

# 5-Star Cities for all

The economics  
of safe mobility

Pedestrian: ★★★★★  
Bicyclist: ★★★★★



# SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



SDG Target 3.6 aims to **halve** the number of road deaths and injuries by 2030



HALVE ROAD DEATHS & SERIOUS INJURIES BY **2030**

# Global Road Safety Performance Targets



## NEW ROADS & STREETS

## EXISTING ROADS & STREETS

**GLOBAL PLAN**  
 DECADE OF ACTION FOR ROAD SAFETY  
 2021-2030

Calls for action on:

- Multimodal transport & land-use planning
- Safe road infrastructure**
- Safe vehicles
- Safe road use
- Post-crash response

DECADE OF ACTION FOR ROAD SAFETY 2021-2030

TARGET **3**  
**2030**

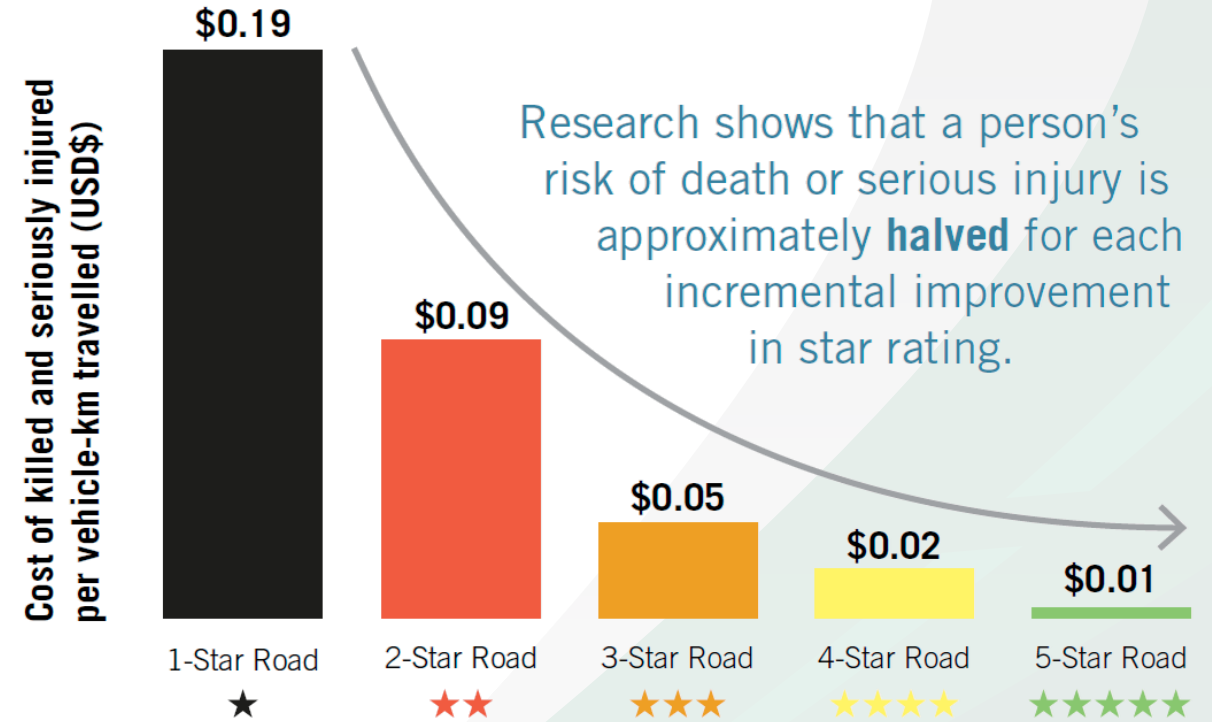
**Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.**

