

Public sector innovation: an ecosystem-based approach to addressing driver distraction

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Abstract

Distracted driving due to mobile device use is an increasing contributing factor in road crashes globally. In Queensland, a high proportion of drivers report using their phone illegally in the car, despite being aware of the risk for driving. The Department of Transport and Main Roads (TMR) in Queensland has applied an ecosystem-based approach to this ‘wicked’ policy problem by co-designing solutions with stakeholders who may contribute to drivers’ decision-making to engage in this high-risk behavior.

Background

On average 25 people are killed and 1,235 seriously injured on Queensland roads per year as a result of crashes where driver distraction played a part (TMR, 2018). It has been estimated that mobile phones and other devices may be a factor in an estimated seven per cent of all crashes (BITRE, 2014). Despite the dangers, approximately 70 per cent of Queenslanders admit to using their mobile phone illegally in the car (Footprints 2018).

Understanding the issue

The Department has completed Stage 2 of a multi-stage Driver Distraction Project investigating the causes of mobile phone-related driver distraction and co-designing solutions with stakeholders to address this behavior. This included collaborating with federal, state and territory transport agencies across Australia.

In Stage 1, TMR applied design-thinking methodologies to better understand the influence other factors were playing on drivers’ decision-making. Drivers and subject matter experts were engaged in this process. This revealed that drivers sit at the centre of a complex ‘ecosystem’ of elements that each, to varying degrees, reinforce driver’s risk-reward decision to use a mobile phone or other device while driving. This ecosystem comprises elements including, vehicle and mobile phone manufacturers, insurance and telecommunication providers, infrastructure planners and builders, and regulatory and enforcement agencies.

This suggested a ‘systems approach’ was needed to significantly impact driver behavior.

Tackling driver distraction

In Stage 2 of the project TMR applied a holistic approach that encompassed all the elements of the ecosystem contributing to the problem centered around four separate, yet interrelated, streams of work (see Figure 1):

1. Engage with, and bring together, stakeholders from across the ecosystem
2. Review and develop a new penalty regime
3. Assess the feasibility of technology-based solutions
4. Apply chain of responsibility principles to employers and Original Equipment Manufacturers



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Figure 1. Driver Distraction Project scope – Stage 2

Through Stage 2, TMR adopted the role of *Convener*, by bringing stakeholders in the ecosystem together to share knowledge and resources to solve the challenge of driver distraction. This involved convening solutions-focused stakeholder engagement forums, including industry workshops, technology discovery days and a National Summit.

The key outcome from this stage was an action plan outlining tangible solutions with a roadmap for their implementation. Equally important has been the development of a sense of shared responsibility by stakeholders across the ecosystem.

TMR demonstrated public sector innovation through applying this ecosystem-based approach so that stakeholders now understand their role and can adopt appropriate strategies to overcome the problem posed by driver distraction (Deloitte, 2017).

This approach to a ‘wicked’ problem has provided valuable insights and lessons learned for policy practitioners to inform future policy direction.

References

- Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2014). Research Report 140. Impacts of road trauma and measures to improve outcomes. Canberra, ACT.
- Deloitte. (2017). Catalyzing public sector innovation. A report from the Deloitte Center for Government Insights.
- Department of Transport and Main Roads (TMR). (2018). Data Analysis Unit. Brisbane, Queensland.
- Footprints Market Research. (2018). Driver Behaviour & Attitudes Study. Research undertaken for the Department of Transport and Main Roads and BCM Partnership, Brisbane.