



# LIBRARY OF IDEAS

## **Citizens' Jury: Sharing the Roads Safely**

November 2014



**Citizens' Jury, 2014**

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# LIBRARY OF IDEAS

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This document has been sorted into themes for ease of navigation. Please note that this Library of Ideas captures all of the ideas considered by the Citizens' Jury, including the ones which did not feature in the Jury's recommendations. These ideas were harvested by the Jury (from experts, citizens and online contributors) and are provided to help anyone who is interested in exploring the issue of safe sharing of roads. They are in no particular order and may be the ideas of one citizen, or many.

## **Road Use**

Using the roads we have in a better way

## **Arterials and Throughways**

Thinking about how people move and how they should move

## **Attitudes and Culture**

Promoting the behaviours we want to see – a more collaborative culture

## **Education**

Educating all road users of the laws, the preferred culture and the consequences of not sharing the roads safely

## **Bicycle Infrastructure**

Infrastructure that enables people to ride more often

## **Funding and Budgeting**

Allowing more in the government budget for initiatives that promote safe sharing of roads

## **Parallel Initiatives**

Changes to other road use, regulations, laws and the like that promote the culture of sharing

## **City Design**

Designing cities that have mobility in mind (cycling, walking etc)

## **Technology**

Using technology to assist in information, education and real time data

## **Laws and Regulations**

Establishing and enforcing the optimal set of regulations and laws that ensure safe sharing

## **Visibility**

Improving the visibility of cyclists so they can be seen, and therefore are safer

# ROAD USE

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## Using the roads we have in a better way

- Improving traffic flow in the city, hence less irritation between cyclists and motorists
  - Better traffic signaling and sequencing
  - One way streets
  - Better flow through Bentham Street
  - Better flow through Victoria Square
- Close off parking at peak hour times and allow cyclists to use that as their lane
- Lower speeds of traffic where the majority of bikes and cars interact (certain streets/routes)
- 30 km/hr speed limits
- Have zones that are for either cycling or motoring and don't allow them to mix/share
- Cycling tracks that minimise 'dooring' (positioned between street parking and the footpath)
- One way streets in the CBD
- Bike lanes in the middle of roads (between both lanes)
- Bike lanes only on roads under 60km/hr. Separate path for roads where speed is greater than 60km/hr
- Allow bikes to use footpaths to cross at major intersections
- Raised concrete barriers to separate cars and bikes
- Permanent lanes for bikes (not temporary)
- Dedicated bus, car bike and parking lanes
- Protected intersections to support protected bike lanes
- No street in Adelaide should have parking in cycle lanes at any time of the day
- Implement hook turns in the city
- Improvement of bike lanes where they end suddenly
  - Utilize Port Rd median strip for bikes
  - Open Barton Tce to improve flow to North Adelaide for cyclists and motorists
- It would be wonderful if there was more scope for those over the age of 12 to cycle legally on footpaths wherever practical
- Bike lanes continued at crossings and intersections
- Minimum bike lane width of 2m. On the Anzac Highway the extra width could come from the lawns on the edge
- 40km/hr across CBD and inner metro residential areas standardized

