City of Greater Geraldton

Sunset Beach Traffic Calming Community Workshop

May 2016

Background

The need for traffic calming treatments in the Sunset Beach suburb has been expressed by the community a number of times in the past including during Sunset Beach Precinct Planning workshops in 2012 and it was submitted as a community project for the 10 Year Capital Works Plan in November 2013. These streets are Bosley Street, Volute Street and Swan Drive.

To get a better understand of speeding patterns on these streets, the City undertook traffic counts which confirmed there are high levels of speeding that occur on these three streets at various times during the day.

The City also undertook the Sunset Beach Traffic Survey with the objective of identifying other streets that have speeding patterns and the preferred treatments to slow traffic down.

The Traffic Survey was followed by a community workshop which had the following objectives:

A) Gather community feedback on traffic calming treatments for:

- ***Volute & Bosley Streets***
- ***Swan Drive & Swordfish Vista***
- ***Chapman Road & Sail Boulevard***

B) Prioritise the streets requiring traffic calming treatments

The workshop was attended by 21 members of the community and three City Councillors.

The City utilises a three stage Project Management Framework for all capital works. The first stage of framework requires concept designs be developed for the project. The results of the Sunset Beach traffic survey and the feedback received from the community during the workshop will be used to inform the concept designs for traffic calming treatments for Sunset Beach streets.

The next stage of the project is detailed design, followed by project construction.

The Sunset Beach Traffic Survey

The City of Greater Geraldton partnered with the Sunset Beach Community Group to promote the Sunset Beach Traffic Survey to the community. The survey was available online and the Community Group also distributed hard copies. City staff and members of the Group also had an information booth at the Glenfield Shopping Centre on one afternoon to talk to residents about speeding and have them take the survey. There were 27 respondents to the survey with the following results.

Street where speeding occurs	**% of times mentioned**
Chapman Road new 60km zone	30%
Chapman Road south of roundabout	22%
Swan Drive	19%
Bosley Street	19%
Volute Street north-south	11%
Volute Street east-west	8%
Chapman Valley roundabout	4%
Chapman Valley Road	4%
Sail Boulevard	4%
Swordfish Vista	4%
Faranda Road	4%
Baler Road	4%

Survey respondents were also asked to choose their preferred traffic calming treatments which produced the following results.

Preferred traffic calming treatment	% of times mentioned
Horizontal displacement device	52%
Road cushions	48%
Blister Islands	30%
Median Treatments	26%
Edge lines	4%

The survey also asked if there were any other traffic calming treatments that could be used to slow vehicles down. The following answers were submitted.

- Speed cameras in place more often
- Police presence more often
- Reduce the speed limit to 70km from 90km on Chapman Road
- More 50km signs in the suburb

Options to Reduce Speed

Following a short presentation to participants on the Survey results the five traffic calming options to reduce speed were presented by Samantha Adams the Roadwise Regional Safety Advisor, Mid West.

The presentation included the advantages, disadvantages and costs to implement each of the five options. These options include:

- Road Cushions
- Horizontal Displacement Devices
- Blister Islands
- Median Treatments
- Edge Lines

A booklet containing this information was given to each workshop participant to follow the presentation (see Traffic Calming Options to Reduce Speed Booklet, page 5).

Some of the comments made during the presentation included:

- Concern that no one from the caravan park was present at the workshop to share their views regarding traffic calming treatments and caravan traffic along Bosley Street
- More frequent policing may be a viable solution
- The use of temporary speed humps should be investigated
- The 'T' intersection of Bosley Street and Pinna Way is very dangerous with drivers cutting the corner

Participants were then informed of the various factors the City takes into consideration when designing traffic calming treatments for streets some of which include:

- Overall visibility not compromised
- Who are the users? Children, aged or disabled persons…
- Road users? Buses, emergency or service vehicles
- What activities are going in the vicinity?
- Through traffic problems?
- Existing Footpath - safety not compromised
- No Footpath - bicycle & pedestrian safety
- Motorcycle/moped – skid proof surface/line marking
- Safe property access
- Storm water drainage
- Landscaped options - ongoing maintenance

Feedback on Options

Workshop participants were given the opportunity to discuss the five traffic calming options for the six streets and to provide their comments, support or concerns on each of the five options by adding them to butchers paper provided on tables in the room. The following comments were made.

Option 1 - Road Cushions

- No for Volute – Too noisy!! Living in the suburb is noisy enough!
- Definitely not for Volute Street or Bosley Street -too long and would attract hoons.
- No Volute or Bosley!
- No Value
- In my opinion one of the most effective one for residential areas.
- Yes for all the streets!
- Use temporary road cushions – similar to ones at Bunnings
- Road cushion is the best option. High visibility, indestructible, convenient for emergency vehicles, trucks and buses. It slows down the traffic, suitable for pedestrians. Does not create parking problems.

Option 2 – Horizontal Displacement Devices

- No for Volute – too noisy!! Living in the suburb is noisy enough!
- Definitely not for Volute Street or Bosley Street - for parking problems.
- Yes for Swan Drive.

Option 3 – Blister Islands

- Yes, suitable for Bosley Street because of caravans.
- Yes, suitable for Bosley Street because of caravans and the caravan park
- Yes for Volute but some cars will still speed up on purpose.
- Yes Volute and Bosley (caravans) Look best but effective?
- Yes for Volute. Most suitable option for slow down with noise issues with vehicles speeding up.
- Yes for Bosley Street and Volute but only if necessary.
- Speed cameras and police on the road will be more effective. Prevention in better than spending thousands on something that could have been potentially fixed.
- I agree with the above statement.
- Me too, I agree with the above statement
- Yes for Swan Drive.