TARGET **4**  
**2030**

**Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.**

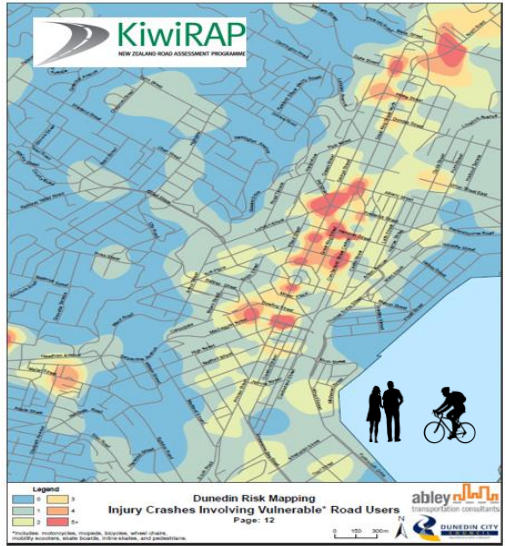


# Global Star Rating Performance

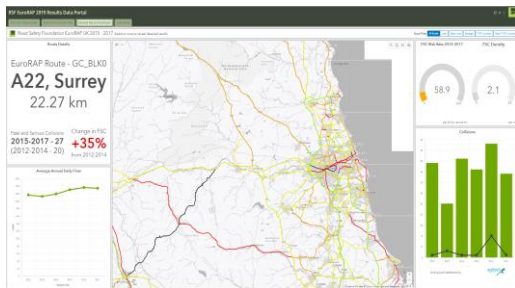


# The iRAP Global Standard in Urban Areas

## Global Risk Mapping



[KiwiRAP Risk Maps](#)



[EuroRAP Risk Mapping Results UK](#)

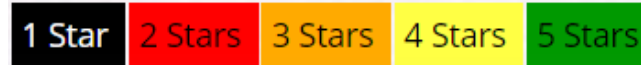
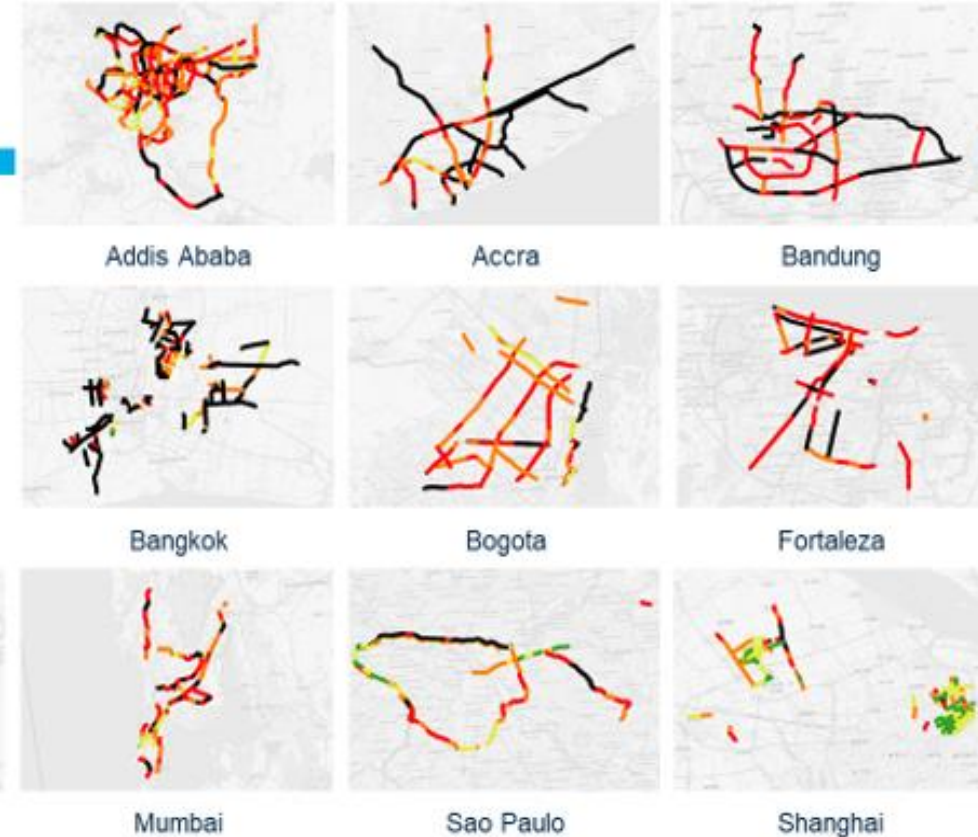
## Global Star Rating in Cities

