Submission: Victor Harbor Integrated Transport Strategy (preliminary Vision)

To: City of Victor Harbor (localgov@victor.sa.gov.au)
From: Brent Jacobs, Encounter Bay (resident and ratepayer)
Date: 22 November 2026

I am an Encounter Bay resident and ratepayer, and I have completed the survey. Because the consultation offered no modelling of what the proposed changes would do, I built a traffic simulation of Victor Harbor myself, using SUMO (Simulation of Urban Mobility), widely used open-source traffic simulation software that moves every vehicle through the road network second by second. It is built from publicly available data: the Australian Bureau of Statistics population figures, OpenStreetMap roads, the Department for Infrastructure and Transport's traffic counts, Council's own 2017 counts and Council's growth scenarios. I then tested Council's options, and some alternatives, in it on a school-term weekday and a summer peak day, now and as the town grows. **The views in this submission are based on the results of those simulations**, together with a review of the documents behind the Strategy.

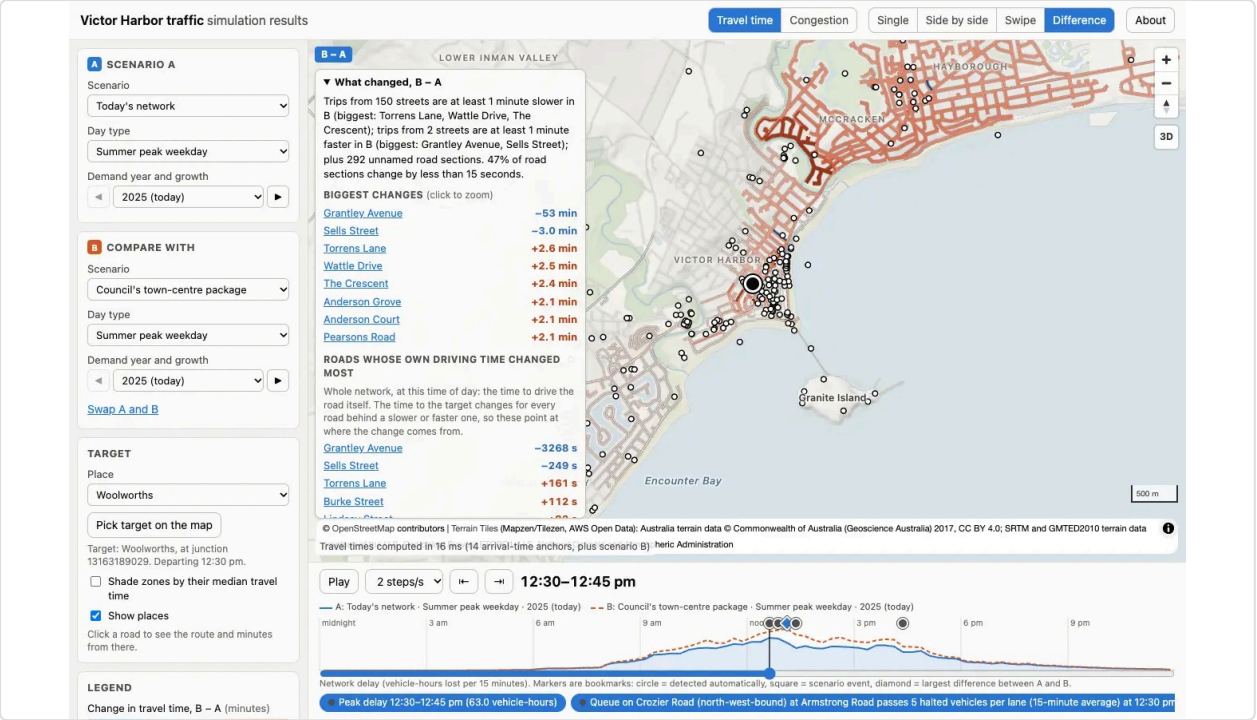
I support planning for growth, better public transport, walking and cycling. I do **not** support the town-centre package as presented (the one-way loop, a blanket 30 km/h limit, shared zones and new signals), and I ask Council to test options properly before asking residents to rate them.

