

# ROAD SAFETY 2023

A Career Pathway for Women







# Executive Summary

Road safety has been identified as a significant public health issue because of the strain it places on both human and financial resources. It is the leading cause of death globally for young people aged up to 29 years, with 73% of all road traffic deaths occurring among young males. After decades of improvements in trauma rates there has been a plateau. It was suggested there should be a renewed focus on connecting education with practice, building capacity, and bridging the science practice gap (World Health Organisation 2018) Research methods were mixed, providing both quantitative data via an anonymous survey (269 participants) and qualitative data, which involved a workshop (32 participants), 11 focus groups (27 participants) and one-on-one interviews (15 participants). This approach provided approximately 400 individual perspectives that led to this report.

- The survey was implemented to obtain quantifiable data.
- The workshop was conducted to obtain consensus or lack thereof on identified issues.
- Focus groups were conducted to provide insights on perception changes through discussion.
- One-on-one interviews were conducted in order to obtain in-depth personal perspectives.

Overall, the findings from this research suggest male and female views were mostly similar. What did affect results was the historical influence of physical science education vs. social science education. Results showed that both approaches are needed. Results also showed there is currently limited road safety specific education and professional development resources, particularly at the non-university level. Due to both education and professional development limitations, it was not possible to map specific courses that would definitively lead to a road safety career. It was also not possible to map current employment factors as each state, territory, and local government have different requirements, job titles, funding arrangements, management, and reporting approaches. However, the research was able to identify transferrable skill groups that do characterise current role types in road safety, and the type of core road safety education that is required. This information could be used to develop courses that will provide career pathways for road safety whilst underlying causes of identified problems are addressed.

**The data revealed fundamental problems that are contributing, not only to difficulties with career development, but to road safety’s traction in society. The core issues identified are:**

 Leadership	 Identity	 Education	 Governance
Leadership is required to unite the fragmented aspects of road safety.	Road safety would benefit from viewing itself, and being classified, as a social and economic entity/industry.	All levels of education for road safety should be underpinned by the Safe System Approach which is transdisciplinary.	Current systems of reporting, funding, and management between governments appear more suited to infrastructure concerns than to community behaviour problems.



## Key Recommendations

1. Road safety should be united under a single organisation or body. Participants in this research were clearly seeking leadership and saw the Australasian College of Road Safety (ACRS) as the organisation best placed to do this.
2. Develop an understanding of the road safety workforce. This will focus and clarify education pathways, improve marketing of road safety as a career pathway and aid the profile of road safety in the public domain.
3. Investigate what is required to be recognised as an industry, but in the interim, market road safety as an industry, at a personal level to the road safety community, and to the wider community. This will attract interest and the support of the public in order to drive and sustain growth through the uptake of careers within the industry.
4. ACRS should consider leading the development of non-university courses/refresher courses in transferrable skills that are underpinned by the Safe System Approach. This will serve to reinforce leadership and legitimacy both within the industry and for the industry as an entity.
5. Tertiary education should consider incorporating aspects of road safety in degrees and increase accredited postgraduate road safety courses.
6. Reporting and information sharing between state and local government should be realistically aligned to meet the needs and accountability of both systems. This will reduce frustration and improve productivity. For example, developing a Guide for Council Road Safety Practitioners.

### Limitations of Data

- Males are underrepresented in these results despite the industry being male dominated.
- Most participants in this study are tertiary educated (76%). In the closing days of data collection the following question was asked in a telephone conversation, “I’m calling because my staff have asked me if they are eligible to participate in this survey even though they don’t have a degree”. PNF-01-12:23 It is unknown how many people in road safety are not represented in this report because they felt they were not eligible due to their education.





## PEOPLE WORKING IN ROAD SAFETY



- 79%** Have three or more years work experience in other jobs.
- 67%** Started their road safety career after the age of 41 (mid- to late-career).
- 60%** Have worked in the industry for five or more years.

## PERSONAL MOTIVATION FOR WORKING IN ROAD SAFETY



- 87%** Most participants have an inherent passion or interest in road safety.
- 96%** Believe they are contributing to a better and safer environment.

## CONDITIONS AND BENEFITS OF WORKING IN ROAD SAFETY



- 79%** Report road safety offers a good work/life balance.
- 71%** Report road safety provides job security.