- Glen Osmond Rd – make it a no right hand turn during peak hour (excluding traffic intersections)
- Wider cycle lanes – up to 3m
- Double bike lanes to accommodate larger amounts of traffic.
- LED lights that indicate a bike is close by – to avoid intersectional accidents.
- Clear and consistent signage to and from nearby bike routes
- Start green markings well before car is stationary at intersection when a driver is thinking about turning – not when they are turning and it's too late.
- Trial wider painted lines – do they make drivers think a bit longer before turning across them?
- Trial lines painted to look 3D/kerb like even though they are flat – cheaper than kerbs
- Mark the yellow no-parking line on the kerb faceout rather than towards the gutter. Could also use a red kerb to mark a clearway.
- Use on footpath of every street for cycles
- Cycle lanes need to be clearly defined, and not disappear
- Where bike paths are designated on pavements (eg west terrace) need to make the green man/bike automatic, not demand responsive. If cars travelling the same direction have green without asking for it, so should bikes
- Scrap time limited bike lanes
  - If it is important during 7.30-9am it should be important all the time
  - Makes it easier for drivers too – don't have to be aware of what the time is
- Why not have an extra line 1m outside the bike lane. Cars could not cross this line and bikes have to stay in their lane. This will ensure the 1m separation. The existing/proposed rule will not.
- Bike lane markings that continue through intersections
- Bike specific signaling
- Signage regarding riding abreast in the Hills that helps to reduce angst, better educate and encourage preferred behavior
- Allow bikes to use the special right turning lanes and traffic lights for buses
- Introduce a 'beware of bikes' sign beneath the give way/stop signs at T-junctions
- Bike lanes that go through roundabouts
- Bike lanes on footpaths – get bikes off the road
- Two tone (3D) line markings between bike lanes and cars
- Improve traffic signals to allow cyclists a head start
- Reduce King William, Grote and Wakefield to one car lane and dedicated bike and bus lanes each direction
- On road cycle lanes on major roads provide a real indication that cyclists are accepted on roads and should be included where ever possible. They provide a degree of safe separation for cyclists and vehicle drivers.

## ARTERIALS AND THROUGHWAYS

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### Thinking about how people move and how they should move

- Can a review of traffic flow on all major arterials be done, which includes a broader look at the Adelaide Metropolitan Area
- Increase the number of off-road bike tracks (ie Linear Park/Parklands) built into the CBD
- Veloways 'one street in' from major arterials – cyclists will prefer and choose a safer/slower speed limited route
- Create school cycling arterials
- Improve poor connections and disappearing bike lanes
- Accelerate the provision of completed fit for purpose cycle networks
- Bike path trial to a zoned school – get those crazy parents off the road!
- Where major roads are not wide enough for cycle lanes, have parallel streets with cycle lanes
- One way system throughout the city centre – more space on each street for bikes/cars and pedestrians
- Where possible separate the two groups. Use way finding to encourage cyclists to one path. use speed limits and one-way streets to push motorists to other arterials (eg ring route)
- Major through roads (Wakefield, King William etc) should not have bike lanes
- Bicycle snake – cycle only bridge that provides linkages.
- Clearer hierarchy of roads – helps people understand what speeds to expect, what works best for bikes, what's best for the casual/new rider.
- 12km floating "Thames Deckway" proposed, near one bank and away from major traffic. User-pays.
- cycle tracks above railway lines
- On major arterial roads such as the ring route, Anzac highway and west terrace, sacrifice the left hand lane as a designated bike lane.
- Put in intersectional lights and crossings for cyclists instead of just pedestrians to make sure cars making left hand turns don't collide with cyclists
- On every multi-lane road, use 1 lane in each direction as a cycle way
- Focus on areas directly around schools as pilot sites for safer road use – captive audience: parents, kids, teachers
- No bikes on arterial roads unless they are registered
- Better way finding for cyclists (to preferred routes)

# ATTITUDES AND CULTURE

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## **Promoting the behaviours we want to see – a more collaborative culture**

- Increase empathy and awareness of all users
- Recognise and reward the behaviours we want to promote (instead of catching people doing things wrong)
- Lose a minute to save a life campaign
- In getting the cyclist/motorist safety balance right we can learn a lot from the big truck/car interaction as described by Steve Shearer. Boils down to a universal recognition that our roads are there to be shared as they were before the rise of the private car in the mid 20<sup>th</sup> Century
- Bus drivers acknowledge courteous acts (letting people in etc) to change the mood – set a new standard
- The battle lines between some cyclists and some motorists are entrenched and need to be addressed
- Courteous cycling re pedestrians (who are also motorists at other times) would encourage greater mutual respect
- Get media support, not just negativity
- “in my way” – how do we address the attitude
- Encourage more kids to ride to school – hence reduces traffic and has major benefits to all
- Green wave – prioritizing cyclists over cars. When you cycle at 20km/hr you will catch all the green lights. Small LED green lights that light the way
- Tackle the way the media presents the Lycra set and do more to show what an everyday rider looks like...PR
- Trial incentives for cycle commuters (drink/snack stations/discounts). France is trialing paying people to ride to work.
- Encourage more people to ride (more cycling leads to greater safety, reduced cycling leads to reduced safety)
- More people using a bike than a car for the short/small trips in their neighborhoods (benefits to motorists include less congestion, better air quality)
- Making Adelaide more liveable and mobile for cyclists and motorists
- Important to seek parents views in relation to their children's safety
- Signage that promotes the health, economic and social benefits of cycling over car driving.
- Promote better bike maintenance to improve safety of cyclists on roads and reduce the likelihood of crashes between cars and bikes