My submission also includes a short presentation of the findings, attached to my email and available at https://br3nt.github.io/victor-harbor-roads/deck/. The full evidence, hotspot by hotspot, is at https://br3nt.github.io/victor-harbor-roads/onboarding/, and animations of each hotspot (today, Council's package and an alternative, side by side) at https://br3nt.github.io/victor-harbor-roads/hotspots/. The images below link to the same views in the interactive simulation viewer, and residents can check their own trips at https://br3nt.github.io/victor-harbor-roads/maps/residents/. How the simulation was built, and where every piece of data comes from, is set out at the end.

1. The town-centre package makes traffic worse, for no traffic gain

In the simulation, with traffic built from 2025 data:

- On a summer peak day the package adds about **28 seconds to the average trip** and about **60% more time stopped in queues** across the town (about 275 more vehicle-hours a day). On a school-term weekday: about 14 seconds a trip and 58% more queueing.
- On a summer day the **one-way loop** is the largest single cause; on a term weekday the **signals** are.
- Most single trips change by seconds. The cost lands on particular streets and at particular times, below.



Change in driving time to Woolworths with Council's package, summer peak day, 12:30 (red = slower). The panel lists the streets that change most. Open this view in the interactive viewer.

2. It hurts specific streets and people

- **Trucks on the foreshore:** on a summer day about **80 trucks a day** (about 15 today) take Bridge Terrace and the north end of Flinders Parade into Coral Street under the package, and about **160** with the loop on its own. All traffic on that stretch roughly doubles (about 2,600 to 5,200 vehicles a day).
- **Residential side streets:** drivers take the fastest route, so slowing the centre pushes traffic into side streets. Acraman Street carries about **three times** today's traffic, and Lindsay Street residents wait about **80 seconds instead of 15** to get onto Crozier Road. Acraman Street already has crash hotspots. Back streets near the town-centre service station and Inman/Newland Streets see waits roughly double.
- **Everyday summer trips:** Encounter Bay to a supermarket about a minute longer; McCracken to medical services typically 1–1.5 minutes longer.