### How does my city compare to others?

### Pedestrian Star Ratings (before changes were made)



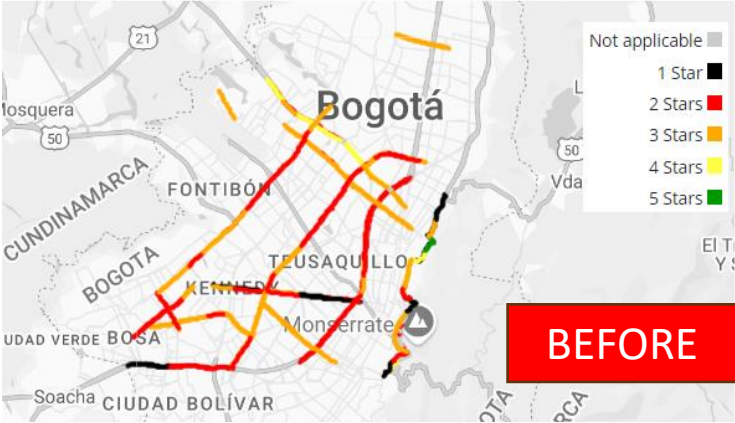
- 1 star
- 2 stars
- 3 stars
- 4 stars
- 5 stars
- N/A



# iRAP Safer Road Investment Plans

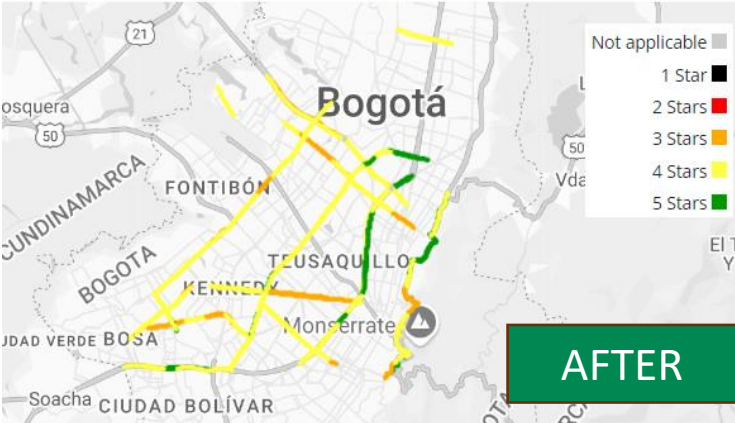
Star Rating

👤
Smoothed
Before
Show Legend  
Raw
After
Hide Legend



Star Rating

👤
Smoothed
Before
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After
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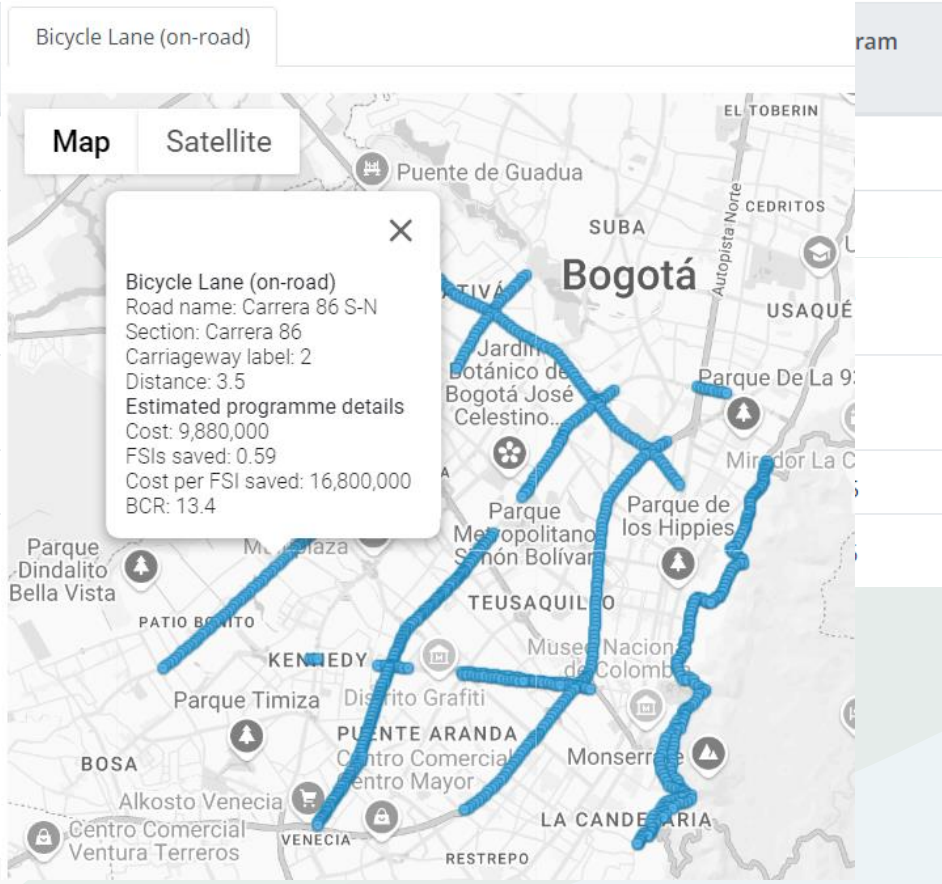


