

Infrastructure Safety to save lives

iRAP Star Rating and Investment Plan

Samar Abouraad
Safer Journeys Specialist for Europe
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www.irap.org

Outline

- Decade of Action and its Target
- What is iRAP?
- What is the RISM Directive for Europe?
- Why is Infrastructure data so important?
- What is a RAP?
- What can be done in Kosovo? Look at a pilot project

The United Nations Global Plan 2021-2030

UN General Assembly Resolution 74/299 declared a **Decade of Action for Road Safety 2021-2030**, with the target to reduce road traffic deaths & injuries

BY AT LEAST 50% during that period

3 GOOD HEALTH AND WELL-BEING



11 SUSTAINABLE CITIES AND COMMUNITIES



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



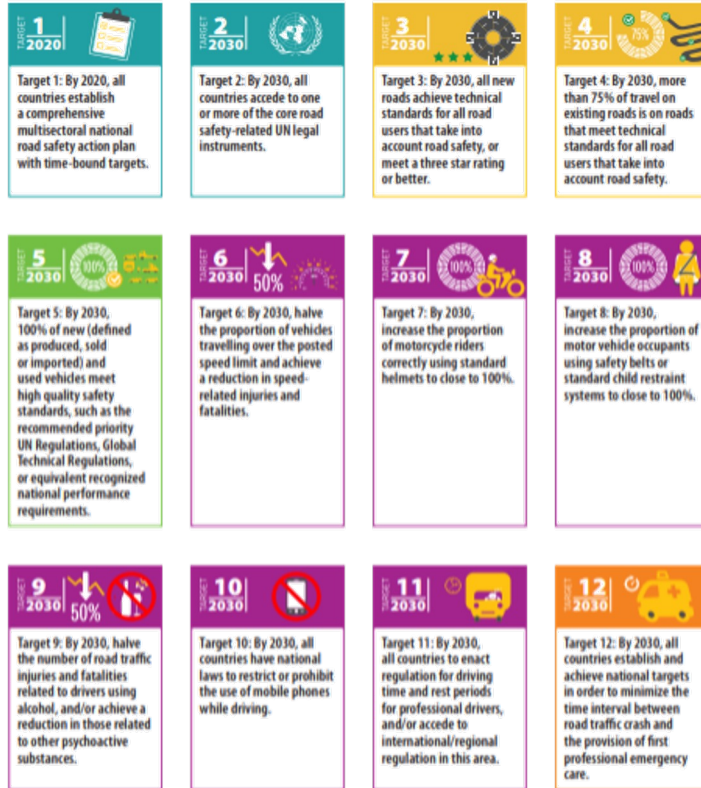
Post-crash response



UN Global Road Safety Performance Targets



SUSTAINABLE DEVELOPMENT GOALS



■ PILLAR 1: Road safety management
 ■ PILLAR 2: Safer roads and mobility
 ■ PILLAR 3: Safe vehicles
 ■ PILLAR 4: Safe road users
 ■ PILLAR 5: Post-crash response

Following the request of the United Nations General Assembly, on November 22, 2017 Member States reached consensus on 12 global road safety performance targets. For more information: http://www.who.int/violence_injury_prevention/road_traffic/road-safety-targets/en/



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.

ALL new roads
3-Star 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.

>75% of travel
on existing roads
3-Star or Better



A WORLD FREE OF HIGH-RISK ROADS

 **100+** countries

 **2,500,000+** km

 **us\$80bn+**
investment made safer



PARTNERSHIPS FOR 2030 IMPACT

A WORLD FREE OF HIGH-RISK ROADS – PROGRESS BY JUNE 2022



109
COUNTRIES
REACHED

USDS\$
96
BILLION OF INFRASTRUCTURE
INVESTMENT MADE SAFER

54
THOUSAND
PEOPLE TRAINED

1.4 MILLION
KM ROADS
AND DESIGNS
STAR RATED

1.6 MILLION
KM RISK MAPPED

944
SCHOOLS STAR RATED
USING SR4S IN
55 COUNTRIES

5.2 MILLION
KM OF ROAD IN VIDA



25 THOUSAND
PARTNERS

234
iRAP ACCREDITED SUPPLIERS

50 INNOVATION
PARTNERS

62 3-STAR OR BETTER
POLICIES

iRAP partners with governments, mobility clubs, funding agencies, development banks, industry, research institutes and NGOs around the world to make roads safer