3. It was never tested or costed

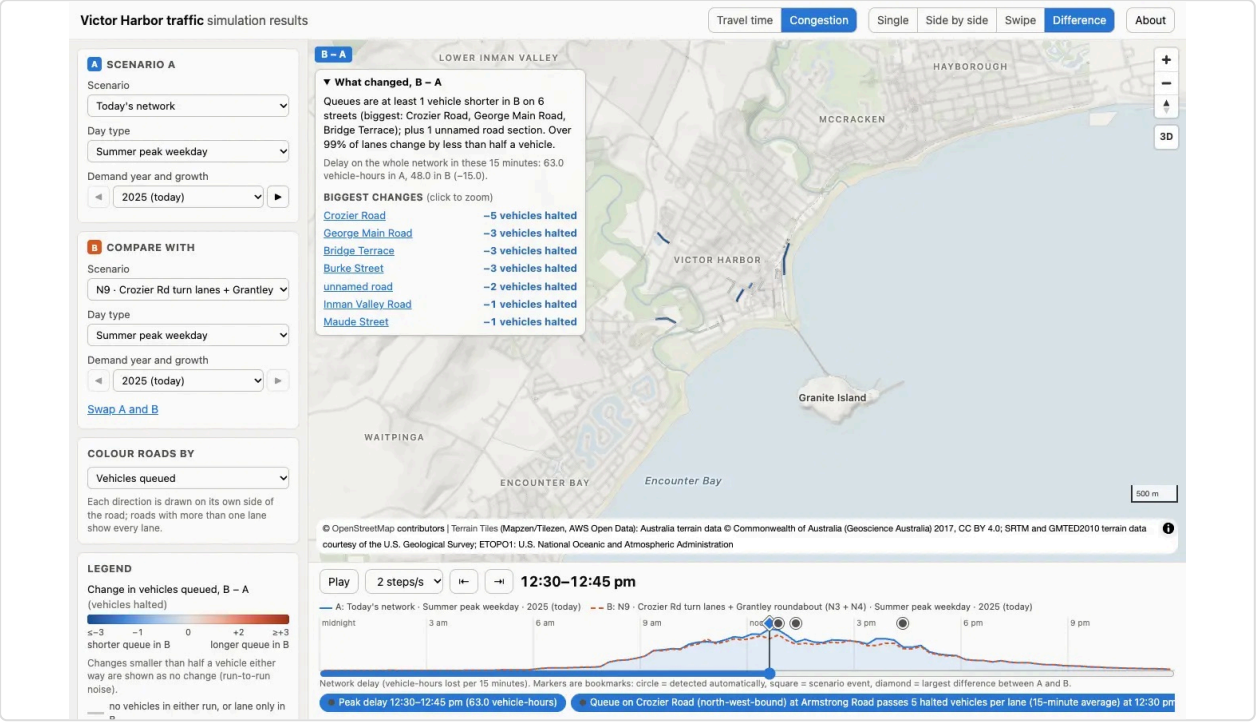
- The only technical report, SMEC's Phase 1 report (Revision 2, August 2026), contains **no one-way loop and no 30 km/h proposal**. Its model is described as a simplified model of a typical weekday, and only a 'Do Nothing' network was run. Testing, modelling and costings are scheduled for February–June 2027, after this consultation.
- At the 26 October 2026 meeting the Strategy was discussed for about five minutes. No speaker mentioned the loop, 30 km/h or the signals, and the cost estimates one councillor asked for are not in the consultation material.
- The newest detailed town-centre counts are from April 2017, taken in school holidays. SMEC's daily volumes for Hindmarsh Road and Torrens Street are roughly half to two-thirds of the Department for Infrastructure and Transport's (DIT) published figures.
- DIT's Speed Limit Guideline (version 3, October 2023) says a 30 or 40 km/h limit “is not intended for streets with short holiday or tourism peaks”, that freight and major traffic routes “are

unsuitable”, and that 30 km/h suits roads designed for it with alternative routes available. Torrens Street and Hindmarsh Road are State roads and DIT freight routes, and only DIT can approve speed limits.

4. Cheaper, targeted fixes do better

The simulation shows where the delay actually is: drivers waiting to turn right out of side streets onto single-lane main roads around the middle of the day (Victoria Street near the shops, side streets off Hindmarsh Road, the Bridge Terrace / Grantley Avenue link) and, as the town grows, Crozier Road and Greenhills Road joining Armstrong Road. It is not the town-centre roundabouts, which mostly wait 3–8 seconds.