## EDUCATION

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### **Educating all road users of the laws, the preferred culture and the consequences of not sharing the roads safely**

- Splash page as people register their vehicles with a safety message
- A better bike hire scheme
- Marketing campaign to help drivers understand cyclists
- Clear target for this government term – 0 deaths by 2017. Don't just accept the annual death rate, remove it.
- Promote cycling as a better alternative to driving (campaign/events)
- More positive media stories focusing on good behavior, not bad
- Target groups who more regularly take risks (ie hardcore club members, couriers)
- Survey the public to find out what they know about existing laws – and tailor messaging to fill the gaps
- Improve quantity and quality of data collection, research and sharing across all major stakeholder groups
- Cycling course (on road)
- Ideas need to be motivated by and marketed as safety for EVERYONE. If we say it's just to keep cyclists safe, then those who don't ride are likely to get annoyed by the inconvenience
- Use the data to make the point
- Pamphlets on care and courtesy on the roads for both motorists and cyclists. Distributed free when motorists register their vehicles
- Target the people who may not have access to written material – splash page with a gritty safety message when people register cars online. Then a continue button to complete registration
- Entertaining, creating but effective campaigns
  - Dumb ways to Die
  - Utilize technology to get the message out there (TV, YouTube, Apps, games etc)
  - Cost effective vs infrastructure changes
  - Strong message aimed at the majority
  - Appeals to younger market (especially kids) and therefore gets the message through sooner and stronger)
- School cycling education – improve awareness of high risk situations;
- Promote cycling – it is generally safer when there are more bikes on the road
- Comprehensive road rules education in schools
- Drivers license renewal road rule test every 10 years – would benefit safety as a driver as well as safety for cyclists

- Imitate before you innovate – take people who have successfully implemented safe road schemes in other places and do a job swap with local staff for 3-6 months
- Start in primary schools – get kids on bikes and on roads. Change the culture and give kid the experience of cycling as well as driving
- Educate on bike routes and bike parking via schools
- Accompany each bike sale with info pack on safety, resources, info, advantages etc – quick simple catchy messages
- Cyclists become cars for a day – light frame the size of a car on each bike – to promote message of safety to all car drivers
- Bike education in schools
- Ensure those who only ride on weekends are up to speed with the rules
- Celebrity bike education in schools that encourages parent participation
- Physically get kids out riding
- Simulated program to learn safe cycling – may remove issues of liability. No risk of injury for young riders
- Ensure driving instructors discourage bad attitude towards cyclists in early training
- Buddy system – interested and concerned person teams up with a proficient cyclist to ride – encourage them to find a safe way to do it
- Educate drivers about the unexpected hazards facing cyclists
- Learner drivers being taught about the rules and practical interactions with cyclists
- Bike skills training for all school children, primary and secondary – creates more education road users, cyclists and drivers of the future
- Share the road signage
- Mass advertising campaign targeting sharing the road – joint venture with a worthy organization. Hard hitting message about motorists and cyclists sharing the road
- Bike shops to provide education/road rules with every bike sold
- Expand the 'share the road' campaign to cover bikes, trucks, cars and buses
- Promote a defensive riding mindset
- Award the best council safe sharing initiatives and promote the 'worst'...!
- Free workplace presentations about safer road use
- More funding to reach all kids through Education programs



