



Common Sense Regulations to Optimise Australia's Micromobility

Supporting Sustainable Mobility, Innovation and More Liveable Communities

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Australia is a Legislative Mess in Micromobility

Inconsistent and Regressive Laws

- Purchase and ownership of eScooters and ePMDs is permitted for 100% of Australians
- Around 250,000 Australians have purchased eScooters and ePMDs they are riding illegally
- Privately owned eScooters and ePMDs are illegal to use for 65% of Australians.
- Vehicle Specification requirements vary between states and federal laws
- Riding rules vary from State to State
- Non-compliant, modified, grey market and dangerous vehicles and components are being sold as no education or control exists
 - Excess speed risks
 - Increased risk of fires
 - Increases unqualified servicing and dangerous parts

Australia is a Legislative Mess in Micromobility

Inconsistent and Regressive Laws

Legalise Don't Demonise ePMDs

- Legal standards can be communicated
- Community can be educated
- Illegal devices can be identified
- Vehicles from quality manufacturers are safer

Just Do It! No Trials Required!

- Each State/LGA thinks they are different – they're not!
- Every day's delay brings more illegal and dangerous devices and components
- Do it now, learn, review, revise like Queensland.

Barriers to Greater Active Transport

Vehicle Standards

- ePMD specifications compromise innovation and safety
- Bikes are power limited, restricting use for heavy people, people with disabilities, cargo and hilly areas
- Throttle bikes are not allowed
- Speed Pedelecs are not allowed

Private Ownership

- ePMDs are illegal for private use for 65% of Australians

Environment for Use

- Street speed limits are too high
- Footpath clutter can be dangerous for pedestrians and people with disabilities
- Bike paths do not connect for major end-to-end journeys