irap.org [irapsavinglives](https://twitter.com/irapsavinglives) [irapfb](https://www.facebook.com/irapfb)

>400,000
deaths and injuries
prevented by 2022



* Preliminary estimations by Johns Hopkins University based on sample of iRAP assessment data

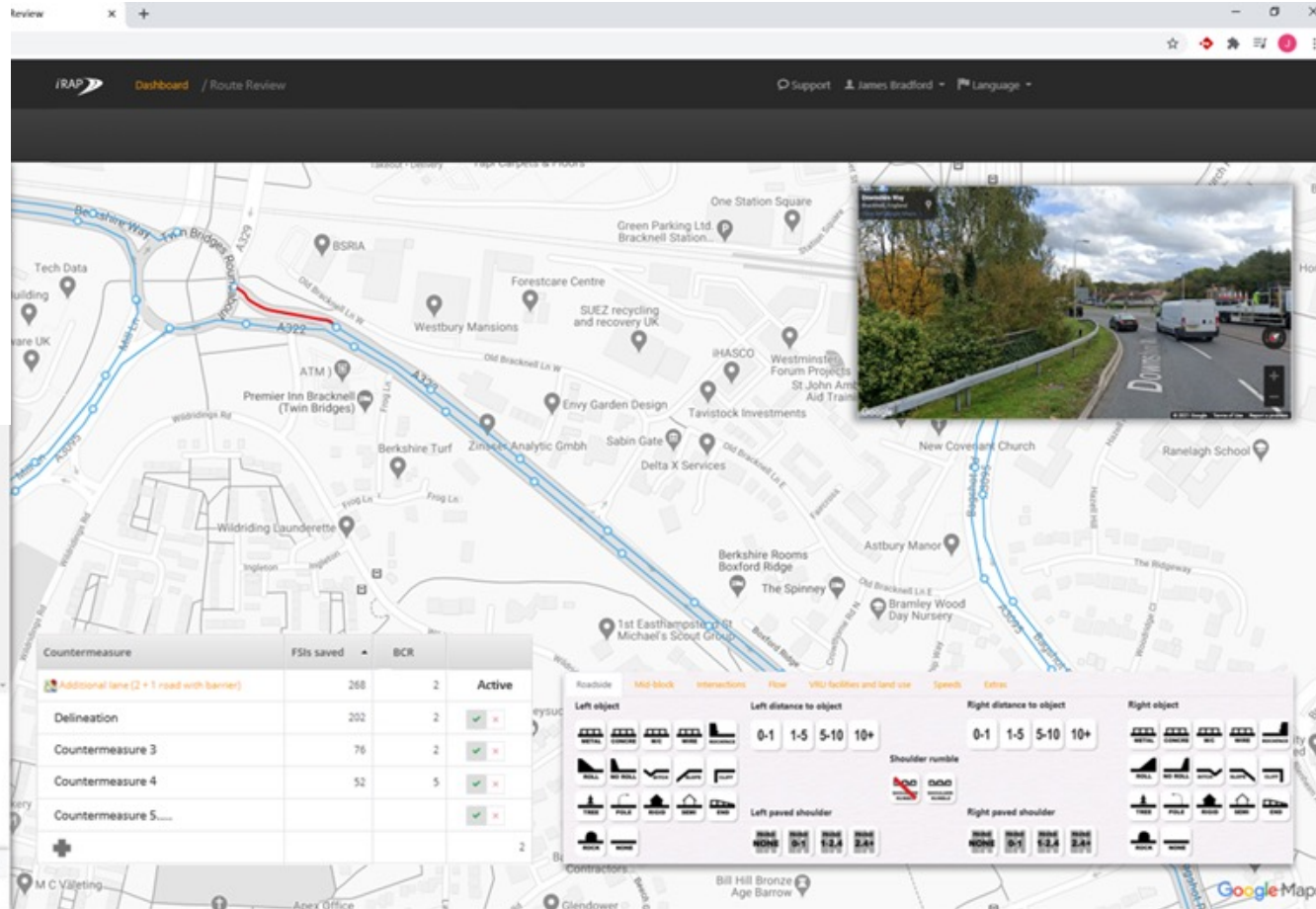
RISM and Route Review Tools & Investment Advice

