



[www.tinyurl/WalkACT](http://www.tinyurl/WalkACT)

## Questions about Segway use on ACT paths

Dear Shane

Living Streets Canberra is concerned that Segways be appropriately regulated, not only for the safety of pedestrians and Segway users but also to avoid jeopardising progress towards [Transport for Canberra](#)'s targets for walking, cycling and (in relation to walking to and from bus stops) public transport.

We believe that the relevant regulatory changes must as a minimum address the following questions:

- What will be the minimum age of Segway users?
- What training, licensing and registration requirements will apply to Segway riders?
- How will the Government educate road users to share with Segways?
- What compensation will be available to people who are injured by Segways?
- What design standards apply to shared pedestrian/Segway paths?
- Will Segways be restricted to paths that meet appropriate design standards?

Please note the explanatory information below, and advise how you propose to address the above issues.

Yours Faithfully

A handwritten signature in black ink that reads "Leon Arundell".

Leon Arundell B Sc Hons, M Env St, Grad Dipl Appl Econ.

Chair, Living Streets Canberra

4 February, 2017

## ***Explanatory information***

### **What will be the minimum age for Segway use?**

The minimum age, for driving any other motor vehicle more powerful than an electric bicycle, is seventeen years.

The minimum age for riding Segways in Queensland is [twelve years](#).

The minimum age for riding on a motorcycle pillion seat is eight years. The rider of a Segway is in control of the vehicle, and so carries additional responsibility for the safety of other road users.

The minimum age for travelling by bicycle is twelve months, because no manufacturer makes a helmet light enough to be safe for a child of that age.

The Canberra Times reports that [the new provisions won't include any age restriction for Segway use](#).

### **What training licensing and registration requirements will apply to Segway riders?**

Training is required for knowledge of road rules and for operations such as safe mounting, dismounting, luggage carrying and emergency stopping.

GC Law solicitors advise that [“It should be compulsory for Segways to be registered ... in the same way as vehicles that travel on our roads,”](#)

### **How will the Government educate road users to share with Segways?**

The proposal is that [“Segways will generally be treated as pedestrians.”](#)

A driver turning left at an intersection must currently scan an area within about four metres of the vehicle's path, in case the driver must give way to a pedestrian. In three seconds, a pedestrian travels about four metres.

In the same three seconds a Segway can travel sixteen metres. So the Government will need to educate drivers, when turning at intersections, to scan an area four times as large as the area they are currently accustomed to scanning.

Drivers are accustomed to driving to the left of oncoming headlights. If Segways are required (like pedestrians) to travel to the right of oncoming vehicles when travelling along a road, then a driver who drives to the left of an oncoming Segway's headlight will drive off the road.

### **What compensation will be available to people who are injured by Segways?**

GC Law solicitors advise that [“It should be compulsory for Segways to be ... covered by CTP insurance”](#).

Even the [world's fastest man is not immune from collision with a Segway](#). Segway crashes can result in large compensation payouts. [A Connecticut jury awarded a man \\$10 million after he tumbled from a Segway and suffered brain damage in 2009](#). The Canberra Times reported in 2016 that a [Canberra bike rider was awarded \\$9 million in damages after a crash with a reversing car](#).

[Brodie v Singleton Shire Council, 2001](#) confirmed that a local government has a legal obligation to maintain roads and related facilities to appropriate standards.

**What design standards will apply to shared pedestrian/Segway paths?**

Segways are up to 85 cm wide. So a path must be at least 170 cm wide if it is to allow two Segways to pass.

Segways can travel at 20 km/h or more. A Segway weighs twice as much as an electric bicycle, has more than three times the power, and requires 50% more distance to stop.

Taking those factors into account, we expect that a 20 km/h design standard for a shared pedestrian/Segway path would be similar to the existing 30 km/h standard (right) for a shared pedestrian/bicycle path.

**Will Segways be restricted to paths that meet appropriate design standards?**

Only some Canberra footpaths meet the 30 km/h design standards (right) for shared pedestrian/bicycle paths.

Many footpaths are only 1.2 metres wide, have very short sight lines at driveway crossings, and/or have tight curves.

Some footpaths pass through narrow and heavily-trafficked spaces between cafes and their outdoor eating areas.

If the ACT Government legislates to allow Segways on footpaths that it knows do not meet appropriate design standards, then the Government leaves itself open to being sued in the event of a Segway crash in which the design standard of the footpath is a contributing factor.

**Table 6.2: Design speed of off-road bicycle paths.**

Design element	Coverage in <i>Austrroads - Part 14</i>	Example values for 30 km/h design speed
Operating speed	6.3.1 Bicycle operating speed	30km/h
Horizontal curvature	6.3.2 Horizontal curvature Table 6-1	25m minimum path radius
Bicycle path width	6.3.4 Width of paths Figure 6-28, 6-25, Table 6-4, 6.5, 6-6	1.5m one-way 2.5m two-way
Shared path width	6.3.4 Width of paths Figure 6-19, Table 6-3	2.5 - 4.0m
Clearances	6.3.5 Clearances Figure 6-8, 6-13, 6-22	0.5 - 1.0m to walls and fences
Gradient	6.3.6 Gradient Figure 6-2	5% maximum
Sight and stopping distance	6.3.7 Sight distance Figures 6-6, 6-5 and 6-7 for vertical	35-40m 8m sight clearance on min 25m radius curves
Super elevation and crossfall	6.3.8 Super elevation, crossfall and drainage Table 6-2, Figure 6-8	2% for minimum radius of 25m