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Dear Josh,

**Re: Design of Roads and Streets manual**

Thank you for the opportunity to provide feedback on the draft Design of Roads and Streets manual (DORAS).

Bicycle NSW has been the peak bicycle advocacy group in NSW for over forty-eight years, and has more than 30 affiliated local Bicycle User Groups. Our mission is to 'create a better environment for all bicycle riders', and we support improvements to facilities for pedestrians and cyclists. Bike riding provides a healthy, congestion-reducing, low-carbon form of travel that is quiet, efficient and attractive for all ages with the correct infrastructure design.

**Bicycle NSW supports the intent of a NSW Government document that provides clear direction to local and state government stakeholders, as they work to deliver new and re-imagined streetscapes that strongly embed the Movement and Place framework.**

However, a close look the draft DORAS has revealed several **concerns**. We wish to make a series of **recommendations** for the final DORAS.

The document is very long, and the timeframe and structure of the consultation process inadequate. Our list of concerns is in no way exhaustive. We align with additional comments made by our advocacy partners at Walk Sydney and Better Streets.

**Concern 1:**

The draft DORAS is 275 pages long and poorly laid out. The index doesn't list each and every street category. It is difficult to find the correct one. The document is text heavy and lacks diagrams, flow charts and easy reference tables. Too much content is repeated, often inconsistently.

**Recommendation 1:**

Shorten DORAS to no more than 30 pages and put any additional diagrams, tables and guidelines in an appendix. The NACTO guides or the City of Sydney - Sydney Streets Code could inspire the layout and graphics of DORAS.

**Concern 2:**

It is not clear who the audience is. Is it primarily for state agencies working on state-owned roads? Will local government have to adopt DORAS and its minimum guidelines for local streets?

**Recommendation 2:**

Decide who the audience is. Urban designers and planners require a different approach to engineers and network operations staff who respond best to jargon-free, process-orientated directions). Clarify whether DORAS applies to local streets. If not, commit to a specific 'local streets guide' to follow shortly.

**Concern 3:**

There is barely any mention of 30km/h speed limits in DORAS. '30km' appears just 8 times, 7 in the intro section about safety and once as a recommended speed for a 'yield street'.

Our roads are becoming less safe every year. The [road toll is rising](#). 1303 people were killed on Australian roads in the year to May 2024, [an increase of 123 deaths](#) (10.4%) over the previous year's toll. NSW had the second highest increase, with 372 deaths recorded, a 32.9% increase on the 280 recorded the year before. That is on top of the hidden road toll of 11,000 each year due to toxic dust and vehicle emissions.

30km/h limits on residential streets and around schools and shopping villages aligns with international best practice. [Research](#) from across the globe shows that 90% of pedestrians survive a collision at 30km/h.

Speed limits are easier to change since the NSW Government published a new Speed Zoning Standard with official guidelines for 30km/h speed zones.

**Recommendation 3:**

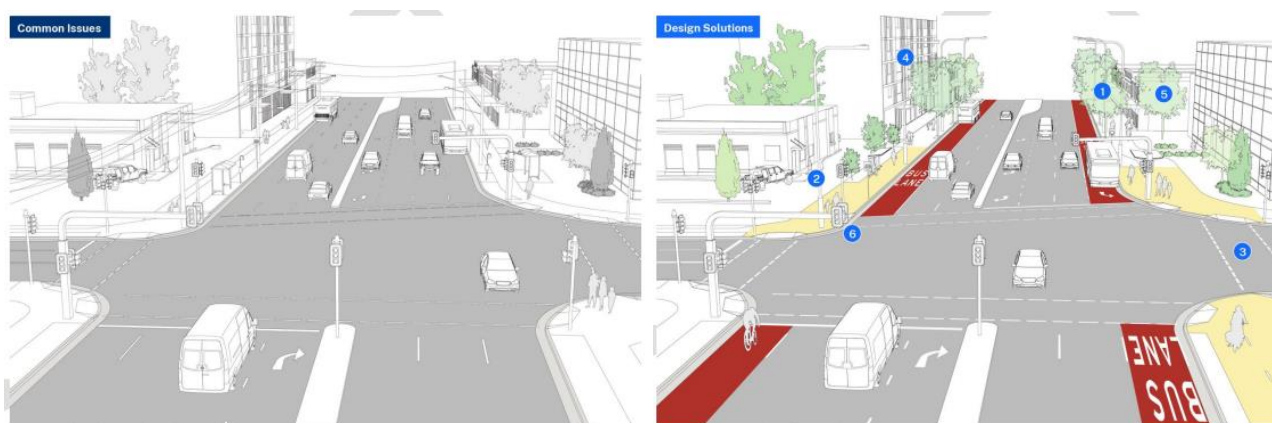
30km/h speed limits should be part of the design solution for all 'neighbourhood streets' and many types of 'urban street'. DORAS must set out how local government can fast-track speed reductions. Reductions should be comprehensively applied across larger areas, to create a more uniform sense of awareness in drivers. Speed limit inconsistencies contribute to the need for additional road signs and speed treatments, which chew through Council funds and create visually cluttered streetscapes.

Speed limits can be changed at the stroke of a pen, reducing the need for significant investments in disruptive capital works. Only TfNSW can make this happen as TfNSW still controls speed limits in NSW.

**Concern 4:**

As already highlighted, the guide is long, and Bicycle NSW has not studied each typology and the associated design solutions in detail. However, the discussion of issues and possibilities for "transit arterials" (Section 8.3.2) stands out as an example of the missed opportunities in DORAS.