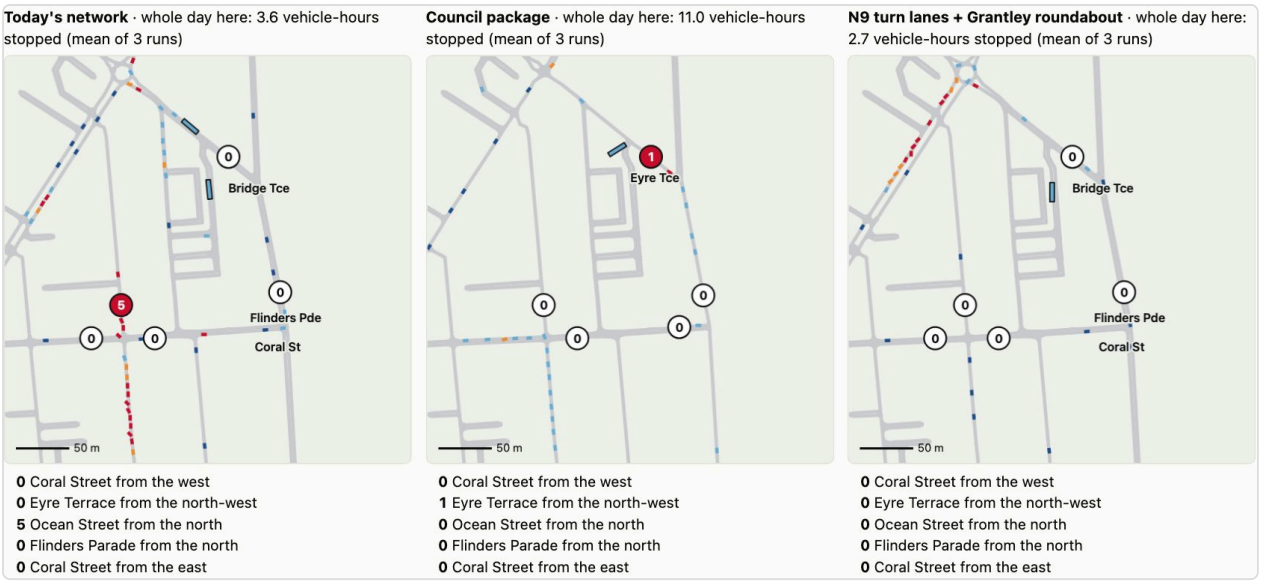
- **Turn lanes on Crozier Road at Armstrong Road, plus a roundabout at Hindmarsh Road / Grantley Avenue:** about **11% less** time stopped on a term weekday and **18% less** on a summer day, now.
- **Roundabouts at Armstrong Road's junctions with Crozier Road and Greenhills Road, plus Grantley:** about **24% less** in 2041 (about 15 years, high growth), where the Council's package adds about 60%.
- These are rough layouts tested in a model, not designs or costings, but they show where effort should go.



Change in queues with the targeted fixes (Crozier Road turn lanes plus a Grantley Avenue roundabout), summer peak day (blue = shorter queues, red = longer). Open this view in the interactive viewer.

Hotspot by hotspot

Each picture is the same moment in the simulation, during that spot's busiest quarter-hour: today's roads, Council's package and an alternative, side by side. Red dashes are stopped vehicles and the numbers count vehicles standing still on each approach. Each link opens the animation, which plays the whole quarter-hour.

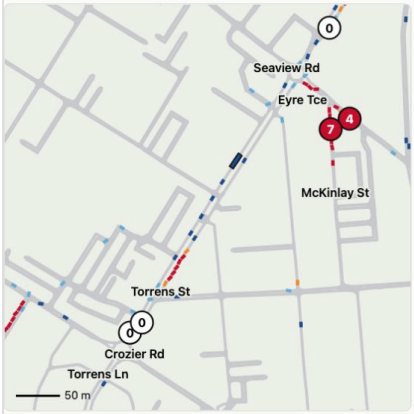


Foreshore (Bridge Terrace into north Flinders Parade), summer day: about 2,600 vehicles a day today (about 15 trucks), about 5,200 with Council's package (about 80 trucks), about 7,400 with the loop on its own (about 160 trucks). Open this view in the interactive viewer.



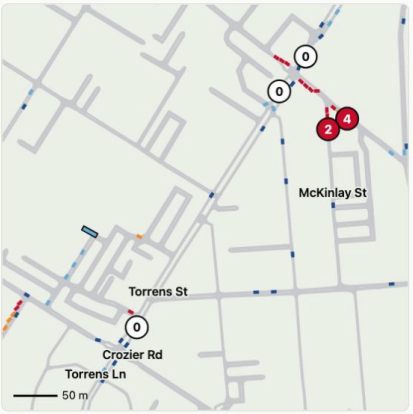
Lindsay Street onto Crozier Road, summer day: about 14 seconds' wait today, 83 seconds with Council's package, 12 seconds with the targeted fixes. In 2031 (about 5 years, high growth): 45 to 142 seconds. Acraman Street goes from about 1,800 to 5,400 vehicles a day. Open this view in the interactive viewer.

