Our membership includes all 139 Local Governments in the State. WALGA uses its influence, support and expertise to deliver better outcomes for WA Local Governments and their communities. We do this through effective advocacy to all levels of Government on behalf of our Members, and by the provision of expert advice, services and support to Local Governments.

WALGA's vision is for agile and inclusive Local Governments enhancing community wellbeing and enabling economic prosperity.

Background

Main Roads WA released the Revised Traffic Signals Approval Policy and Process (Policy and Process) for review on 21 May 2024.

Consultation

To provide a consolidated view from the Local Government sector, the WALGA Infrastructure team commenced a consultation with affected Local Governments.

The following Local Governments were invited to provide comment to WALGA. This list was compiled based on the presence of traffic signals in these Local Governments.

- All Perth Metro Local Governments
- Karratha
- Geraldton
- Kalgoorlie
- Northam
- Bunbury
- Busselton
- Dardanup
- Collie

WALGA received six responses from Local Governments, all from the metropolitan area.

Identified Issues

While detailed comments are provided to specific areas within the document in the attached spreadsheet, the following is a summary of the key areas of feedback from the Local Government perspective, organised by topic.

Roundabouts

- Main Roads' strong preference to prefer roundabouts – this does not always align with Local Government's strategic vision for their community and community safety (particularly for non-motorised users)
- Recommendation to review and revise the warrants for implementing different types of intersections to allow for more flexibility and for the consideration of community goals in selecting intersection types.
- Consider the implication of repairing roundabouts, which will fall on Local Government, when large vehicles mount the roundabout and damage the kerbing.
- Economic considerations should also be considered in the Local Government context. In some cases, roundabouts may be a reasonable approach for technical reasons, but require more land and are therefore not economically feasible, leading to no action being taken. This is a bad outcome, when achievable improvements are not implemented.
- The requirement to prove a roundabout is not feasible should be removed in favour of supporting a best option for the asset owner and users of the intersection.
- This policy essentially forces developers to default to roundabouts without due consideration of other potential intersection options; this Policy and Process should allow these other options to be explored.

Non-Motorised Users

- Suggestion to strengthen the language around accommodating non-motorised users safely and comfortably at intersections in built-up areas.
- Guidance should also be provided on best practice in accommodating pedestrians, including people with disabilities, and bicycles at intersections via sound/lights/vibrations in this Policy and Process.
- This Policy and Process should support improving signal timing for non-motorised users.
- Pedestrian and other non-motorised users should be accommodated, through zebra crossings, signals, or other treatments at intersections. This is particularly important near schools, town centres, and venues attracting large numbers of vulnerable groups such as people with disabilities. More weight should be given to these criteria, or these areas should be treated differently, as roundabouts provide no safe location for pedestrians/non-motorised users to cross and the presence of non-motorised users should be prioritised in some situations.
- Consideration that not all pedestrian crashes are recorded and that pedestrians avoid sections with poor LOS. Note that RMS lists requirement for Road Safety Audit.
- Provide example design drawings for Roundabouts (inc. Roundabout metering signals) that include signalised pedestrian crossings.

- Pedestrian and bicycle counts are often less available than vehicular counts, which systematically leads to vehicles being prioritised over non-motorised modes. This policy should support moving people safety, rather than prioritising vehicular movements.
- The MRWA *Guidelines for Pedestrian Crossing Facilities at Traffic Control Signals* should be integrated into this document for clarity and ease-of-use.

Intersection Performance Metrics

- Suggest revisiting the suggested metrics for evaluating intersection performance, based on Local Government strategic transport plans and goals and the context of the intersection.
- Suggestion to focus on audiences when determining signal timing, e.g. heavy/long vehicles should be accommodated to traverse intersections safely.

Scenario Planning

- Consideration of a more targeted scenario planning approach to forecasting travel demand involving Local Governments and their role in determining future land use plans

Bureaucracy/Complexity

- Recommendation to simplify approvals process.
- The language used in the Policy and Process is overly bureaucratic, making interpreting the document difficult.
- The Policy and Process does not have any mechanism to prioritise grant funded projects, which may prevent Local Governments from using grant funding for signalised projects or result in numerous variations.
- Simple projects are subject to the same criteria as complex projects. The Policy should differentiate between complex and simple projects. Simple projects can be identified through a checklist, e.g. removal of right turn filters, etc. and approved via a more streamlined process.

Design Requirements

- Recommendation that the Policy and Process allow flexibility in design, particularly with regard to using different types of intersection modelling software.
- Training in LinSig is often not available, so flexibility is essential for Local Government practitioners.
- Many Local Governments do not have the internal capacity to utilize LinSig/SIDRA, which means consultants must be engaged. This has cost implications for Local Government and should be considered.

Asset Ownership

- Notes should be added to the policy around asset ownership, with the asset owner having priority advising powers over the type of intersection selected for implementation.