Option 4 Median Treatments

- Not suitable for residential area if no right turns can be made.
- Roads too narrow for this option?
- Not applicable for this area.

Option 5 Edge Lines

- Possibility, although I'm unsure how effective it would be. Perhaps a waste of money?
- Police presence and speed cameras should be trialled before any $ spent on any of the options presented.

Preferred Options and Prioritising Streets

The final part of the workshop involved participants choosing the traffic calming treatment they believed would work best for each of the six streets and then prioritising the streets for potential implementation. Each participant was given a ballot where they were asked to place a tick beside the treatment they believed was best suited for the street and to prioritise the six streets, one being the most important through to six being the least important street for the implementation of traffic calming treatments. The following ballot results were collated and shared with participants before the workshop came to a close.

Sunset Beach Traffic Calming Workshop Ballot

	Preferred Option Votes	Priority
A. Chapman Road		1
Option 1 Road Cushions	3	
Option 2 Horizontal Displacement Devices		
Option 3 Blister Islands	3	
Option 4 Median Treatments	1	
Option 5 Edge Lines		
B. Sail Boulevard		2
Option 1 Road Cushions	3	
Option 2 Horizontal Displacement Devices		
Option 3 Blister Islands	4	
Option 4 Median Treatments		
Option 5 Edge Lines		
C. Swan Drive		3
Option 1 Road Cushions	4	
Option 2 Horizontal Displacement Devices		
Option 3 Blister Islands	5	
Option 4 Median Treatments		
Option 5 Edge Lines		
D. Volute Street		4
Option 1 Road Cushions	4	
Option 2 Horizontal Displacement Devices		
Option 3 Blister Islands	4	
Option 4 Median Treatments		
Option 5 Edge Lines		
E. Bosley Street		5
Option 1 Road Cushions	3	
Option 2 Horizontal Displacement Devices		
Option 3 Blister Islands	4	
Option 4 Median Treatments	1	
Option 5 Edge Lines		
F. Swordfish Vista		6
Option 1 Road Cushions	4	
Option 2 Horizontal Displacement Devices		
Option3 Blister Islands	5	
Option 4 Median Treatments		
Option 5 Edge Lines		

Booklet:

Traffic Calming Options to Reduce Speed

Option1: Road Cushions

Advantages

- Slows vehicles to about 20 - 25 km/hr. at the device.
- When used in series reduces vehicle speeds along the entire length of the street.
- Is relatively inexpensive.
- May discourage through traffic.
- If used as a Wombat crossing, provides a designated pedestrian crossing place and improves pedestrian safety.

Disadvantages

- May increase vehicle noise through braking, accelerating and vertical displacement;
- May adversely affect emergency and commercial vehicles;
- May only be used on relatively straight and flat streets away from intersections;
- Doesn't overcome 'gun barrel' effect on long straight roads.

Estimated Cost

$3000 - $5000 per cushion (asphalt/Rubber, Labour, Traffic Management)

Option2: Horizontal Displacement Devices

Advantages

- Reduces speed in vicinity of device. Typically, single lane devices restrict speeds to about 25 km/hr. Two lane devices restrict speed to about 40 km/hr.
- When used in series, reduces speeds over the entire length of the street.
- May discourage through traffic.
- Imposes minimal inconvenience on local residents.
- When used to narrow the carriageway provides a shorter crossing distance for pedestrians.
- Relatively low cost.

Disadvantages

- Possibility of increased noise.
- Is contrary to driver expectations if used in isolation.
- May restrict emergency vehicles.
- Will restrict parking opportunities.
- Can present a 'squeeze' point to cyclists if not designed and maintained correctly.
- May result in confrontations between opposing drivers arriving simultaneously at a single lane slow point.
- Kerbing and signage may be damaged by vehicles travelling at inappropriate speeds.
- May not reduce motorcycle speeds.

Estimated Cost

$8000 - 10,000 per device (Kerb, Gravel, Asphalt Cut, Vegetation, Labour, Traffic Management)

Option3: Blister Islands

Advantages

- Well-spaced blister islands reduce speeds along a street.
- They can provide refuge for cyclists and pedestrians crossing the street.
- When landscaped they can reduce a 'gun barrel' effect on long straight roads and enhance the residential streetscape.
- Can accommodate buses and commercial traffic.
- Design flexibility allows for a variety of applications over a range of roads having different traffic volumes

Disadvantages

- Reduction of on street parking adjacent to the islands.
- May create a squeeze point for cyclists.
- May impact on property access and egress.

Estimated Cost

$8,000 – $10,000 per island (Kerb, Gravel, Asphalt Cut, Road Realignment, Foot Path realignment, Drainage Realignment, Other Services Vegetation, Labour, Traffic Management)

Option 4: Median Treatments

Advantages

- Provides refuge for pedestrians.
- Separates opposing traffic.
- Enforces lane discipline on curves.
- Enforces no right turns, when placed across an intersection on the through road.
- Well accepted by residents.
- Can restrict speed.
- Painted medians can provide storage for turning vehicles at driveways.
- Accommodates centrally displayed traffic control devices.

Disadvantages

- May impact on property access.
- Can create a squeeze point for cyclists.
- May impact on kerbside parking.

Estimated Cost

$800-$1000 per meter (Kerb, Gravel, Asphalt Cut, Vegetation, Labour, Traffic Management)

Option 5: Edge Lines

Advantages

- Low cost
- No obstruction to motorist vision
- No obstruction to resident access and egress

Disadvantages

- Will not slow down motorists who intend to speed
- Confusion – some motorists will drive within lines
- Confusion – cyclist use as path, whilst some motorists will drive within lines

Estimated Cost

$5000 per kilometre