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.

- Downshire Way
- Downshire Way
- Carriageway A of a divided road
 - 0.0 km (-)
 - 0.1 km (1)
 - 0.2 km (1)
 - 0.3 km (1)
 - 0.4 km (1)
 - 0.5 km (1)
 - 0.6 km (1)
 - 0.7 km (1)
 - 0.8 km (1)
 - 0.9 km (1)



Why is infrastructure data important?

Strong evidence linking road design with crash likelihood and crash severity

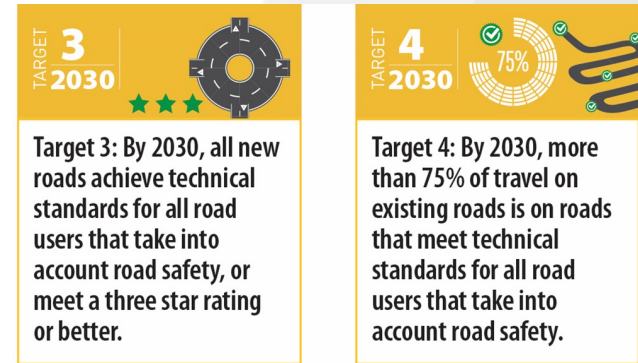
Can be measured

By systematically inspecting roads, we can develop an understanding of the level of risk that is 'built in' to road networks

“Proactive” and actionable data that can be to target high-risk sections of road for improvement before people are killed or seriously injured

Can be used to identify opportunities to encourage more safe, active transport – cycling and walking.

Global Performance Targets

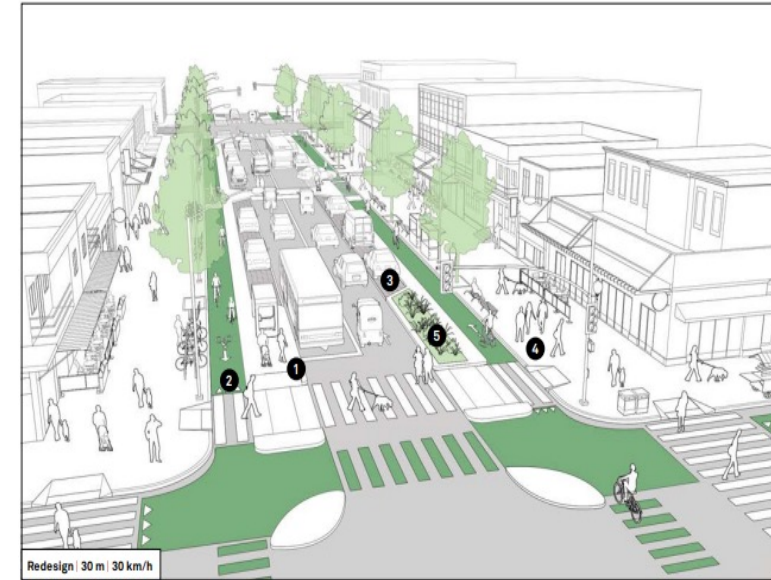


What is infrastructure data?