## SKILLS, EDUCATION AND TRAINING



**There are gaps in current road safety education.**  
*'I've done the road safety audit course ... [but] I can't progress because I'm not an engineer'.* F01b-18:25

**Road safety specific education is very limited.**  
*'There's no specific qualifications for it [Road Safety Officer] ... it's very much experience based'.* F03b-2:20

**There is no guide for road safety in governments.**  
*'When I came into this job there was no training ... nothing. It was all learn-on-the-job'.* F04b-37:32

**Professional development is needed for all areas of road safety.**  
*'I'm 22 years into this job, ... I want examples of what other people are doing, new and innovative [things] ... No one's been able to help us in that'.* F01b-47:43

**Road safety education is too little, too late.**  
*'I had to wait till my fourth year when I did work experience'.* FG04-F02-40:02

*'[Only] one subject was road safety or transport related [in my degree]. ... We don't do enough of that in our units'.* FG04-M03-33:22

Road safety education is splintered and siloed making it difficult to find appropriate education that will advance a road safety career.

## Methods

A mixed research method was used for this research. Participants were drawn from local government employees and employers through the Australian Local Government Association (ALGA), students from the Monash University Accident Research Centre (MUARC), and Australasian College of Road Safety (ACRS) members who are proactive in the road safety community. From the data we obtained over 400 participant perspectives.

DATA SOURCE	PARTICIPANTS
Survey	327
Workshop	32
Focus Groups	27
Interviews	15
Total	401

## Survey

Implementation of an online survey was used to obtain quantifiable data about career pathways for women in road safety.

- Twice as many women (69%) as men (31%) participated in the online survey and participation was in line with state or territory activity.
- No statistically significant differences were identified between male and female perceptions of the work environment, but nearly twice as many females felt that road safety is a male dominated industry (females 62%, males 33%).
- People in road safety are driven by a passion to constructively contribute to society (96%).
- Most participants agreed that road safety is not perceived as a career and that career paths are unknown (85%).
- Road safety careers appear to appeal to mature employees with previous work skills and education (71%). They rely on transferrable skills for entry to road safety careers and seek further education, training, and professional development once in a road safety position. Cost is not perceived as a career barrier (67%).
- Government is the largest employer of people in road safety (54%).
- Online searchable information is needed to promote road safety careers (35%) as well as face-to-face industry events and education (35%).

## Interviews, Focus Groups, and the Workshop

Road safety as a career is not well understood and does not have an engaging image. A lack of public awareness regarding road safety career pathways needs to be addressed. Road safety needs to be united under one body so that it can be recognised as an economically viable industry.

Overall, road safety appears not to have gender issues but there are some remnants of gender bias. This attitude is changing motivations to work in road safety are mostly for ethical reasons and work flexibility. Practical experience and professional development courses are regarded as necessary in road safety.

There was consensus that both physical and social science education is required for road safety. The feeling was that one should specialise in one area but have education and exposure to the other area through courses and professional development. Road safety as a career opportunity should also be introduced early in the education cycle.

- Two types of education are needed.
  - a) Professional education, such as a university degree in a physical or social science, or possibly a specific road safety degree.
  - b) Practitioner education, such as short, accredited courses specifically tailored to road safety. Some of these courses may require practical skill development.

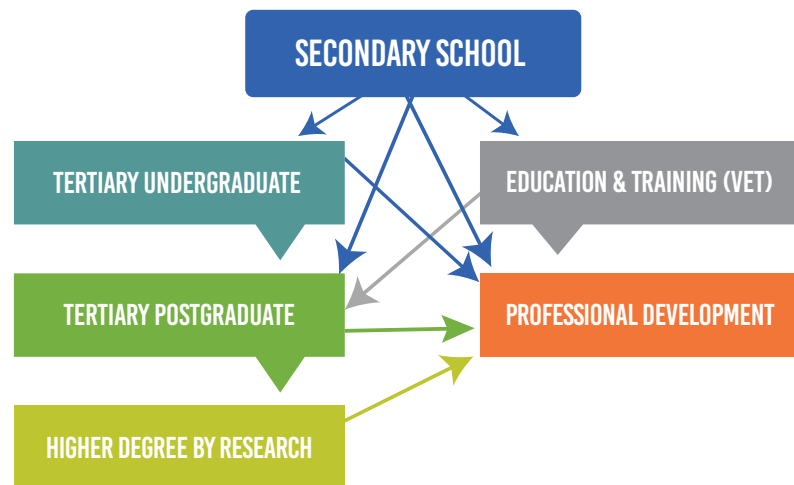
Identified Problems Affecting Careers in Road Safety

- 1. Road safety should:
  - a. Quantify its value.
  - b. Define itself.
  - c. Be orchestrated as a single unit.
- 2. Managers need a better understanding of their employees' roles.
  - a. Funding arrangement need to be more carefully structured to ensure processes, and requirements can be reasonably met.
  - b. Processes need to be clearly outlined and presented to all parties.
- 3. Implementation of a national guide for all local road safety employees, and a platform to share insights of the local level for benefit at state and federal levels.
- 3. Regardless of education level attained, involvement in road safety should require specialised training. This aspect requires further development.
- 4. Current courses need to be re-examined so that they are both accessible and attainable.