Total FSIs Saved	Total PV of Safety Benefits	Estimated Cost	Cost per FSI saved	Program BCR
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25,000	1,480,000,000	184,000,000	7,340	8.04
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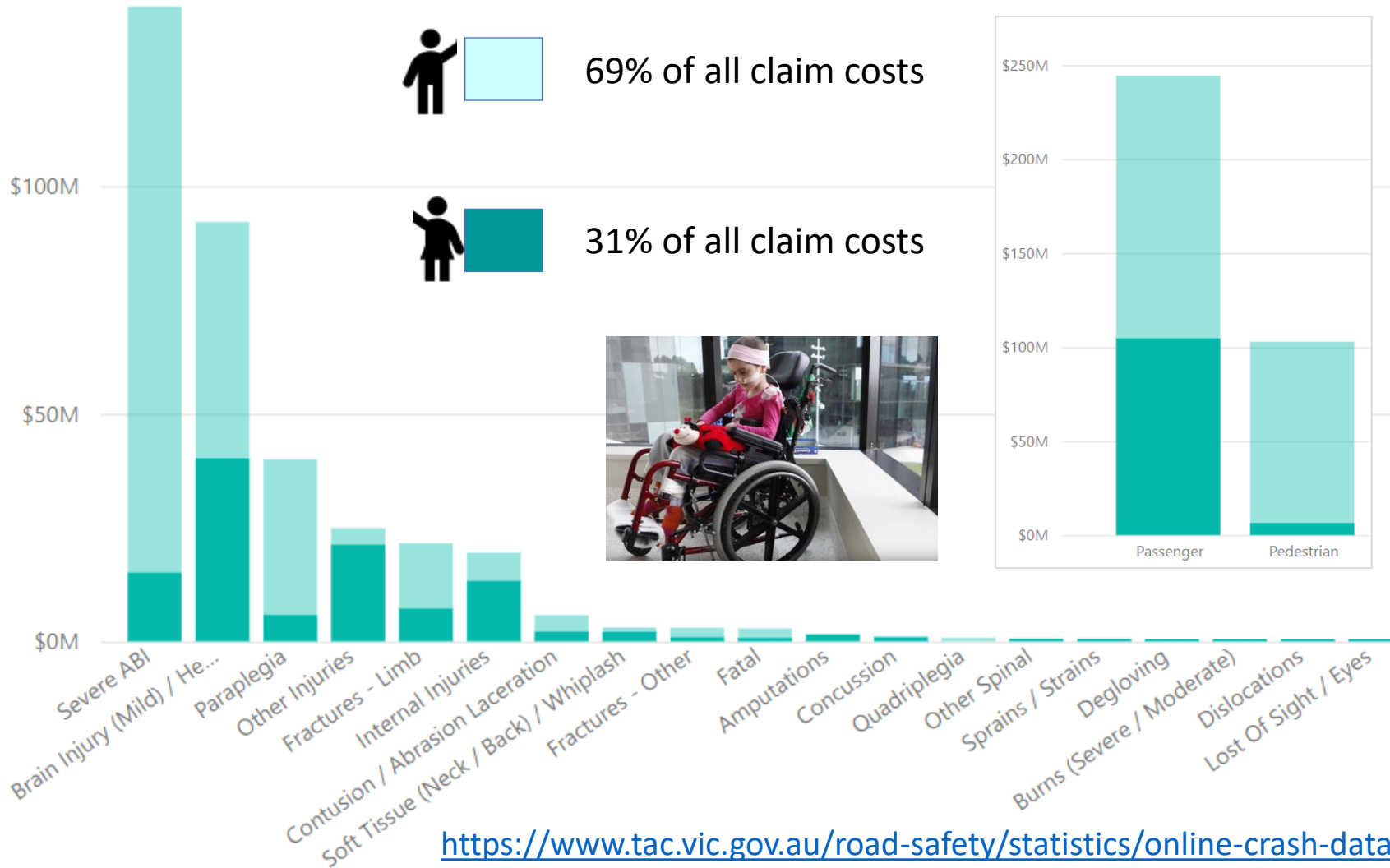
Countermeasure	Length / Sites
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Bicycle Lane (on-road)	80.8 km
Traffic calming	118.3 km
Footpath provision passenger side (>3m from road)	11.6 km
Side road signalised pedestrian crossing	184 sites
Signalised crossing	317 sites
Unsignalised raised crossing	182 sites