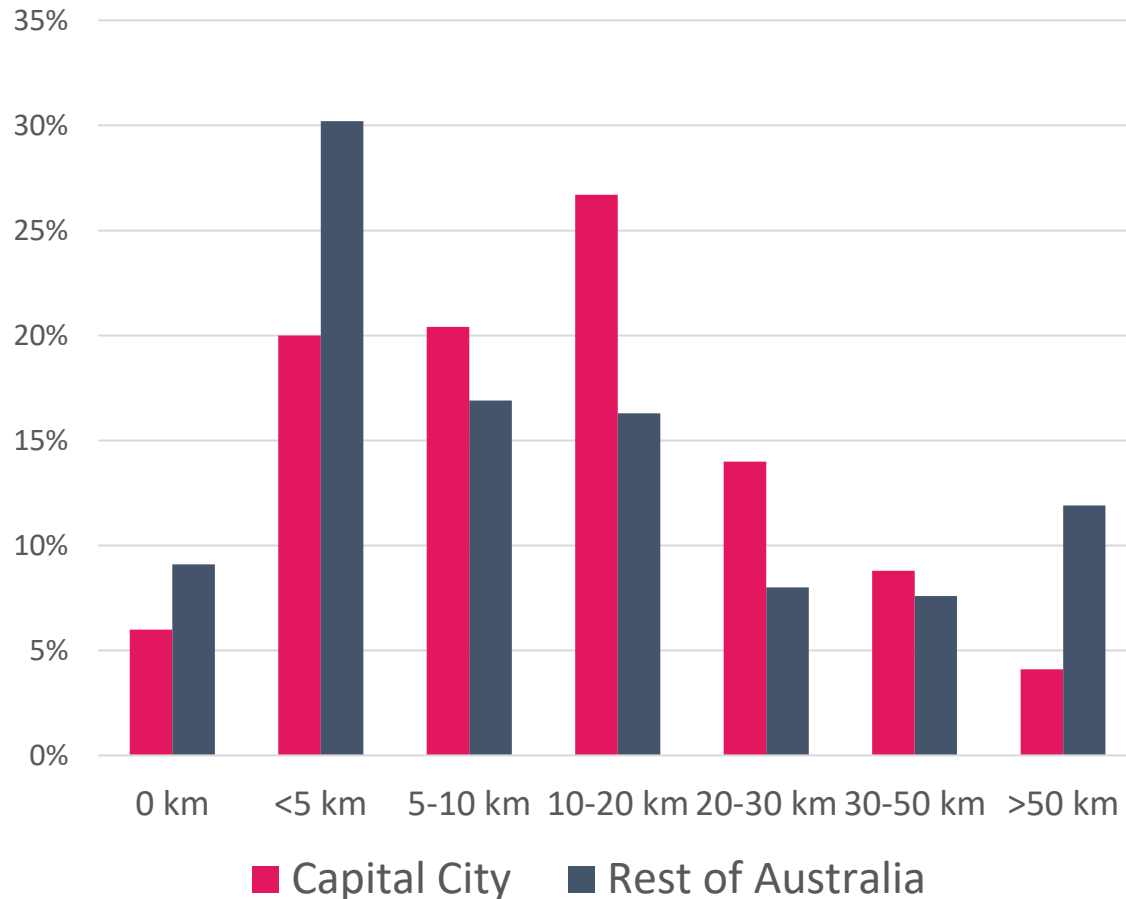
People

- Bureaucrats
- Politicians
- Mischief Makers

10 billion+ Car Journeys <5 km per year in Australia

The Objective: **Replace Short Car Journeys with Sustainable Transport**

Car Journey Distance



50 million tonnes of CO2 emissions

50% of all car journeys

Higher outside capital cities

Most journeys driver-only

Benefits of Modal Change

Health

Environment

Safety

Liveability

Local Economic Activity

Vehicles Needed for All Use Cases and Users

Local Journeys, Shopping, Commuters, Delivery, Cargo (Children, Pets, Shopping, Tools)

	ePMDs	eBikes	eCargo Bikes/Trikes	Throttle eBikes	Speed Pedelects
Young Adults					
Commuters					
Families					
Seniors					
Elderly					
People with Disabilities					
Delivery Riders					

Harmonise More Power Required Currently Banned in AU



Harmonising Australian ePMD Vehicle Standards



Federal Department of Transport Definition – ePMD

- **is designed to carry one person only**
- has one or more wheels
- is propelled by an electric motor
- has an effective stopping system, including one or more of these – brakes, gears or motor control
- is not capable of exceeding 25 km/h on level ground when propelled by a motor
- **has a footprint of no more than 1250 mm by 700 mm**
- is not more than 1350 mm in height
- **has an unladen mass of 60 kg or less**
- is not equipped with protrusions, sharp or pointed objects (paraphrased for brevity)

Enhancements to Better Meet Market Needs

Allow more than 1 if designed for the purpose



Remove length restriction or extend to 200cm

Some States have varied this



Regulate to Allow Wider Range of eBikes

- **Regulate to allow eBikes with power up to 1,000W**
 - Supports heavier riders, people with disabilities, hillier areas and cargo
- **Allow throttle only eBikes speed limited to 25 kph**
 - Supports greater adoption as a car alternative and greater inclusiveness
 - Seniors
 - Elderly
 - People with Disabilities
- **Allow Speed Pedelects speed limited to 50 kph and 4,000W**
 - Supports longer rides
 - Require moped level driver's licence and lite registration



Harmonising to Worldwide Manufacturer Standards Brings Innovation, Better and Safer Vehicles to Australia

- Major Manufacturers sell bikes with these standards elsewhere in the world
 - Increases adoption and usage
 - Supports more use cases
- Discourages poor quality and illegal conversions/hacking if quality bikes are available with these features
- Manufacturers will not build to Australian regulations if the market scale is too small
 - This encourages illegal imports, grey markets and cheap, dangerous models

European Classification (Countries may vary)

The L1e-A Electric Bikes: The maximum speed and power output of e-bikes in this category are 25km/h and 1000W, respectively. Also, they have both the pedal-assist and throttle functions.

The L1e-B Electric Bikes: The e-bikes are built with two wheels and only function with the pedal-assist feature. The maximum speed and power outputs are 45km/h and 4000W, respectively.

Listen to Lena - Adopt 30 kph as the Speed Limit for Local Streets, School Areas and High Activity Zones

- **Dramatic reduction in incidents and crashes**
 - Increased reaction time prevents incidents
 - The risk of death involving a motor vehicle is less than 10%
 - The severity and cost of injuries significantly reduced
- **Riders feel safer without separated bike/mobility lanes**
- Safer for pedestrians and other vulnerable road users
- Community liveability enhanced
- Little impact on car journey time
- Low cost to implement
- **Proven throughout the world – just do it!**



30please.org

Harmonise Riding Rules – Use Queensland as Basis

[Link to Full Queensland Rules,](#)

Areas of Use	Speed Limits
Footpaths	12 kph
Shared Paths	12kph (unless signed otherwise)
Separated Paths	25 kph (unless signed otherwise)
Bicycle Paths	25 kph (unless signed otherwise)
Bike Lanes on Roads with Speed Limit up to 50 kph	25 kph (unless signed otherwise)
Bike Lanes Physically Separated on Roads	25 kph (unless signed otherwise)
Local Streets (50 kph or less and no dividing line)	25 kph (unless signed otherwise)
Prohibited Areas, As Indicated by Signs	
Other Core Rules	
Helmets Required	
Minimum Age, 16 or 12 if supervised by an adult	
No Mobile Phone Use, Riding Under the Influence	