Relationship to Structure Plans

- The Policy and Process should be very clear on how the TSAP process relates to the Structure Planning process. Stage 1 approval should be a minimum requirement for Structure Plan approval, while the Policy and Process should reference relevant MRWA Policies, provide a flow chart for approvals, and provide delegations of authority.
- This Policy and Process cannot sit in a vacuum and must honour previous decisions and previous plans, e.g. approved arrangements under Development Contribution Plans. Where traffic lights are proposed and supported (including by ministerial approval), this should be honoured.
- Two-year timeframe is too short. Within the planning system, a four-year approval is now standard; this policy should follow suit. With regard to Structure Plans, this should be considered “locked in,” so the approval period would be moot.

Detailed Comments

Detailed comments Policy and Process have been compiled based on the above principles and can be found as tracked changes and comments in spreadsheet of recommended changes, attached to this submission.

Since these comments and suggestions are detailed and far reaching, it is recommended that Main Roads convene a workshop with Local Government representatives to work through the issues and arrive at a mutually acceptable outcomes.

Network Operations Planning Branch - Policy, Processes and Guidelines - Stakeholder Feedback

Policy/Process/Guideline - Title:

Traffic Signals Approval Policy-Network Operations Directorate

Content Manager:

D17#582749

Number	Stakeholder Name/Position	Date	Page	Paragraph	Clause Number	Comment
1	WALGA	31/05/2024	8		5.1	What about an upgrade to another road, not classified as a highway/freeway? Not all Main Roads are classified as highways/freeways, is that correct?
2	WALGA	31/05/2024	14		7.1.2.6	When are pedestrian and cyclist counts appropriate? As Local Governments maintain this infrastructure in many cases, I think this should be considered in every instance within an urbanised area/townsite boundary.
3	WALGA	31/05/2024	15		3 7.1.3	Could/Should more high-level strategic, travel demand modeling (e.g. VISUM, TransCADD, EMME, etc.) also be considered here? This will provide a longer-term understanding of the capacity needs at intersections, which may have an influence on design selection.
4	WALGA	31/05/2024	15		7 7.1.3	Does this paragraph prohibit submitting proposals to reduce the capacity at intersections? If so, Local Governments may wish to discourage motor vehicle traffic through intersection design - this should be allowed, as this is often in line with Local and State Government strategic goals. If not, can this be reworded to be a bit more clear?
5	WALGA	31/05/2024	17		1 7.1.7	From a Local Government perspective, roundabouts have significant issues in terms of people safely using footpath and cycling infrastructure, as the motorised vehicles never stop. Signals are often the only place where active transport users can safely cross a road, so this preference for roundabouts (at least without adequate designs to safely stop motor vehicles and allow pedestrians/cyclists to stop) actively creates unfriendly environments for active transport. Consider removing this sentence and reversing this position. None of the stated reasons apply for other modes of transport except for motor vehicles, which also must be considered by this policy.
6	WALGA	31/05/2024	17		2 7.1.7	<p>These justifications may apply on rural highways where consideration of other modes of transport is less of a priority and vehicle throughput and travel time reductions are paramount, but in complex urban environments (where vehicle throughput and travel time reduction are not the chief goals of the road network), roundabouts should not be considered. While they may be safer for motor vehicles and can achieve higher capacities for motor vehicle traffic, roundabouts are a serious impediment to people using other modes of transport than motor vehicles. In fact, they are dangerous for pedestrians and cyclists to navigate. Better designs which safely accommodate non-motorised users and require vehicles to stop should be provided by Main Roads and, generally, roundabouts should be avoided where pedestrian/cyclist traffic is expected to use the intersection.</p> <p>At a minimum, this section should reference the deficiencies of roundabouts for users of other modes of transport, namely that traffic never stops, making the intersection dangerous for pedestrians and cyclists (among other reasons). This section should also define the conditions where roundabouts are best applied, namely away from areas where people are likely to be using other modes of transport.</p>
7	WALGA	31/05/2024	18		7	Non-motorised modes should be added here as a key consideration for the type of intersection in urban areas in addition to the traffic volumes. Additionally, consultation with the Local Government on their non-motorised plan should be undertaken to ensure that priority corridors for non-motorised transport are considered and accommodated at intersections.
8	WALGA	4/06/2024	18		8	Considering a four-way stop with pedestrian crossings on all legs should also be an option under the right conditions. While the counter-argument to this is that there is too much uncertainty, it is exactly this uncertainty that makes everyone move through the intersection slowly and carefully. This is also a very cost-effective treatment to stop traffic and provide opportunities for people to safely cross.
9	WALGA	31/05/2024	19		2	In the example sentence: Multi-lane roundabouts should be avoided in urban areas, as they are nearly impossible to safely navigate for non-motorised users. If the roundabout is located in a rural area, then this design type would be more acceptable.