Today's network · whole day here: 43.7 vehicle-hours stopped (mean of 3 runs)



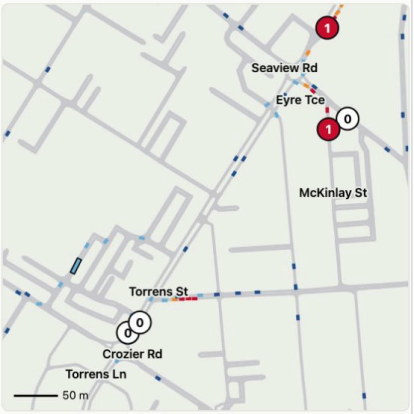
4 Eyre Terrace from the south-east
7 McKinlay Street from the south
0 Torrens Street from the south-west
0 Hindmarsh Road from the north-east
0 Torrens Street from the north-east

C4 signals · whole day here: 91.2 vehicle-hours stopped (mean of 3 runs)



4 Eyre Terrace from the south-east
2 McKinlay Street from the south
0 Torrens Street from the south-west
0 Hindmarsh Road from the north-east
0 Torrens Street from the north-east

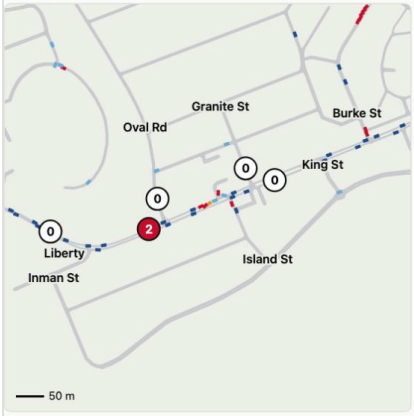
N9 turn lanes + Grantley roundabout · whole day here: 26.0 vehicle-hours stopped (mean of 3 runs)



0 Eyre Terrace from the south-east
1 McKinlay Street from the south
0 Torrens Street from the south-west
1 Hindmarsh Road from the north-east
0 Torrens Street from the north-east

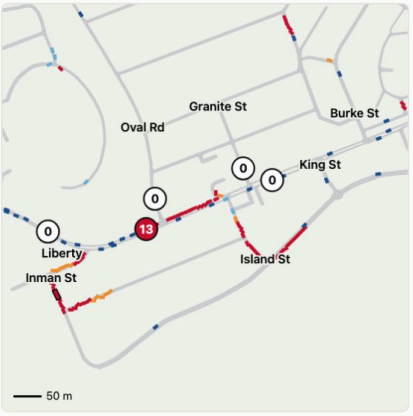
Torrens Street roundabouts, summer day: 44 vehicle-hours stopped a day today, 91 with the signals alone, 114 with the whole package, 26 with the targeted fixes. In 2031 (high growth): 67 today, 137 with signals, 40 with the fixes. Open this view in the interactive viewer.

Today's network · whole day here: 77.4 vehicle-hours stopped (mean of 3 runs)



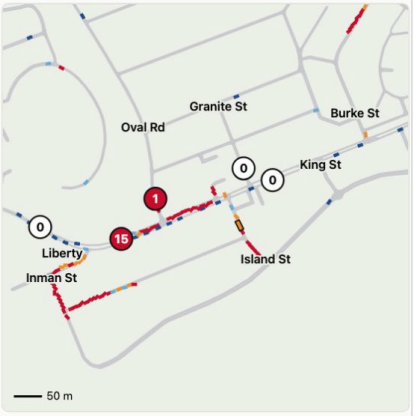
0 Victoria Street from the north-east
2 Victoria Street from the south-west
0 Granite Street from the north-west
0 Victoria Street from the north-west
0 Oval Road from the north-west

Council package · whole day here: 113.6 vehicle-hours stopped (mean of 3 runs)



