

## Frequently Asked Questions

## Clifford Street and Broken Head Road Intersection

#### Will enhanced line marking improve safety?

Enhanced line marking provides clearer guidance for motorists and pedestrians, improving visibility.

However, it doesn't address congestion, turning conflicts, or unsafe crossing behaviours, requiring additional safety measures.

#### Will additional lighting improve safety?

Improved lighting increases visibility, reducing night-time risks, especially for pedestrians, cyclists, and elderly users.

Yet, lighting alone does not mitigate daytime congestion or conflicts during peak traffic periods.

## Will a 'seagull intersection' improve safety?

Offers dedicated turning lanes, reducing some conflicts.

Does not significantly improve congestion and poses additional risks due to merging traffic.

## Would removing the right turn into Clifford Street improve safety?

Eliminates key collision points but would likely shift risks and congestion to other intersections, possibly prompting illegal manoeuvres.

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However, it doesn't address congestion, turning conflicts, or unsafe crossing behaviours, requiring additional safety measures.

# Why upgrade if the intersection has experienced only 10 crashes in the past 10 years?

Safety is assessed by potential hazards, near misses, delays, and pedestrian concerns, not solely recorded crash data.

Projected increased traffic volumes based on forecast growth rates will have an exponential impact on vulnerable road users and motorists, increasing the risk-taking behaviour and likelihood of a serious incident.

#### Why not a roundabout?

Full-size roundabouts require significant space and land acquisition.

Mini-roundabouts pose issues: insufficient deflection, pedestrian safety concerns, heavy vehicle manoeuverability, each introducing additional safety risks.



Data from TfNSW Clifford St/Broken Head Rd, Suffolk Park shows that the most recent recorded incidents involve vulnerable road users. (pedestrians, cyclists)

A roundabout will not adequately address this prevailing vulnerable road user safety issue, as there are no signal-controlled crossings.

#### How do traffic signals address morning congestion?

Traffic signals create predictable gaps, reducing risky turning behaviours, and significantly improving safety and flow.

## What about emergency services access?

Intersection upgrades will incorporate designs ensuring efficient and safe emergency vehicle movements.

Council has recently met with the Rural Fire Service and Byron Bay Rural Fire Brigade representatives regarding the intersection signalisation design and construction. Final approval will be subject to TfNSW.

## What about pedestrian crossings?

Traffic lights provide safer, controlled pedestrian crossings compared to standard zebra crossings.

Location of signal-controlled pedestrian crossings will be assessed during intersection design, considering site constraints and pedestrian/cyclist desire lines.

Signalised pedestrian crossings enable vulnerable road users with a safe road crossing, which cannot otherwise be provided under a roundabout treatment.

#### Impact on bus stops

Intersection upgrades will account for bus operations, ensuring minimal disruption and safe passenger access.

Repositioning of bus stops will be assessed during intersection design.

#### **Funding & Grant Background**

- 1996 Letter from Suffolk Park Progress Association re traffic calming needed.
- 1999 Community request traffic calming at Council meeting, design listed for future funding.
- 2000 LTC report on traffic issues at intersection, Council staff to design a roundabout and request reallocation of blackspot funding from other approved projects.
- 2001 Due to blackspot funding timeframe and risk of re-assessing the project against funding BCR, Council did not proceed with reallocating funding to this project. Significant community and political support for a roundabout.
- 2003 Council staff make internal budget bid of \$600k for a roundabout.

- 2004 Council staff prepare \$850k blackspot funding application for traffic signals.
- 2005 Community request pedestrian crossing on Clifford Street but not supported by Council. Council staff submit blackspot funding application for a roundabout.
- 2007/2008 Council had \$700k to design and build a roundabout (consisting of \$350k TfNSW Blackspot funding, \$350k Council developer contributions). Council completed a concept design but the project fell through due to a few reasons, which included issues with land acquisition.
- 2009 MR545 Strategic Study Pacific Highway (Ewingsdale) Interchange to Byron / Ballina Shire Boundary (Broken Head). A single lane roundabout would provide an adequate level of service to 2028. Signals were not fully considered by consultants.

Council resolution 09-596 - Council did not support traffic signals then, in a following meeting, supported an application to RTA for black spot funding for signals because Land Acquisition costs too high with roundabout, amongst other issues.

Later that year, a landowner gifted land to enable construction of a roundabout and a further report was submitted regarding land acquisition for roundabout. Council decided to leave the intersection, monitor it and be open to ideas on how to fix it.

- 2014 Council applied for \$1.2m of Blackspot funding for construction of a roundabout, based on community feedback. The funding bid was successful but again fell through due to land acquisition issues.
- 2016 Council engaged TTM Group (traffic engineers) to provide an options analysis for this
  intersection and TTM recommended traffic signals. However, TfNSW advised that this
  intersection did not meet their warrants or criteria for traffic signals. As an interim measure
  (estimated 4 year life), Council proceeded with some minor changes to improve safety (e.g.
  removing the left turn lane from Broken Head Rd onto Clifford St).
- 2024 Council engaged Metis to undertake a traffic study of the intersection to compare traffic modelling for a roundabout with traffic signals in both 2024 and 2034. Council received TfNSW Road Safety Program funding to install traffic signals at the intersection.

## Why apply for grants without initial community input?

Intersection improvements have been a long-term consideration, with past community engagement.

The time-sensitive grant required immediate action, though ongoing community feedback remains vital.