LGAs apply these rules locally and can vary Areas of Use and Speed Limits as local conditions require

Smart Certification, Lite Registration & Licences

Vehicle Type	ePMDs	eBikes	Speed Pedelecs
Max Powered Speed	25 kph	25 kph	50 kph
Licence	No	No	Yes
Smart Certification	Yes	Yes	Yes
Lite Registration	No	No	Yes

Smart Certification, Lite Registration & Licences

Smart Certification

- A secure and trustworthy method of remotely checking that any device complies with Federal and State laws
- Only qualifying manufacturers are eligible for smart certification
- Illegal and grey market vehicles will not be eligible – and hence identifiable as illegal
- Can be done instantly using secure scanning technology from any location
- Tamperproof labels on vehicles can be scanned for enforcement and other services

Lite Registration

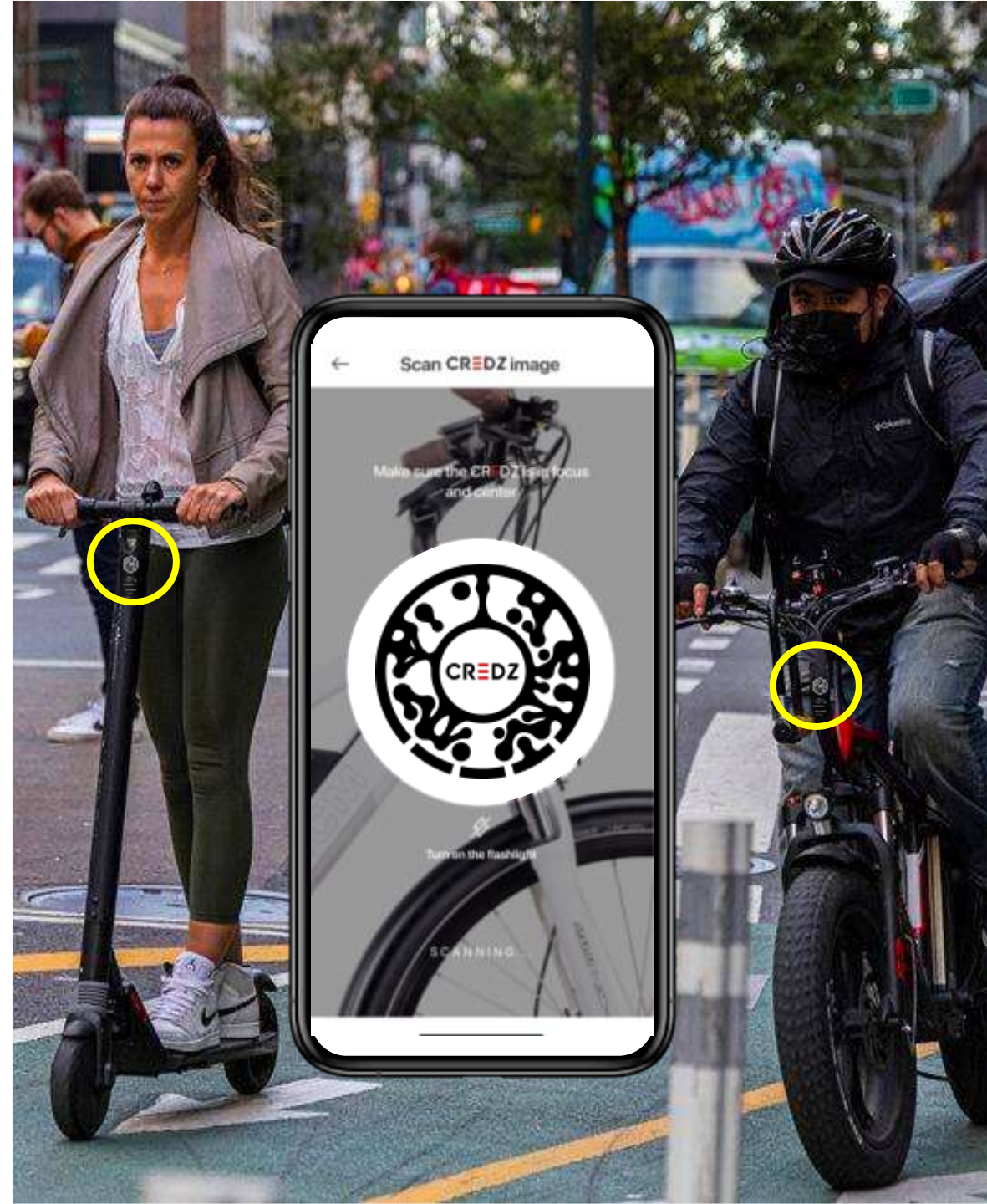
- An e-moped approach to registration, under \$100 per year
- Can be done instantly as an additional function to smart certification



