

Title	Leveraging Road Crash Statistics and Multi-Agent AI for Enhanced Road Safety and Policy Making
Item	Enhancing Road Safety through AI, Data Analysis, and Crowdsourced Feedback

Core message / purpose

This brief presents an innovative approach to road safety by integrating road crash statistics with multi-agent AI-based web applications, integrated into the Digital Atlas of Australia. The purpose is to demonstrate how UrbIA's technology stack (Digital Atlas of Australia + Geolocated Open Data + OpenAI) can help identify accident hotspots, generate actionable safety recommendations, and support evidence-based policy making. This project is presented to the GovHack judges to highlight the potential for improving road safety through AI and to seek support for deploying these advanced tools in road safety initiatives.

Recommendation/s

That the Committee:

- a. Approves the integration of UrbIA's technology stack (Digital Atlas of Australia + Geolocated Open Data + OpenAI) with road crash statistics for enhanced road safety analysis and policy support.
- b. Endorses the development and implementation of AI-driven recommendations, vetted through crowdsourced feedback and expert advice, such as safety improvements and public awareness campaigns, to address identified road safety issues.

Addendum

Project Description

UrbIA is a geospatial data platform powered by the Digital Atlas of Australia and AI, designed to make urban data more accessible and empower decision-making. It allows users to explore local environments, receive AI-generated insights, and contribute their own suggestions, with a focus on road safety, capacity forecasting, and sustainable urban development.

Features

- **Geospatial Navigation:** Users can navigate the map using the Digital Atlas of Australia to explore data on road safety, traffic patterns, public transport usage, and more.
- **AI-Generated Insights:** *UrbIA* utilizes AI to provide actionable suggestions based on real-time data. These insights cover areas such as road safety improvements, infrastructure capacity needs, and sustainability measures.
- **Crowdsourced Feedback:** Users can react to AI-generated insights by rating and offering their own suggestions, creating a collaborative environment for improving urban spaces.

Use Cases

- **Road Safety:** By analyzing Victorian Road Crash Data, *UrbIA* generates safety suggestions such as adding guardrails or improving road lighting.
- **Capacity Forecasting:** Using traffic volume data, the platform offers insights on where capacity upgrades or maintenance may be needed.
- **Sustainability:** *UrbIA* provides AI-driven recommendations for expanding bike paths, optimizing public transport routes, and promoting greener mobility options.

How It Works

1. **Data Collection:** Geolocated data is sourced from the Digital Atlas of Australia and other public datasets such as road crash statistics, traffic volume reports, and public service utilization.
2. **AI Analysis:** OpenAI is used to analyze this data and generate insights. For example, AI may suggest infrastructure improvements based on accident hotspots or low traffic volumes.
3. **User Interaction:** Users can view these insights, rate them, and provide feedback, fostering a collaborative approach to urban planning.