# BICYCLE INFRASTRUCTURE

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## Infrastructure that enables people to ride more often

- Cycling infrastructure along key paths/routes
- Bike racks on buses
- Secure bike lockups at train and tram stops
- Bike racks at the outside rear of buses
- Cyclist bike lockers
- Storage with attached showers change rooms and in the CBD
- Safe places to park cars. Bikes as in Perth, close to transport
- More safe storage
- Garbage bins tilted towards cyclists
- Bike halls – where you can park bikes, under carparks.
- Cargo bike secure parking area – in one existing car park on the street, which would house 4 cargo bikes.
- Govt funded and uniformly presented bike parking at schools
- a bollard with handle and footrest for cyclists waiting at an intersection:
- bike barns at schools for parking bikes – will interest kids in cycling, will ensure bikes are safe during the day
- build cycling infrastructure through the hills and country and prohibit cyclists on dangerous country/hills roads
- 'cool' bike racks at schools
- Encourage councils and mall owners to provide bike racks onsite
- Create safer routes for bikes
- Extend the greenways routes to and from the CBD
- Bike cages and lockups at train stations
- Bike racks on the front of buses
- Extend CBD bike hire scheme
- Improve the cleaning/clearing of bike paths

# FUNDING AND BUDGETING

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## **Allowing more in the government budget for initiatives that promote safe sharing of roads**

- More cycling police to regulate and correct driver behavior
- Voluntary registration with incentives to raise funds for better infrastructure
- Make cycling and walking a greater priority in all transport and infrastructure planning decisions
- Infrastructure commitment to budget and build pedestrian and cycle bridge from Linear Park to the new Royal Adelaide Hospital. Currently in plan but not in budget. Without it all cyclists will be forced onto North Terrace to access the hospital.
- High profile sponsors to fund safety visibility gear/promo

## PARALLEL INITIATIVES

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### **Changes to other road use, regulations, laws and the like that promote the culture of sharing**

- Multi council collaboration for planning and initiatives
- Public transport that is reliable and regular x2
- Employers in CBD to give a bit of extra time to get to work – thus employees won't worry about arriving on time – accidents could then be reduced
- Explore introduction of mandatory truck side-under-run protection
- Encourage critical thinking about when it's the most convenient time to use the car
- More park and ride
- Increase parking charges – make other options easier
- Shared footpaths for cyclists and pedestrians
- Run competitions for students/innovators to help solve problems – and offer a prize.
- Incrementally reduce parking in the city – increases visibility for all users and minimizes dooring
- Make sure roads are safe and that the surface is clear of holes and potholes – this avoids cyclists trying to avoid them and landing in traffic
- Introduce renewal of drivers license test
- Reducing car use frees more road space for cycling paths. Encourage more walking and public transport which will lead to safe shared use
- Encourage doctors to recommend commuting by bike rather than just leisure/lycra style riding
- Improve the cleaning of roads – remove rubbish in gutters and on the edge of the road which ensures cyclists don't have to zig zag and dodge the rubbish
- AKA tidy towns award – a cycle friendly council award. Cheap if not free if we get sponsorship
- Encourage government departments and companies to provide incentives/amenities to encourage their staff to drive
- Incentives to use public transport more
- Alternative mobility choices information program delivered by volunteers to community groups
- Ensure government departments, and councils work together and collaborate
- Promote active transport
- Tax offset for commuting to work by bike as in France and the US.
- "Buy a section of bike lane" initiative for the community to help fund infrastructure initiatives

- Tandem seated cars available for highway single occupant commuters
- Build narrow cars which when parked to curb end bike dooring
- Free bikes for all who joined in on the live twitter chat
- Sell the idea of better commercial results for local shopping resulting from reduced car parking in front of retail. This has been proven in US.