CREDZ

A Solution for Smart Certification & Lite Registration

- Link production records to unique secure images
- Images are digital twins of physical vehicle specifications to a serial number level
- Images are attached to or printed on vehicles and key components such as batteries
- A simple scan verifies authenticity and vehicle certification to Federal and State laws
- Riders are informed of local riding rules
- Certification and Registration can be completed instantly via API to Government systems
- Scan the code at www.credzid.com to see an example



Top 6 Actions to Move Short Journeys from Cars

1. Legalise ePMDs for Private Use in All States

- A. Use the Federal Department of Infrastructure, Transport, Regional Developing and Communications [Road Vehicle Standards](#)
 - i. Amend length to 200 cm

Federal
Vehicle Specifications

2. Amend Federal eBike Standards to allow:

- A. Electric Motors up to 1,000 W
- B. Throttle-only eBikes up to 25 kph
- C. Speed Pedelecs with speeds up to 50 kph and 4,000 W

States
Road Rules Toolkit

3. Harmonise ePMD Riding Laws Across All States, use Queensland as the basis

LGAs
Local Toolkit Application

Top 6 Actions to Move Short Journeys from Cars

4. **Introduce Smart Certification** for electric devices up to 25 kph and Lite Registration for vehicles 25-50 kph

Federal
Vehicle Specifications

5. **Adopt 30 kph as the default speed limit** in local streets, high-activity areas, school areas and others as designated by LGAs

States
Road Rules Toolkit

6. **LGAs use the regulatory toolkit** to optimise their local environments

A. Areas of use

B. Local speed limits, based on the appropriateness of local paths, roads and infrastructure

LGAs
Local Toolkit Application

About Zipidi

Zipidi provides strategic consulting and insurance to the micromobility industry worldwide. We work with fleet operators, manufacturers, technology companies, governments, and many types of organisations.



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Some Bonus Information

Putting eScooter Accidents in Context

- New Zealand has a national Accident Compensation Commission
 - Any accident of any type is claimable
- Electric Scooters have been legal since 2017 and are a normalised form of transport
- This data looks at over 300,000 claims since 2017 across 10 modes of active transport.
- eScooters represent under 5% of incidents
- Average eScooter claim is NZ\$2,371, \$500 less than the average pedestrian claim

NZ Active Transport Claims Paid 2017-2022

		Accepted Claims					
Transport Type		2017	2018	2019	2020	2021	2022 (YTD)
1	Cycling	27,771	27,801	32,939	36,412	34,269	17,610
2	Pedestrian	2,043	5,256	13,550	11,391	11,650	5,787
3	Scooter	7,295	7,095	8,837	8,748	8,804	4,079
4	Skateboard	8,519	7,703	8,188	9,804	9,091	3,920
5	E-scooter	309	938	3,427	1,958	2,278	1,482
56	Roller Skate	1,279	1,501	1,878	2,030	2,372	1,141
7	E-bike	164	356	655	992	1,407	1,028
8	Mobility Scooter	397	458	485	401	454	241
9	Moped	175	231	293	219	270	141
10	Segway	76	66	41	32	22	11
	Total	48,028	51,405	70,293	71,987	70,617	35,440

Cycling, Pedestrians and Kick Scooters are more than 75% of claims

Less than 5% of claims

Around 70,000 Claims/year

Average Cost of Claims Paid 2017-2022

		Average Payment Calendar Year					
	Transport Type	2017	2018	2019	2020	2021	2022 (YTD)
1	Segway	\$1,707	\$834	\$3,124	\$3,380	\$3,931	\$3,646
2	Mobility Scooter	\$2,634	\$1,987	\$2,576	\$2,470	\$2,788	\$3,050
3	Pedestrian	\$7,775	\$4,859	\$2,781	\$3,042	\$3,310	\$2,875
4	E-scooter	\$4,097	\$2,242	\$1,965	\$3,095	\$3,287	\$2,371
5	Moped	\$855	\$2,450	\$3,288	\$3,729	\$2,939	\$1,868
6	Cycling	\$1,641	\$1,692	\$1,696	\$1,848	\$2,000	\$1,679
7	Skateboard	\$1,010	\$1,248	\$1,294	\$1,419	\$1,548	\$1,546
8	E-bike	\$1,871	\$1,768	\$1,801	\$1,660	\$1,881	\$1,342
9	Roller Skate	\$851	\$928	\$977	\$978	\$1,272	\$1,175
10	Scooter	\$465	\$491	\$597	\$730	\$736	\$814

Less than 5% of payments

Alternative Talk Title?



“Sometimes the questions are complicated and the answers are simple.” –Dr. Seuss