Cycle infrastructure and lane reallocation is **not shown** as a design solution for "transit arterials"



This is despite the excellent multi-modal street diagram from Transport for NSW's own Future Transport Strategy, which is front and centre in the DORAS introduction:



Transit arterials include roads such as Military Road, Broadway and Victoria Road. These roads constantly feature in our advocacy for road space reallocation. They are where many of the Strategic Cycleway Corridors are slated to go.

#### **Recommendation 4:**

A much more ambitious vision is needed for arterial roads. DORAS should direct practitioners to apply the Road User Space Allocation to reimagine traffic sewers as multi-modal corridors. Include options for a complete overhaul of 'transit arterials' that focus on less car traffic, more landscaping and public space, lower speeds and multiple transport options for everyone in the community.

#### **Concern 5:**

Design solutions for neighbourhood streets (section 8.4.5) don't specifically refer to the 'Quietway' nomenclature. The word 'Quietway' is only used 3 times, all in the intro sections, despite its inclusion in TfNSW's own Cycleway Design Toolbox. This is just one example of the lack of consistency between NSW Government policies and strategies.

#### **Recommendation 5:**

Align the DORAS much more closely with all other TfNSW strategies and policies. Language, graphics and nomenclature should be consistent so that each document supports the others and stakeholder confusion is minimised.

#### **Concern 6:**

DORAS is silent on NSW Government's Net Zero targets and the role of the road-based transport system in meeting those targets.

Road transport and road-related infrastructure represent the [second biggest source of greenhouse gas emissions. And it's growing](#). The Climate Council calculated in [Shifting Gear](#) that no more than 36% of trips should be taken in a car by 2030, half the current rate of around 80%. This is radical - and necessary to rapidly cut transport emissions.

#### **Recommendation 6:**

DORAS must address Net Zero emissions and set out street designs that prioritise active and public transport. The space allocated to private cars on all types of roads and streets must be reduced as part of a short-term and urgent strategy to reduce driving.

**Concern 7:**

TfNSW exclusively controls signals on all NSW roads but DORAS says very little on how signal phasing should be managed to improve conditions for people walking and cycling. The current signal standards do not prioritise people and include outdated warrants that require people prove they need to be able to cross state roads.

**Recommendation 7:**

DORAS should explicitly direct TfNSW to phase signals to prioritise walking and riding for specific street and road typologies. Maximum wait times must be specified, shorter wait times prescribed for off-peak times, and 'dwell on green' used where and when traffic volumes are low.

**Concern 8:**

The minimum lane widths shown in DORAS are too wide. 3.2m-3.5m is unnecessary for the majority of local streets and many state roads. Wide lanes lead to wide streets and roads. The consequence of wide streets is that vehicles drive too fast and there is insufficient space for other uses such as separated cycleways, landscaping and widened footpaths.

**Recommendation 8:**

The minimum road and street lane widths should be reduced to 2.8 m to allow better accommodate all road users and reduce speeds within existing road corridors.

**Concern 9:**

There are several points where the guide recommends removing slip lanes wherever place function and pedestrian amenity are the focus. This is strongly supported by Bicycle NSW. However, the language is far too non-committal – the text is peppered with 'would', 'could' and 'may' when strong direction for change is essential.

A typical example of mushy language:

**9.5.3.1 Greenfield developments**

*Intersection design at greenfield development is often based on modelling of the projected usage 20 years or more into the future. The large size of these intersections can be attributed to the following reasons:*

- *the initial financial outlay offsets the future, increased re-construction costs*
- *the surrounding road network is not developed so modelling assumes all projected traffic onto the main roads*
- *poor understanding or vision for public or community transport services*
- *developer contributions are available now and may not be available later for redevelopment*
- *a desire for maximised main road traffic throughput and capacity*
- *balancing the demand for turning vehicles to and from the main road.*

*These large, main road intersections typically include slip lanes on every corner and can be uninviting environments for people who are walking, cycling and connecting to public transport. An undesirable, unintended outcome of car-centric travel may result from this design practice which can be difficult to reverse in future.*

All this makes sense. So why then does DORAS suggest this?:

*Instead, greenfield intersections **could** be developed to encourage less car-dependent long term travel behaviours, such as public and active transport. Rather than multi-lane roads with intersections sized accordingly, the main roads **could** be built as single or two-lane roads, with part time parking lanes, to minimise crossing distances. The internal network of streets **could** be designed to facilitate better traffic distribution through more frequent collector/arterial intersections. In this case, slip lanes **may not** be essential to promote efficient vehicle movement.*

Such conditional language provides business-as-usual developers and engineers with a licence to maintain the status quo.

**Recommendation 9:**

Use much stronger language throughout DORAS to direct changes to the traditional approach to designing road and streets. The priorities for designers, in alignment with a raft of NSW Government policies and strategies, are health, urban liveability, road safety, net zero. Not maintaining maximum vehicle throughput.

Bicycle NSW feels that a lot of work is still needed to finalise DORAS if it is to be fit for purpose and provide useful guidance for the design and operation of our roads and streets. Please do not hesitate to request further feedback from Bicycle NSW's active transport planner at any stage during the next steps.

Finally, **the portal for consultation is awful**. It was complicated and unintuitive to create an account. Comments had to be uploaded in an excel spreadsheet that is not accepted by the system if boxes are not filled in. This is really unacceptable in 2024. It is likely that very few stakeholders will endeavour to get through to the end of the process. This letter is a compilation of our online comments, and we ask for it to be treated as our formal feedback.

Yours sincerely,



Sarah Bickford

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Bicycle NSW



Peter McLean

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Bicycle NSW