SPEED

FLOWS

ATTRIBUTES



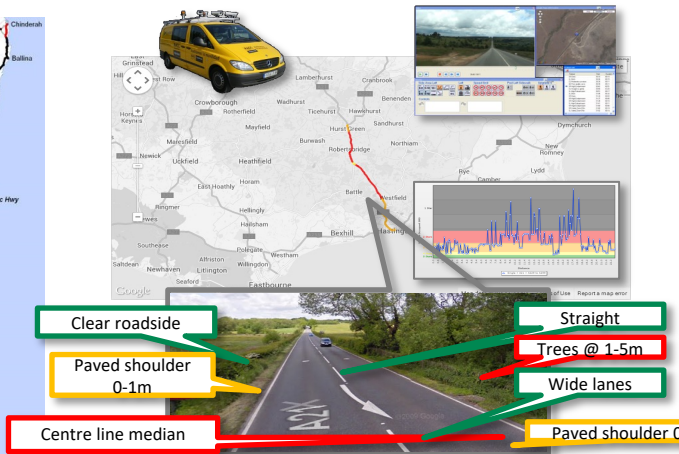
SAFETY PERFORMANCE INDICATORS

What is a RAP?

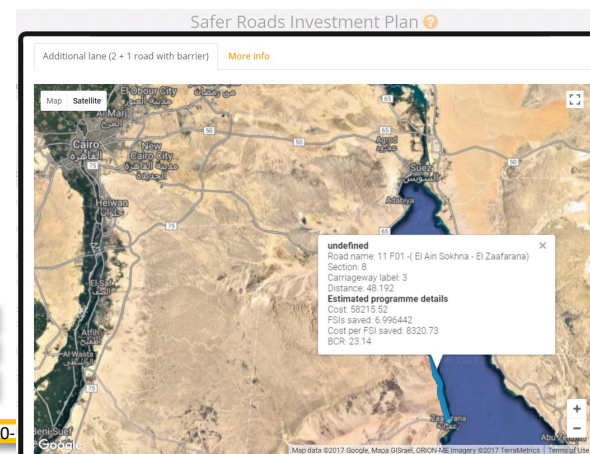
RISK MAPS



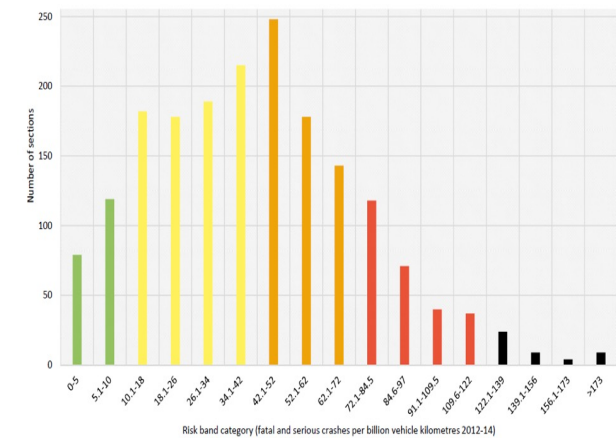
STAR RATING



INVESTMENT PLANS



PERFORMANCE TRACKING



Measuring Road Risk

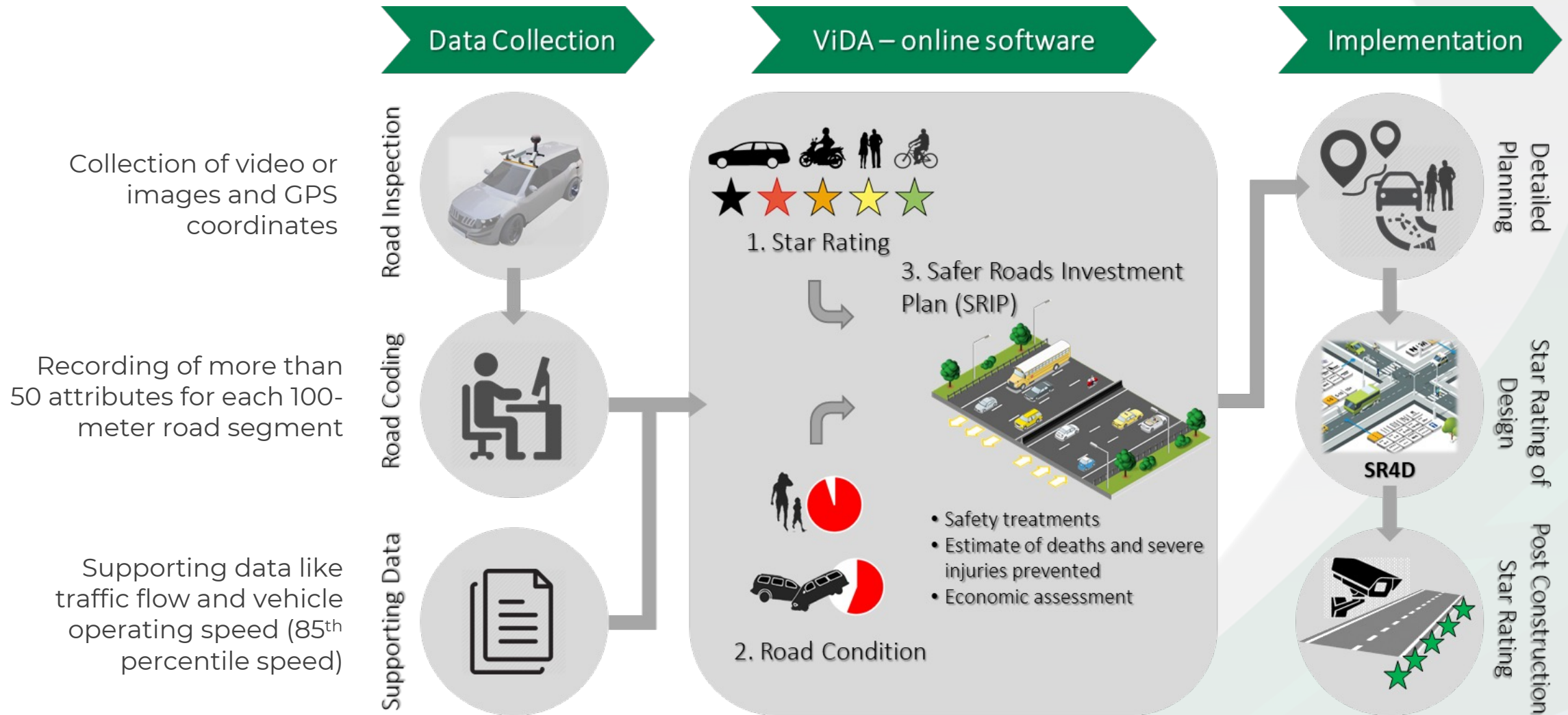
- Reactive
- Measuring crashes per km travelled

- Proactive
- Measuring infrastructure risk
- Can be completed in the absence of crash data
- Five-star road segments are the safest while one-star are the least safe

- Prioritises and costs improvement options to increase Star Ratings and save lives
- Considers 90 proven road improvement options

- Regular risk mapping or star rating to monitor performance over time
- Enables celebration of success and informs action to address persistently high-risk roads

