

AI&Me: Using big data, imagery and AI to drive change and create safer environments for children around schools in Vietnam

Irene Wanady (Australia)

Key words: Low cost technology; Remote sensing; Risk management

SUMMARY

The problem □ Road traffic crashes are the leading cause of death among children and young people worldwide. Road traffic accidents also cause 50% of all deaths among teenagers aged 15-19 and cause hundreds of thousands of injuries. 6-18 vulnerable road users such as cyclists motorcyclists and pedestrians are disproportionately represented, particularly around schools in developing countries. □ □ The Project □ To address the problem, the International Road Assessment Programme (iRAP) created the Star Rating for Schools program which focuses on using AI, big data, and youth engagement to improve road safety in school areas. Supported by a USD\$2m Google.org grant and following a pilot funded by the Botnar Foundation in Ho Chi Minh City, Vietnam was chosen as the target country for this project, which is leveraging AI to scale up iRAP's Star Rating for Schools and AiRAP partnerships to provide 3-star or better journeys to school. □ □ The methodology □ Anditi has been engaged in Phase 1 which entails the screening of Big Data to identify the most at-risk schools in Vietnam. The methodology includes 4 levels of screening from broad country scale to school immediate environment scale. □ Level 1 includes broad data such as monthly average income, rate of urban growth and population density to narrow from a country level to a province level. This identified 12 more at risk provinces for screening at level 2. □ Level 2 included attributes such as road density, school density, percent of population aged 6-18 and % roads with over 50km hr speed limit. These are ranked and an output of 24 districts was obtain as riskier than others. □ Level 3 includes length of road by type, number of intersections, % of commercial land use and number of bus stops. At level 3 street view imagery is collected to assist with level 3 and 4 screening. □ Level 4 consists of ranking individual schools on safeness of their immediate environment including number of lanes, presence or absence of pedestrian crossings and speed limits on adjoining roads. □ □ The projected outcome □ The AI enabled Star Rating for Schools partnership with Google.org is a game-changer for global road safety that will support sustainable mobility for youth and contribute to at least eight of the UN Global Sustainable Development

AI&Me: Using big data, imagery and AI to drive change and create safer environments for children around schools in Vietnam (13241)

Irene Wanady (Australia)

FIG Working Week 2025

Collaboration, Innovation and Resilience: Championing a Digital Generation

Brisbane, Australia, 6–10 April 2025

Goals. Schools will be identified to move through stages 2, 3 and 4 of the project, which will encompass youth engagement and participation and local government commitment to improving safety of the Star Rated schools. □

AI&Me: Using big data, imagery and AI to drive change and create safer environments for children around schools in Vietnam (13241)
Irene Wanady (Australia)

FIG Working Week 2025
Collaboration, Innovation and Resilience: Championing a Digital Generation
Brisbane, Australia, 6–10 April 2025