## CITY DESIGN

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### **Designing cities that have mobility in mind (cycling, walking etc)**

- Urban planning should include cycling arterials/links
- Design roads which
  - Do not have blockages
  - Do not have confusing speed limits
  - Make traffic smooth
- Focus areas around schools to trial safe sharing
- New school precinct design that is focused on shared and safety
- Remove a lane from each multi-lane road leading into Adelaide – and dedicate this to cyclists
- Less iconic tracks – more point to point local lanes (eg retirement village to shops)
- Continuous bikes lanes across and around corners to that we can reduce accidents
- Install more contra flow bike routes in one way city streets – eg – Bank Street, Charlotte Street (south of Frome St.)

# TECHNOLOGY

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## Using technology to assist in information, education and real time data

- Telematics
  - Provide the technology to monitor peoples driving habits and rate the data
  - Europe and USA currently use telematics for insurance purposes – good driving behavior equals cheaper premiums
  - Can we trial using telematics technology in Australia – encouraging drivers to act more responsibly
  - Could reward good drivers with cheaper rego
  - Would be voluntary however people like the carrot rather than the stick
- Better use of information and updates using technology
  - Apps to plan bike routes
  - Parking space live update app
  - Public transport live info at bus stops
  - Public transport route planning
- Trial invisible helmet – would encourage more women to cycle to work or elsewhere
- Green wave – prioritizing cyclists over cars. When you cycle at 20km/hr you will catch all the green lights. Small LED green lights that light the way
- Bicycle counters – that share data. Helps to install civic pride in worlds cycling capital –and getting more people riding.
- More cargo bikes – so people can carry things to and from work, as they would in a car
- Free online service that takes your home/work location and responds with a personal route – already exists! [www.maps.sa.gov.au/cycleinstead](http://www.maps.sa.gov.au/cycleinstead)
- Bike warning bollard – that shoots mist/smoke or a streamer in the air to warn cars (doing a LH turn) that a cyclist is there
- Glass sided truck – that has no blind spot
- USB chargeable lights
- Have a line of electronically activated lights embedded in the white cycle-lane line at a spacing of about 20 meters. As the cyclist is within about 5 meters of one of these, the next five lights are switched on (yellow maybe). Thus, any car in the left lane 100 meters ahead of the cyclist would see these yellow lights **ahead** of them and know that a cyclist is approaching from behind or the side. The cycle would have a small (cheap) radio transmitter to activate the lights and the whole system(s) would be controlled by a central computer.

- One piece of responsive car tech that already exists is mirrors with lights warning when something is in the blind spot. They are already fitted to high end cars. I've noticed they pick up cyclists. How cool is that?
- Use flexible signaling on arterial roads in and out of the CBD to allow more space (ie shared each way roads)
- Develop an app for cyclists to meet up with other cyclists and ride to work together
- Moving lights – 100m ahead of a bike approaching that warn the car that a bike is coming up from behind
- Splash page on rego website with 10 sec education topic for safety
- Keep open an online forum for people interested – like our basecamp portal where we can throw ideas around.

# LAWS AND REGULATIONS

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## **Establishing and enforcing the optimal set of regulations and laws that ensure safe sharing**

- Bike registration
  - With visible plate number
  - Obligation to pass road rules test
- Allow adults to ride on the footpath if they are riding with children
- Make people ride a bike through the city before obtaining a driver's license
- Change helmet laws to increase the number of people willing to cycle
- Violators of road rules be made to ride a bike when on probationary period
- Bikes have right of way – over cars
- Ban cycling on major arterial roads – introduce bike arterials along safer routes
- Give bikes right of way at intersections of designated cycling routes
- Ban cyclists using certain roads in the Adelaide Hills – roads that are hilly, windy and have sharp turns are dangerous for motorists and cyclists alike, especially when the roads are narrow. Build bike tracks through the hills to take them off the roads
- Enforce a minimum 1M passing rule
- Police the fitting of bells on bikes
- Mandatory safer front and rear lights on bikes
- Buses should give way to cyclists – if they're smaller than you, let them pass
- Ban hook turns by cyclists on roundabouts
- Cyclists on narrow (over 60km/hr) country roads (especially those with double white lines) should only ride single file
- Make the law clearer to all road users
- Promote lawful uses of footpaths – to ensure people understand them.
- Pre-greens – lights for bikes turn green seconds before the cars to allow bike traffic to start flowing.
- Trial voluntary helmeting in the CBD and on dedicated bikeways
- Left hand turns addressed as a matter of urgency so that cyclists do not run out of road
- Allow cyclists to use footpaths where there are no bike lanes
- Cycling related questions as part of the driver's license test
- Registration for cyclists – especially for insurances that come with it
- Designate certain roads as not available for cyclists
- Trial the 1m passing law in SA (as is being trialed in Qld)
- Develop and implement a mandatory drivers training which includes:
  - How to overtake a bike
  - How to turn left if a bike is on your left hand side