# The cost to our kids and communities

TAC claim costs for children 0-15 years old



All Pedestrians average claim cost



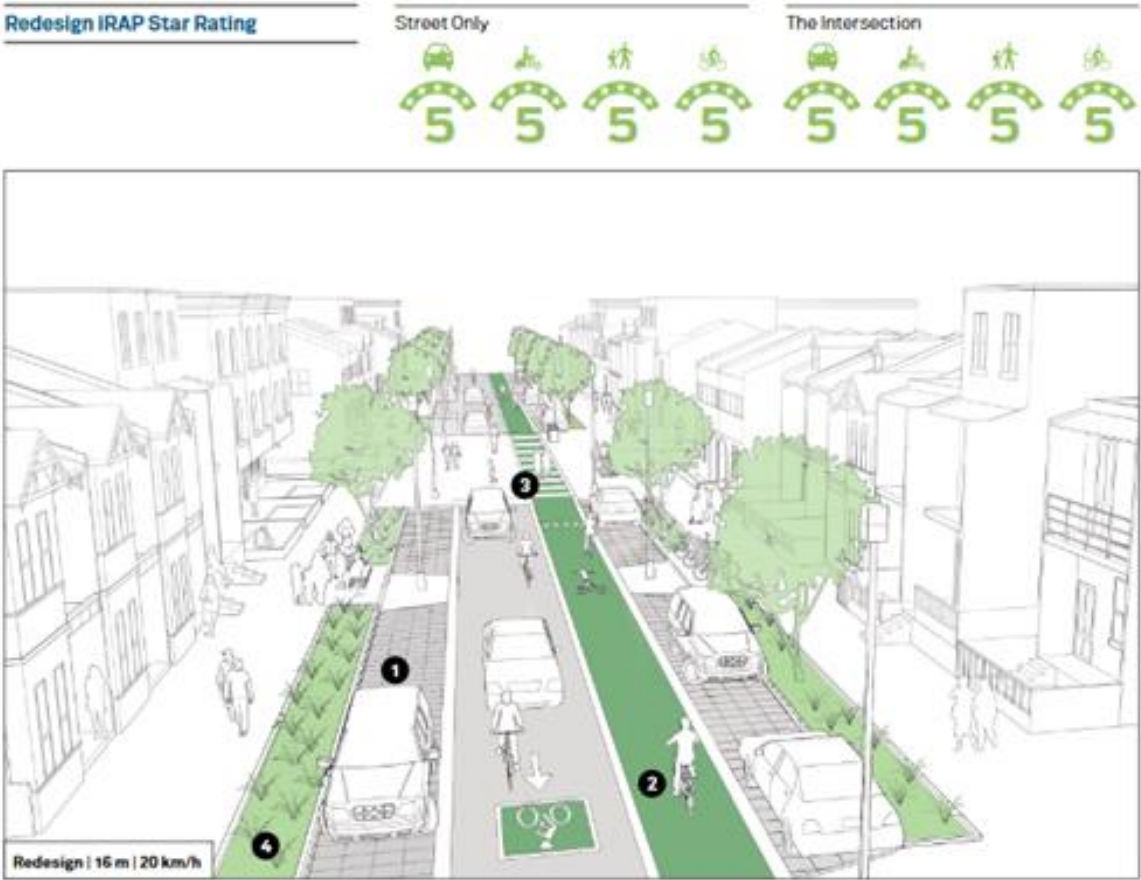
**\$240,000**



**\$36,000**

# Star Ratings for every road user

## Creating 5-Star Liveable Cities for All



<https://globaldesigningcities.org/2020/09/29/star-rating-your-street-plans-with-irap-and-the-global-street-design-guide/>