0 Victoria Street from the north-east
13 Victoria Street from the south-west
0 Granite Street from the north-west
0 Victoria Street from the north-west
0 Oval Road from the north-west

N8 Victoria St left-turn lanes · whole day here: 103.7 vehicle-hours stopped (mean of 3 runs)



0 Victoria Street from the north-east
15 Victoria Street from the south-west
0 Granite Street from the north-west
0 Victoria Street from the north-west
1 Oval Road from the north-west

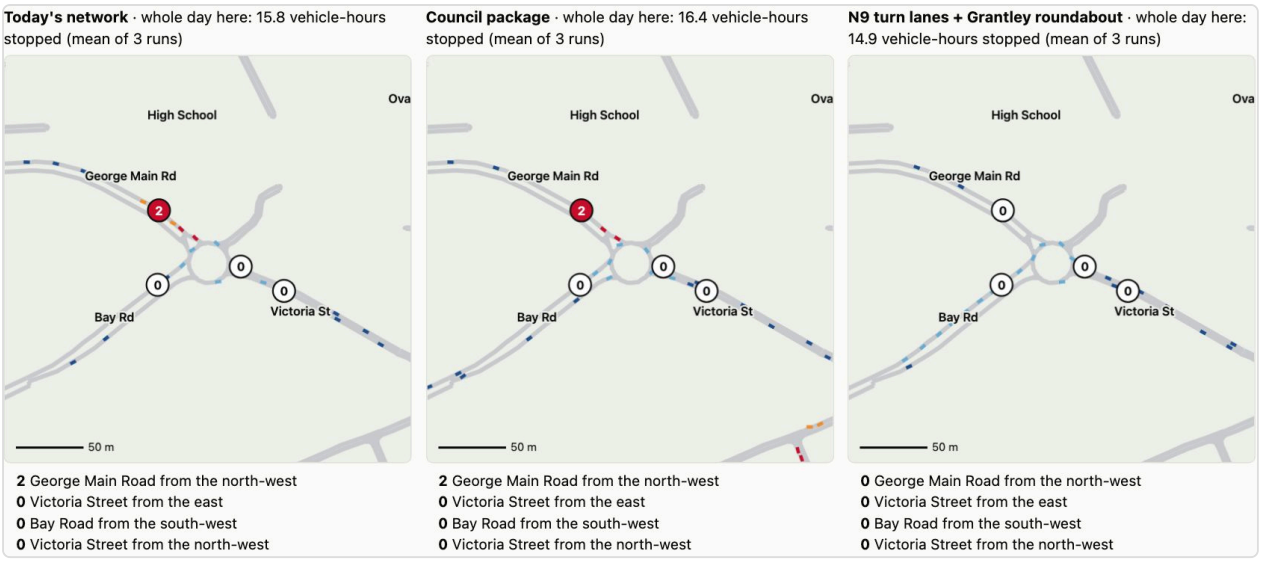
Victoria Street between Bay Road and Torrens Street, the biggest delay in town now: 77 vehicle-hours stopped a day today, 114 with Council's package. No option tested fixes it; this is where Council should look hardest. Open this view in the interactive viewer.



Bridge Terrace / Grantley Avenue onto Hindmarsh Road: about 49 seconds' wait now, 15 seconds with a roundabout. In 2031 (high growth): 89 to 19 seconds. Council's package only shortens it by sending that traffic along the foreshore. Open this view in the interactive viewer.



Crozier Road joining Armstrong Road (the ring road): about 29 seconds' wait now, 43 with Council's package, 16 with turn lanes, 6 with a roundabout. In 2031 (high growth): 79 today, 104 with Council's package, 50 with turn lanes, 8 with a roundabout. Open this view in the interactive viewer.



The roundabout by the oval (Bay Road / Victoria Street / George Main Road): George Main Road waits about 19 seconds now; in 2031 (high growth) about 54 seconds today and 76 with Council's package. Open this view in the interactive viewer.

