

Road Safety Monitoring Centres in Italy: the case of the Lazio Region

CENTRO DI RICERCA
PER IL
TRASPORTO E LA LOGISTICA



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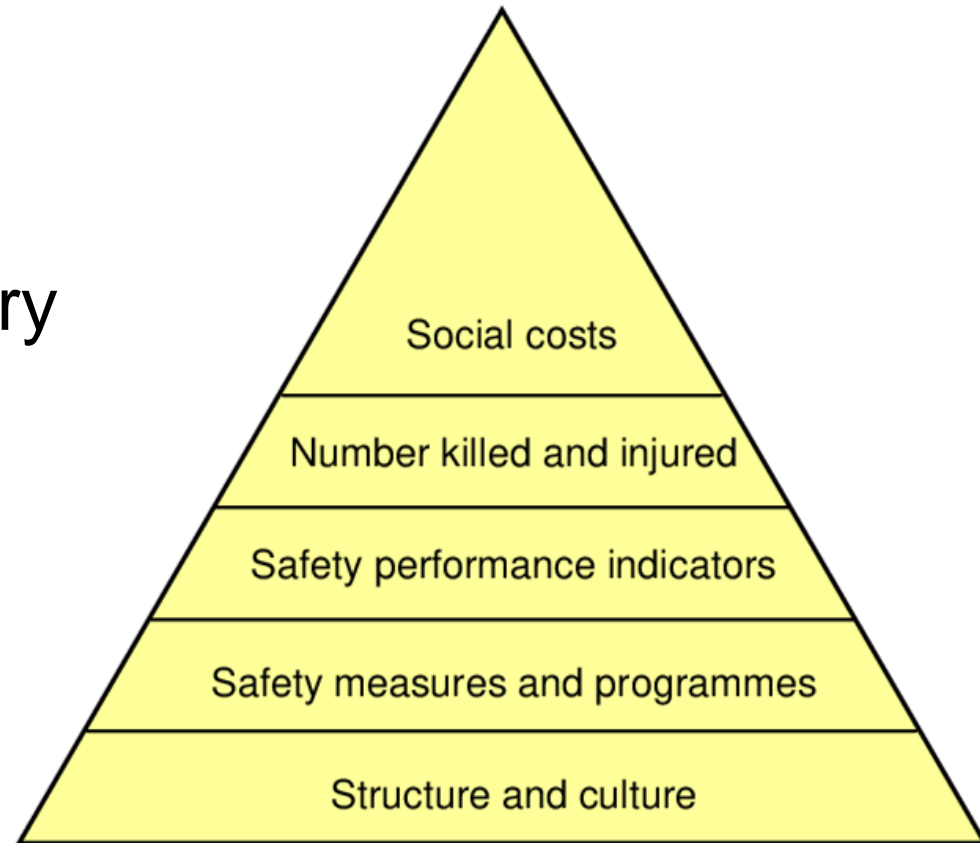


Davide Shingo Usami,
Maria Rosaria Saporito, Roberto
Carroccia, Luca Persia

7th IRTAD conference
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27 28 September 2022

Monitoring Road Safety (RS) performance

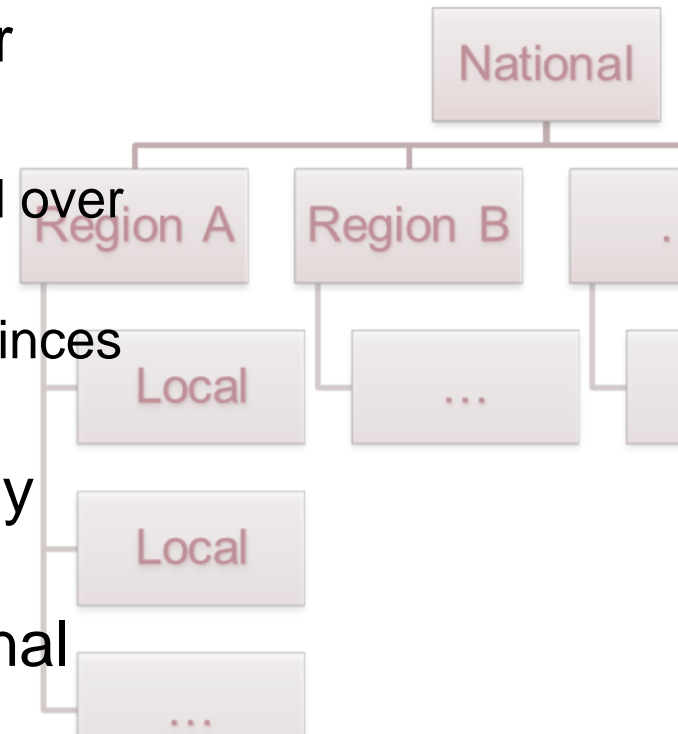
- **RS dimensions:**
Risk exposure,
Accident risk, Injury risk
- **RS strategy:**
targets,
implementation,
outcomes and impact



The SUNflower model (Wegman et al., 2005)

The Italian context ⁽¹⁾

- The Italian Road Safety Plan was instituted in 2001
- The Plan has been put into effect through Implementation Programs and calls for tenders issued by the Regions.
 - Five annual Implementation Programs and over 70 regional calls for tenders.
 - Financing over 1.600 interventions in Provinces and Municipalities.
- How to monitor the implementation? By the establishing of **Road Safety Monitoring Centres (RSMC)** at regional level.