Career Pathways and Transferrable skills

There is currently a wide range of courses and degrees for identified transferable skills. These courses and degrees are both accredited and non-accredited and are run by universities, colleges, and private enterprises. Prices range from under \$500 to over \$50,000 with costs set by the provider if it is a private enterprise or by the government if it is a public organisation like universities. For road safety, the problem with many of these courses are:

- 1. They do not specifically relate to or apply their information to road safety.
- 2. The underlying theories are not necessarily compatible with road safety. To develop this understanding, employees either need to supplement their education with additional courses or learn on the job.



Currently, only MUARC provides a university accredited course specific to road safety. Other institutions and organisations fill the gap of non-university courses but again very few relate directly to road safety.

Career Mapping

- Job titles for road safety positions do not make it easy for job seekers to find jobs or identify career paths in road safety.
- People approaching a road safety career from the physical sciences such as engineering find it easier to develop a career pathway through further education and professional development courses.
- Developing a road safety career pathway from the social sciences appears to be more difficult.
- Transferrable skills are a good way to enter a road safety career.
- Education and accreditation specific to road safety is not readily available and should be developed.

‘I fell into transport engineering, ... It turns out that I really liked what I was doing’.

F09e-28:58

The need for a blended approach to road safety

‘We had a drone fly over a park area and we were looking down across a big intersection in Melbourne and had tram tracks. So signalised intersection, busy roads for a cross intersection and the lights would change phase and pedestrians would run across the road to get to the tram. And we could see with AI overlays we could see tracking of where all the pedestrians would go. It was overlay overlays. We could see the paths and barely anyone actually used their crosswalk areas because they had to quickly race to get to the tram. The infrastructure, even though it met all code, it wasn’t actually performing a function that was required of the pedestrians to get to the tram quickly and easily. So there’s an example of where it’s not really pure engineering necessarily and where others can come in and help’.

F09e-9:35

Unintentional gender bias.

‘Gym class guys would be more happy to work through the mirror, no problems at all. Whereas women will more likely to skirt around the edges cause they don’t want to be on show. They don’t want everyone looking at them. So the space is designed by a guy with just how they would use the space. Yeah. And it’s, it’s not that they did it intentionally, it’s just, you know how things are done. Yeah’.

‘Or public transport hubs or tram stops ... [are] used equal parts by men and women during the daytime. But as soon as it comes night time, you know, women are less likely to use it because they, they’re exposed, they’re vulnerable - [Its] just the way it’s designed’.

F09e-11:56





Road safety is generally seen as an ideal or an enforcement, not a career option, and not as an important social and economic entity or industry.



“for the last 10 years, there’s been no path for me. ... I’m sitting here as someone with these 10 years of phenomenal experience, and yet every single opportunity I’ve had to create myself. ... definitely there has never been any clear path’. F04b-1:02:49

## Road Safety Career Problem: Two Key Issues

### 1. Perception

Road safety is generally perceived in the context of ‘saving lives’ with little focus given to the numerous other aspects of this multifaceted career pathway. The confusion is in part due to successful road safety law enforcement, and campaigns run to promote the ideal of road safety: saving lives. These campaigns are vital for making social changes, like seatbelts save lives, but there has been a cost. The cost being that road safety is not perceived as a viable entity or industry, one that has valid economic and political standing. Currently road safety is relegated to an ‘Other’ status within recognition of industries.

The repercussions of this are vast. At the human level, a large part of road safety is conducted within the framework of government which is a highly structured system that of necessity, conforms to checkboxes and codes. (ABS 2020-21) The downside of systemisation is that classification determines how valued you are ‘to the system’. Like it or not, the system-perception filters through to the workforce where it influences not only the individuals’ self-perception, but how they see others in their environment. If the system classifies you as an ‘other’, that is how people and funding within the system will see you, and ultimately that is how the individual will eventually see themselves within the system.

At the system level, political and financial benefits are diluted by the priorities and agendas of the parent body of the system. For example, Transports’ objectives favour: Freight, cost, time, or resource efficiency over road safety concerns. This has a significant impact on project funding and prioritisation. For example:

- As road safety is not viewed as a viable industry with many pathways requiring education, society does not see it as a career possibility. As a result, there is no public demand for road safety education pathways. This informs universities’ course decision making.
- Government structure has determined ‘road safety education’ should fall under primary and secondary education. Road safety education becomes an additional task for the already stretched educationalists. Road safety education would be better handled by the local road safety officer who understands the specific needs of the community and can better contextualise state and federal programs to the community.
- State level management is impeding local projects because of some funding arrangements. This is a problem as it is the local who understands the nuances of their environment, nuances that need to be accommodated not standardised. For example: The language and cultural behaviour of a particular area will require different approaches.