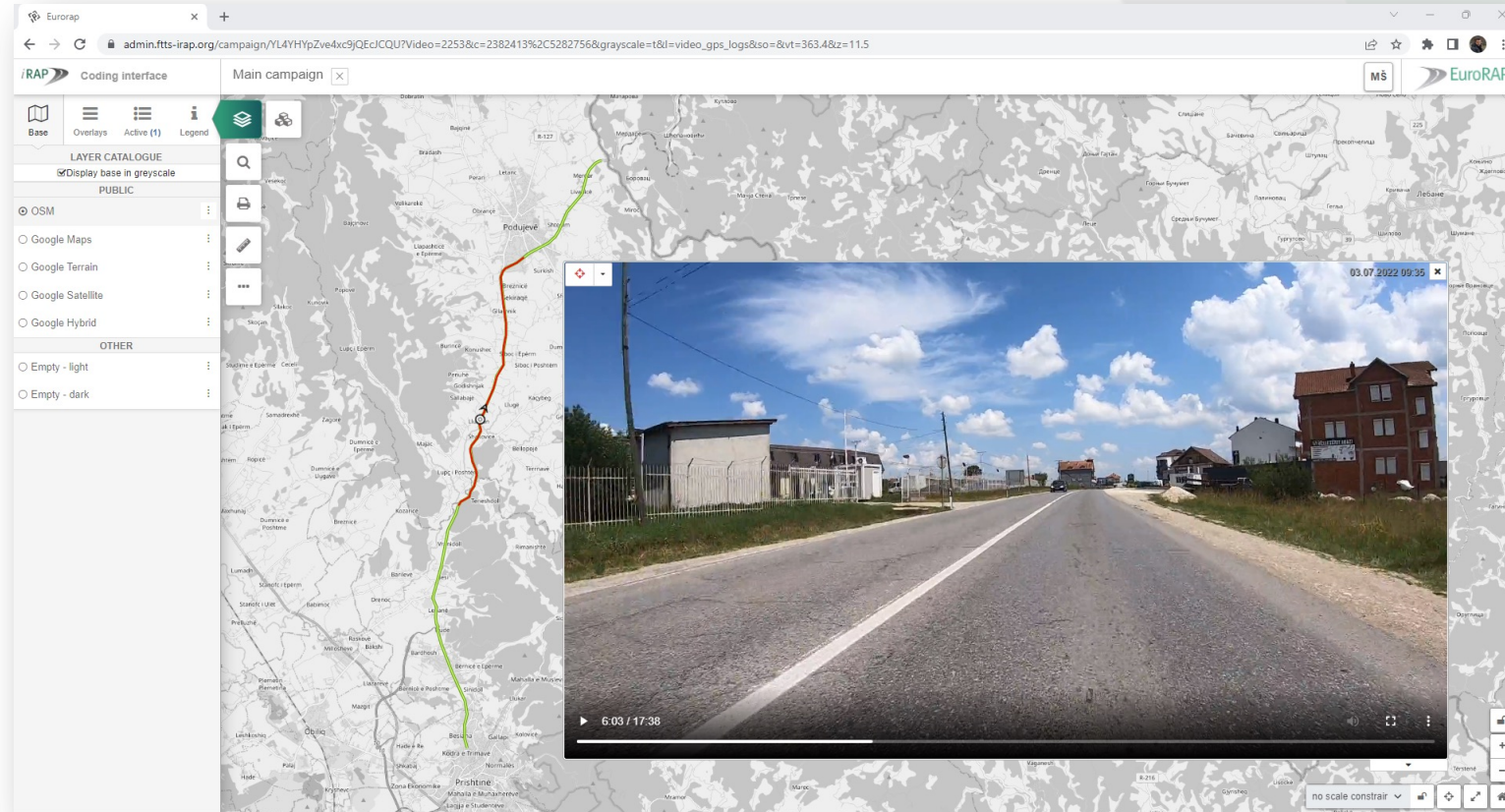
Star Rating and Safety Investment Process