#### Is the grant specifically for traffic signals?

The TfNSW 'Road Safety Program' funding application was for traffic signals at the Clifford St/Broken Head Rd intersection, and the associated works relating to those traffic signals.

The works have to be completed by March 2026. TfNSW has confirmed that this a hard deadline and cannot be moved

Safety improvements must be delivered by March 2026; any alternative intersection treatment (scope change) must address the prevailing safety concerns for vulnerable road users (cyclists and pedestrians) and motorists.

#### Source of the grant

Funded by the Australian and NSW State Governments: Road Safety Program 2023/24-2025/26 | Transport for NSW

Any changes (variations) to the funding scope are subject to TfNSW approval

## Will traffic signals worsen the service level by 2034?

Both signals and roundabouts operate within acceptable limits

These limits are defined by intersection delay times and referred to Level of Service (LoS). LOS is a way to measure how well a road, intersection or traffic control system is performing and is graded from A to F:

- A means free-flowing traffic with minimal delays.
- B and C indicate stable traffic with some delays.
- D means moderate congestion with longer wait times.
- E represents near-capacity conditions with significant delays.
- F means severe congestion, long wait times, and potential gridlock.

Signals provide enhanced pedestrian/cyclist safety, controlled crossings, and better handling of complex intersections.

## Will signals increase congestion on Broken Head Road?

Some queuing will occur during peak times but will enhance overall safety and flow predictability.

The traffic signal phasing will be adaptive based on predominant traffic flow and volumes and will provide priority to the dominant traffic flow directions, typically Broken Head Rd. Clifford St queue lengths will be managed via dynamic signal phasing.

Advanced warning traffic signal signage (flashing signage) will be incorporated into the intersection design.

#### Is this intersection a black spot?

Yes, classified by TfNSW due to repeated pedestrian and vehicle casualties, meeting black spot criteria. (Must have at least three casualty crashes over a five-year period for locations less than three kilometres long - Australian Government Black Spot Program 2025/26)

#### Does modelling consider seasonal traffic variations?

Yes, the Metis traffic study uses standard methodologies, accounting for seasonal variations through multiple scenario simulations.

The traffic signals will be adaptive and will respond traffic volumes in real time

#### Will signals worsen current delays?

Queuing may increase slightly during peak periods, but improved safety and reduced risky behaviours benefit overall traffic flow.

#### Could a mini-roundabout be installed instead?

Assessed but not progressed due to safety, limited capacity, pedestrian access, and unsuitable design for heavy vehicles.

#### Would reducing the speed limit improve safety?

Speed reduction alone is insufficient without traffic calming, potentially worsening congestion.

#### Roundabouts perform better currently; why other options?

Spatial constraints, pedestrian safety, and heavy vehicle movements limit roundabout feasibility.

#### Can intersection treatment scope change under the current grant?

Transport for NSW may allow scope changes, but approval depends on meeting safety, economic, and timeline requirements.

Any alternative intersection must deliver required safety improvements comprehensively for all road users (pedestrians, cyclists, motorists, and vulnerable users) and be fully operational by early 2026. Any additional costs due to scope changes must be covered by Council.

Since the 28 November meeting, TfNSW has advised that a scope change can be requested, however, they could not advise if a scope change from traffic signals to roundabout would be approved. The scope change would need to be reviewed under the funding program criteria of road safety, economic benefits, construction readiness and evidence of road safety risk rating improvements.

According to Road Safety Program 2023/24-2025/26 | Transport for NSW https://www.transport.nsw.gov.au/projects/programs/road-safety-program-202324-202526 , the Program seeks to improve road safety by minimising the occurrence of severe injuries and fatalities, with a focus on vulnerable road users like pedestrians and cyclists.

TfNSW have also advised that if a scope change was approved within the existing program, the new roundabout would also need to be delivered within the current funding available – any additional costs would need to be funded by Council.

TfNSW has also reconfirmed that the program is firm on the end date of March 2026; there are no extensions with the only exception being potential leniency should we be hit with another natural disaster.

## What does "average delay" measure?

The additional time vehicles spend at an intersection compared to free-flow conditions, averaged across all vehicles.

#### Does modelling include side street delays?

Delays primarily measured from the main intersection approach, excluding side street queuing.

#### Does modelling consider entire length of Clifford Street?

No, only the immediate intersection; queues extending significantly indicate capacity issues.

#### Is the Metis report reliable compared to TTM traffic report (2016)?

Both reports are valid; Metis provides updated data through advanced simulation techniques accounting for variability.

#### Will signals improve delays exiting Clifford Street?

Yes, significantly reducing average delays from 86 seconds to approximately 28 seconds by 2034.

It is also noted that residents in eastern Suffolk Park frequently experience delays significantly exceeding the reported peak-hour wait times, causing traffic to queue back as far as Alcorn Street.

#### Pedestrian crossings versus signals

Signalised crossings force the traffic to stop. At zebra crossings, drivers are obliged to stop but are less likely to do so. Signalised crossings are therefore considered safer for pedestrians and cyclists (vulnerable road users).

## Effectiveness of reducing speed limits

Without traffic calming, reduced speeds are ineffective and may worsen congestion on arterial roads.

#### Do signals worsen delays overall compared to existing arrangements?

No, signals significantly reduce risky behaviour and severe congestion issues experienced currently, especially at peak times.

#### **Urgency of addressing delays exiting Clifford Street**

High current and projected delays significantly increase safety risks, emphasizing urgent upgrade needs.