### 2. Leadership

Road safety sits at the centre of opposing attractor centre. As with all attractor centres each one will sway the direction of road safety if they possibly can. For example: For decades the development of infrastructure has pulled road safety towards engineering, the Professional, and Federal & State quadrants. But there is a growing need and demand for the Practitioner and Local Government quadrant involvement.



These four attractor centres require strong leadership in the form of a body/organisation whose sole focus is on developing road safety as an independent entity, an industry in its own right. This body cannot be strongly aligned to any of the existing attractors if it is to successfully unify the four quadrants into the single complex system that is road safety.



Key Recommendations

PROBLEM	RECOMMENDATION	BENEFIT
Road safety is currently not defined as an industry. It is fragmented and siloed. The overarching system of governments does not yet value road safety as an economically contributing industry. This impairs road safety’s economic and political power.	Road safety should be united under a single organisation or body.	As ACRS is already considered the peak body for road safety and has the support of participants this transition should be a smooth process. Independence will enable and encourage alignment of finance and education with practice.
Most people within road safety tend to view their industry from a singular perspective whilst failing to value the entirety and complexity of all its components.	Develop an understanding of who constitutes the road safety workforce.	Determining the parameters of road safety will clarify education needs, improve marketing of road safety as a career pathway and aid public profile.
Road safety is not seen as an interesting or commercially viable career option. It is largely characterised by the sole concept of ‘saving lives’ rather than the reality of it being a multifaceted industry. This perception needs to change if road safety is to attract financial and political support.	Road safety needs to be seen as a viable industry that encompasses the needs of the individual, and wider communities. Increased visibility will attract interest and public support to drive and sustain growth via the uptake of careers and the development of educational opportunities.	Proactive marketing from within to promote a unified road safety industry will both raise self-esteem and initiate a change of perception within the road safety workforce. This perception shift will filter through to the wider public as road safety positions itself as an economically viable industry.
Current professional development activities are the backbone of road safety but these opportunities are limited to a small section of people who consider themselves as being part of the road safety work force already.	ACRS (Australasian College of Road Safety) should consider leading the development of non-university courses/refresher courses in transferrable skills that are underpinned by the Safe System Approach.	Reaching out to the greater road safety community will not only help stakeholders understand the breadth and depth of their community but also build networks and spark discussion in currently unexplored areas. This will lead to growth.
Students are not choosing road safety as a career because it is not introduced during degree courses nor is it promoted as a career path in secondary education.	Tertiary education should consider incorporating aspects of road safety in their degrees and increase road safety accredited courses.	Introducing road safety earlier in the education process would help students make an informed decision about their career options.
Road safety needs to be managed and planned at a national level, but road safety trauma is experienced and understood at the local level. Some key communication between current systems of government are not aligned and are causing issues.	Reporting and information sharing between state and local government should realistically align to meet the needs and accountability of both systems. This will reduce frustration and improve productivity. E.g., developing a Guide for Council Road Safety Practitioners.	A national guide will be a productive starting point for a unified system for road safety. The guide will focus all parties on what is required, delivery timeframes, and factors critical to delivery. It will increase awareness on where additional training is needed.

Conclusion

Road safety as an industry is growing in importance because of increased human awareness and technology advances. Road safety is perceived to be ‘a fairly small market’<sup>M05-13:58</sup> but when all aspects are considered road safety is comparable to the public health industry in regard to its structural complexity. Health as a recognised economic industry has been able to affect social change, attract education at all levels and unify its many businesses and organisations under one banner: DIVISION Q – health care and social assistance. In the health industry it is possible to map career pathways of professionals and practitioners, for associated businesses and organisations. Road safety has no system identity and thus remains siloed, fractured, and frustrated.

Road safety needs to unify under one banner because ‘politicians are only going to move when there’s votes. They’re only going to put money in it when there’s votes and when they can see a better benefit’.<sup>M05-18:30</sup> This will require leadership that can harness the wisdom of the current workforce, adapt it, and build for the needs and demands of the future so that road safety can attract the groundswell of the Alpha generation. A generation that will steward humanity into the digital era, an era of networking not hierarchy.







Partners in this research were:

- Australasian College of Road Safety (ACRS) - the peak membership association for road safety professionals, advocates, and members of the public who are focused on eliminating fatal and serious injuries on our roads.
- Australian Local Government Association (ALGA) as the national voice of local government (employers of road safety professionals).
- Monash University Accident Research Centre (MUARC) as a tertiary education provider of Australia's only Graduate Certificate in Road Safety.

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