<https://vida.irap.org>

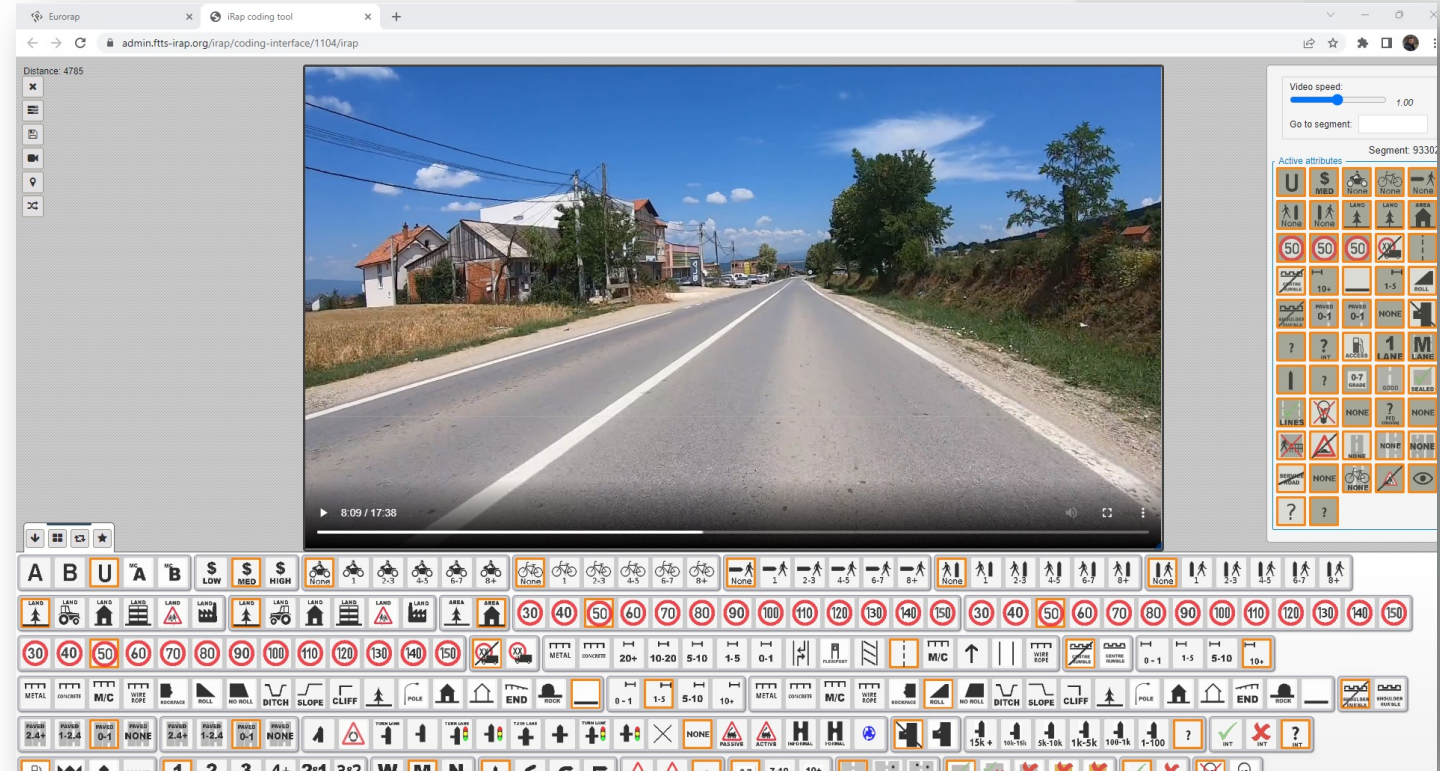
Pilot in Kosovo

- Road M25 -
Prishtinë – Merdare
cca 24 km
- Selected by National Team
for Road Assessment
Program – KosovoRAP
- Survey done by AMRKS &
Tempulli using University
of Zagreb know-how and
software
- iRAP Star Rating coding
performed by University of
Zagreb (in kind donation)



Pilot Star rating results for M25

- Expected Q1 2023
- Post coding data needed
 - Operating (85th percentile) speed
 - Historic crash data calibration
 - Pedestrian and vehicle flow data needed
- Quality Assurance (QA) process required
- National consultations on results to be performed



For more information

Samar Abouraad

Safer Journeys Specialist for Europe

✉ Samar.abouraad@irap.org

☎ +41 79 250 75 70

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

<https://irap.org/project/innovation-social-impact-investment/>

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

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

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