Quieter places checked the same way (the McCracken roundabout by Bunnings, the Maude Street roundabout, the town entrance roundabout, Franklin Parade by Whaler's, and the service stations) are on the same page: https://br3nt.github.io/victor-harbor-roads/hotspots/.

5. The ring road: keep it, and fix its junctions

The consultation asks residents to choose between a new outer freight ring road (Option 1) and keeping the current ring road along Welch Road and Armstrong Road (Option 2). Because Council's map is only indicative, I modelled Option 1 as described in two plausible alignments: about 10 km from Inman Valley Road to Victor Harbor Road using existing roads and short new links, with the existing ring lowered to 60 km/h. At the State's high-growth figure in 2041 (about 15 years) on a school-term weekday:

- **Option 1 makes queueing worse:** about **18–30% more** time stopped than today's roads. Slowing the existing ring pushes traffic onto Hindmarsh Road, Adelaide Road and the town centre, and **trucks on town-centre streets rise by about 28%**.
- **Option 2 with junction fixes does best:** keeping the ring and adding roundabouts at its Crozier Road and Greenhills Road junctions (with the Grantley roundabout) cuts time stopped by about **24%**.
- Widening the existing ring to four lanes on its own makes things worse (about 23% more) unless those junctions are fixed, because drivers from Crozier Road then wait almost twice as long to join it.

Option 1 is also by far the most expensive. Council should publish its own alignment and modelling before asking residents to choose.

See it in the viewer: Option 1 compared with today's roads, 2041, term weekday, 12:30; Option 2 with junction fixes.

6. Growth is not solved by any option tested

At the State's high-growth figure, by 2041 (about 15 years) queueing on a school-term weekday is about four times today's on today's roads, and on a summer afternoon demand exceeds what the network can carry whichever option is built. The model places the new suburbs on today's roads,

without their future streets and link roads, so this shows the size of the problem rather than the answer. That is the reason to model the whole network, including those future roads, before committing to any one piece.

What I ask Council to do

- **Publish the model and the data** (counts, calibration, assumptions) and have them peer reviewed.
- **Model every option, including summer peak and event days**, against both growth scenarios, and publish the results **before** endorsing a Vision.
- **Collect current counts:** term-time and summer turning counts at the town-centre intersections, and permanent counters on Torrens Street and Hindmarsh Road.
- **Trial before committing:** temporary changes through known busy periods, with before and after data and success criteria published in advance.
- **Put alternatives on the table:** keep two-way streets; targeted turn lanes and roundabouts where the delay actually is, staged with growth; time- or event-based speed limits on variable signs instead of a permanent 30 km/h.
- **Publish cost estimates** for each element, as a councillor asked on 26 October.
- **Settle DIT's position** on speed limits and the freight routes before options go back to the public.

How the simulation was built, and how sure the results are

The simulation uses SUMO (Simulation of Urban Mobility), open-source traffic software that moves every car, truck and caravan through the road network second by second. Trips are generated from where people live and the shops, schools, services and beaches they travel to; summer adds visitor traffic. Each option is the same day's trips on a changed road network, so differences show what the change itself does. It is partly calibrated: in the town centre it carries about 80% of the counted traffic, so town-centre delays are more likely understated than overstated. Results are best read as differences between options, not exact times. Everything is published so it can be checked:

- **Method:** simulation design and all results.
- **Data and where it comes from:** the sources register lists every document and dataset with its publisher, date and an archived checksum.
- **Forecasting:** population and growth, and how the 2017 counts were brought forward to 2025 and checked against newer counts.
- **Every assumption:** method and assumptions, one page per topic (road network, trips, counts and calibration, measures, the options, the ring road).
- **The code**, so anyone can rerun it: github.com/br3nt/victor-harbor-roads.

Thank you for considering this submission. I would welcome the chance to walk Council staff and SMEC through the simulation.

Brent Jacobs
Encounter Bay