- How to give way to a bike which is turning either right or left
  - How to cross a bike path when turning left
- Make it a core competency for how to drive around people using the roads (bike and walking)
- 1m passing distance for under 60km/hr, 1.5m passing distance for over 60km/hr
- If we made the 1m passing rule a law, everyone in the left lane on Anzac Highway would be breaking the law every morning
- Bike licenses for the purpose of education
- Identify black spots and have police spend time there during peak period to ensure safe passage
- Find ways in which motorists and cyclists can show their knowledge before they get or renew their license
- Plate number and bike passport - \$15 annual fee
- Give way to bicycles when turning left – and ensure appropriate signage is in place
- Allow people to ride without helmets
- Cycling prohibited on roads that do not support a 1m passing space
- All cars to pass roadworthy tests
- Install new signs in the hills for cars and bikes to share
- Re-establish 18m parking clearance from driveways for visibility
- Greater penalties for vehicle drivers (and cyclists) that break the law.

# VISIBILITY

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## **Improving the visibility of cyclists so they can be seen, and therefore are safer.**

- Bike boxes
- Better visibility at night – reflectors, lights
- Free lights for all cyclists
- Designated light signals for cyclists (as for buses)
- Standardized and better signage for cyclists
- Introduce higher standard of bike lighting
- LED markings to clearly separate cycle lanes at major intersections
- Raised lane markings for cycle lanes
- Signage is too high for cyclists who are usually watching the road surface.  
Introduce standard way-finding to encourage cyclists to focused areas – lower bollard style
- Lane markings painted in faux 3D to look like a kerb. Discourage drivers to cross quickly
- Improve free light and reflective strip program subsidized by enterprise.
  - Better awareness and provision
  - Make sure every rider finds it easy to have a full complement of lights to reflective bands
- Put light reflectors along bike lanes
- Post signage telling riders and drivers to share the road.
- Paint signs on the road for cyclists
- Shared cyclist pedestrian signs in esplanade walkway at Henley Beach is excellent for raising awareness
- Better signage for rules of who has right of way
- Green paint effective but AU standard is expensive
  - Is there a cheaper alternative for bulk use
  - Less reflective
  - Coloured concrete
- Cyclist's rear and front lights as bright as possible, particularly at night.
- Flashing rear lights can be a safety hazard
- Small green sticker on the side mirror of cars to remind drivers to check for cyclists before turning
- Reflective material on the rims of helmets and seat stems
- Legionnaires cap (with long back) which is worn under helmet – back flap is made of reflective material
- Reflective High-Viz Bendable strips wrapped around arms, legs or backpacks
- Road have continuous lines across intersections to help with the progress of safe travel

- Fluorescent vest with a number ID for all cyclists to wear.
- One metre matters – mark one metre from bike lane to car lane
- Crow funded high visibility initiatives
- Free light swap program (like gas bottle swap program) where cyclists can go into certain retail outlets and either swap their light, or swap their light battery.
- Free gear that is cool to wear/use
- Free lights to riders who can't afford to buy them
- Posties on bikes have a reflective flap 20-25 cm long which is velcroed to the back of their helmets. This is probably a better idea than Legionnaires caps. The big point of this idea is the same. **BE VISIBLE** in daylight. These flaps are 1.5-2.0 metres high whereas lights on bikes are usually less than 1m from the ground. Flaps can be seen. Lights often cannot.