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10	WALGA	31/05/2024	19	3	Consideration of a robust travel demand model process would give a sense of the impact of specific intersection designs on overall network capacity and should be an input here.
11	WALGA	31/05/2024	19	4	Again, consider removing roundabouts as the preferred treatment, as they are very difficult to navigate for non-motorised users.
12	WALGA	4/06/2024	20	1	I would add that "for all modes" after "...become familiar with current traffic patterns <i>for all modes</i> , land-use..."
13	WALGA	4/06/2024	20	3	If level of service is a consideration, I would clarify what the appropriate level of service is for different contexts. For instance, level of service A is likely not the desired level of service for a commercial strip, where traffic is encouraged and the presence of traffic, slow moving vehicles, and some delay encourages slower speeds and supports people using other modes of transport and safely crossing the road. Level of service C or D would likely be more appropriate here. In fact, consider disregarding level of service as a metric on some facilities where other modes are/should be prioritised over motor vehicles.
14	WALGA	4/06/2024	22		These flow charts are very helpful.
15	WALGA	4/06/2024	24	2	Are pedestrian and bicycle counts conducted? Including some measure of demand for other modes would be helpful to include as part of a submission. Also, considering whether the intersection falls on a key intersection identified in the Local Government's integrated transport movement/Walk and Ride Plan should be considered in intersection design selection. This will give a measure of proactive planning to the selection of intersections designs, instead of having a completely demand responsive approach, which may not align with the strategic vision for the Local Government in terms of transport.
16	WALGA	4/06/2024	24	2	There doesn't appear to be a Section 7 of the Main Roads' Design Report Guideline
17	WALGA	4/06/2024	24	5	Does this paragraph prohibit submitting proposals to reduce the capacity at intersections? If so, Local Governments may wish to discourage motor vehicle traffic through intersection design - this should be allowed, as this is often in line with Local and State Government strategic goals. If not, can this be reworded to be a bit more clear?
18	WALGA	4/06/2024	28	1	Point 8: How will public transport, pedestrian, and cyclist movements/crossings be managed?
19	WALGA	4/06/2024	28	1	Point 7: With robust Local Government land use data and scenario planning, this could be provided with much greater clarity.
20	WALGA	4/06/2024	28	2	As with previous comments (no. 4 and 17) , please clarify this statement.
21	WALGA	4/06/2024	29	1	Ramp Metering at Roundabouts provides an option to provide pedestrian crossings on legs that are currently with right-of-way. Perhaps guidance for providing pedestrian crossing priority could be explored when roundabout ramp metering is in use.
22	WALGA	5/06/2024	30	4	As with previous comments (no. 4, 17, and 20) , please clarify this statement.
23	WALGA	5/06/2024	31	1	Should other modes also be considered in this Design Report?
24	WALGA	5/06/2024	37	6	It would be good if other modes were also considered here.
25	WALGA	5/06/2024	38	2	As with previous comments (no. 4, 17, 20, and 22) , please clarify this statement.
26	WALGA	5/06/2024	60		This would be a good place to reference roundabout designs that provide pedestrian priority crossings
27	WALGA	5/06/2024	61	1	Likewise, here, showing the pedestrian infrastructure as a critical part of this drawing would help make including high-quality pedestrian facilities standard at all intersections.
28	WALGA	5/06/2024	65	1	Good to see some consideration is given to impacts to all modes.
29	WALGA	5/06/2024	68	2	Consideration of other modes should be referenced here as critical to examine.
30	WALGA	5/06/2024	69	6	150 seconds is very, very long. Perhaps implementing maximum cycle times would be a better approach. Having no minimums will ensure that traffic is cleared on all signal phases quickly.
31	WALGA	5/06/2024	69	6	Pedestrian facilities should be considered or even required in every instance within an urbanized area or in an area forecast to become more urban over time. Transport plans at the Local Government level should be referenced to better understand where pedestrian flows are likely to occur in the future.
32	WALGA				This policy cannot sit in vacuum and must honour previous decisions and previous plans, e.g. approved arrangements under Development Contribution Plan, where traffic lights are proposed and supported. This should be honoured.

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33						Two year timeframe is too short. This is not realistic for Local Governments. Planning system now does four year approvals as standard in recognition of constraints; this policy should follow suit. If you have Structure Plan in place, then approval should be "locked in", so two year approval period is then moot.
34	WALGA	4/06/2024	General			Consideration of the outputs of a region-wide model (e.g. using VISSIM etc.) would be good to include here in order to try and "get ahead of demand" for transport infrastructure investment. Better large-scale network modeling will provide useful information on specific intersection upgrade projects. Processes to better reflect land uses in Local Government areas (scenario planning? - LGs should be involved in this) should be undertaken, as this will massively improve the accuracy of the model.
35						