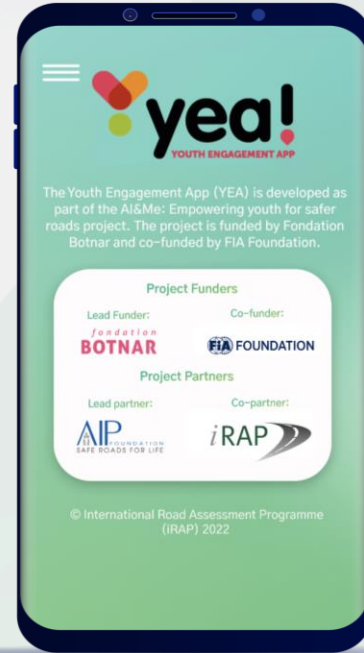
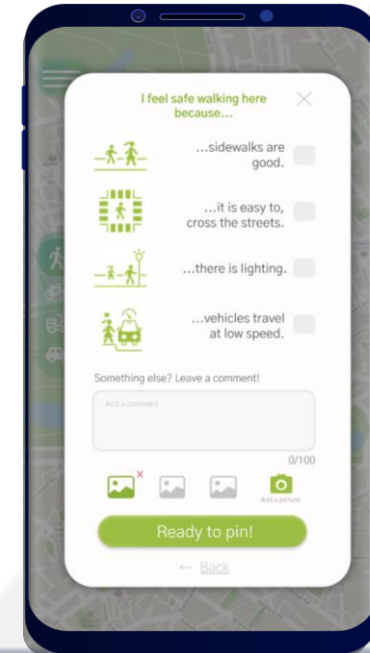
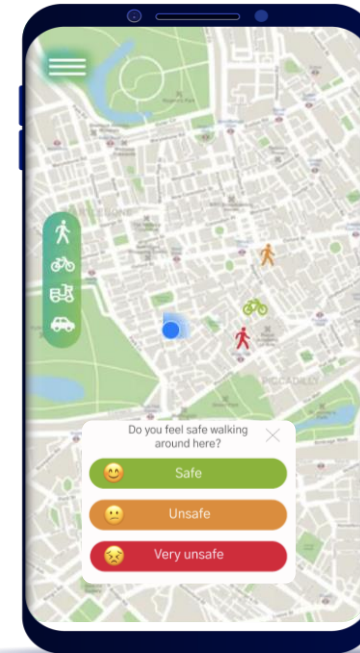






# Innovation: Including our kids

<https://www.starratingforschools.org/>



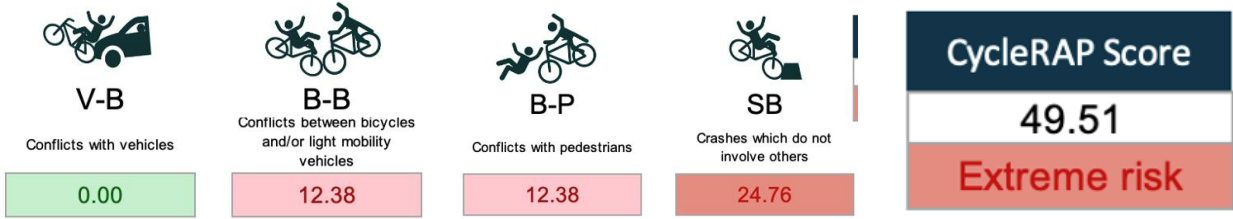
Young people's voices at the heart of the design



# CycleRAP



<https://irap.org/innovation/>



<https://irap.org/cycleraap/>

# DAR ES SALAAM BUS RAPID TRANSIT, TANZANIA



- ✓ Tanzania National Roads Agency (TANROADS), Dar Rapid Transit Agency (DART) and World Bank are developing Bus Rapid Transit (BRT) corridors in Dar es Salaam, Tanzania.
- ✓ Safe designs and speeds prioritized and informed by iRAP assessments.



**900,000 daily commuters**

**Trip time from 3 hours to 45 mins\***

**Deaths down 79% (33 to 7)\***

**3-stars or better for all road users\*\***

\* Phase 1  
\*\* Phases 3,4

# Urban Countermeasures

## Planning, Investment & Design



PREDICTIVE APPROACHES FOR SAFER URBAN ENVIRONMENTS

<https://phoebe-project.eu/>



<https://www.elaborator-project.eu/>

### Living Labs ♦ Lighthouse Cities

Milan, Italy



Copenhagen, Denmark



Helsinki, Finland



Issy-les-Moulineaux, France



Zaragoza, Spain



Trikala, Greece





# Celebrating Star Rating Results

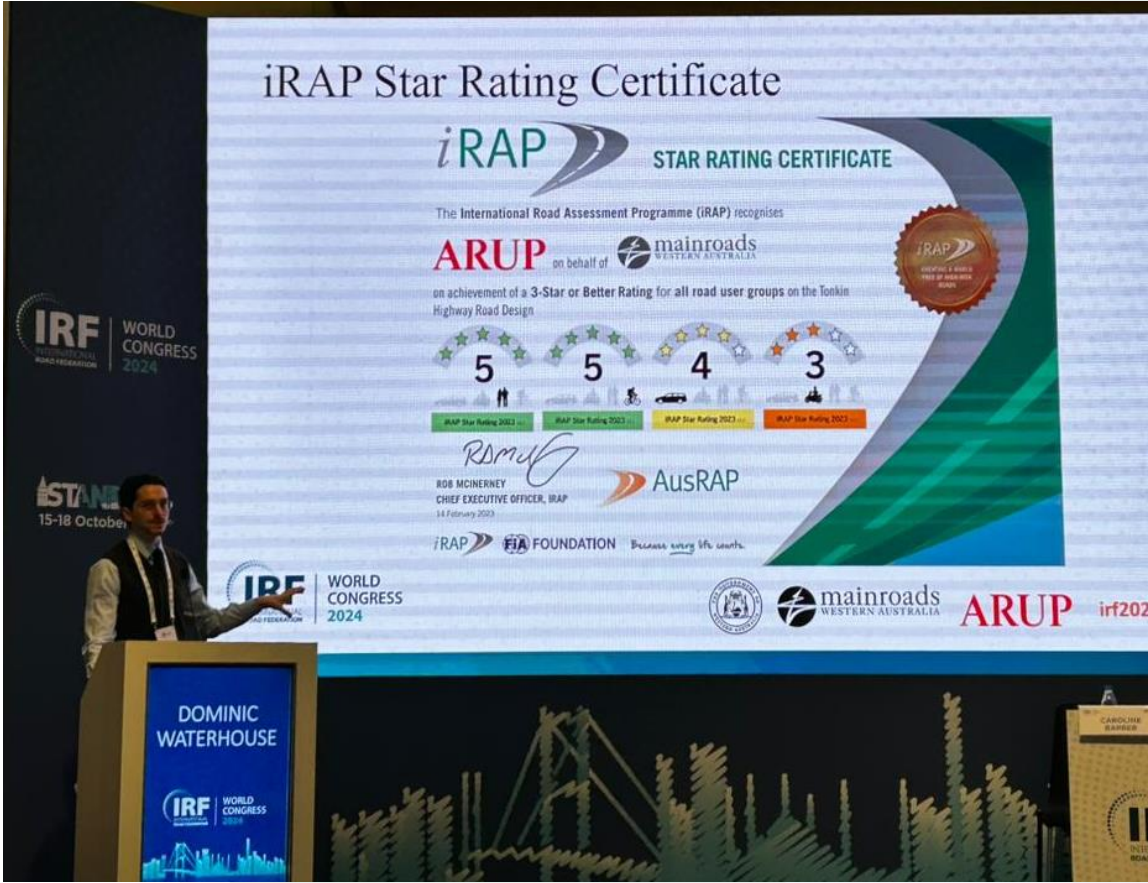


## Ribbon Cutting Safer City Streets

Pedestrian: ★★★★★  
Bicyclist: ★★★★★



Shanghai



# For more information

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<https://irap.org/cyclerap/>