The Italian context ₍₂₎

- Crash data collection involves 3 Police forces
- National survey coordinated by ISTAT to uniform crash data
- Before the RSMC implementation:
 - poor accuracy (no localisation, frequently not digital), not timely provided, incomplete
 - Road and Traffic volume data poorly available and not integrated

Functions and characteristics of regional RSMC according to the National RS Plan ⁽¹⁾

1. Support the creation of **local RSMCs** and the verification of the **implementation of the National Plan** at the local level by the Provinces and Municipalities and develop measures for guiding, coordinating and enhancing these RSMCs
2. Allow the direct **participation of Provinces and Municipalities** in the management of the RSMC
3. Adopt **standards** defined by the National Government to ensure full consistency of data and analysis/evaluation procedures throughout the country

Functions and characteristics of regional RSMC according to the National RS Plan ⁽²⁾

4. Ensure the preparation of a regional overview of the **state of road safety**, the implementation of the (National) Plan, and the results progressively achieved in terms of reducing the number of victims of road accidents
5. Identify the **most effective interventions** to be proposed as good practices at regional and national level
6. Encourage, support, carry out study and research on the **risk factors and causes** of road accidents
7. Promote the drafting and implementation of provincial and municipal **road safety plans and programmes**.

The Lazio region

RSMC: CEREMSS



- **CEREMSS** was established in 2017 by a consortium lead by Sapienza University of Rome
- CEREMSS is managed by **ASTRAL Spa**, the regional road authority with the support of Sapienza
- Strong cooperation with academia from the beginning

CEREMSS system

<https://ceremsslazio.astralspa.it>



Data collection, management, validation

Accident DB

Traffic DB

Road DB

Intervention DB



RSMC system

Planning

Dissemination

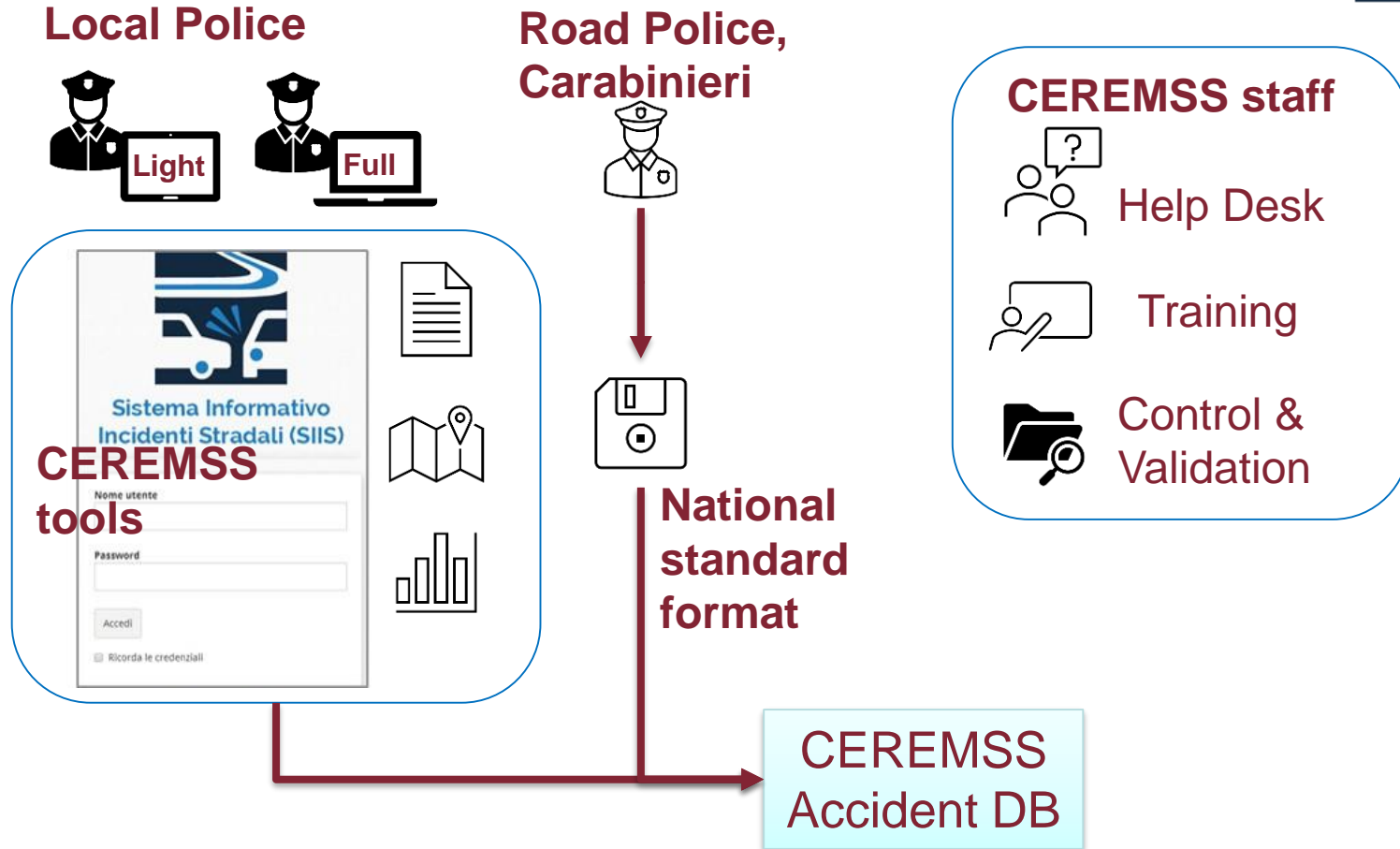


SafetyManager



Reports, videos, surveys, events, app

Accident data collection, management, validation



Monitoring Traffic: FCD & fixed cameras

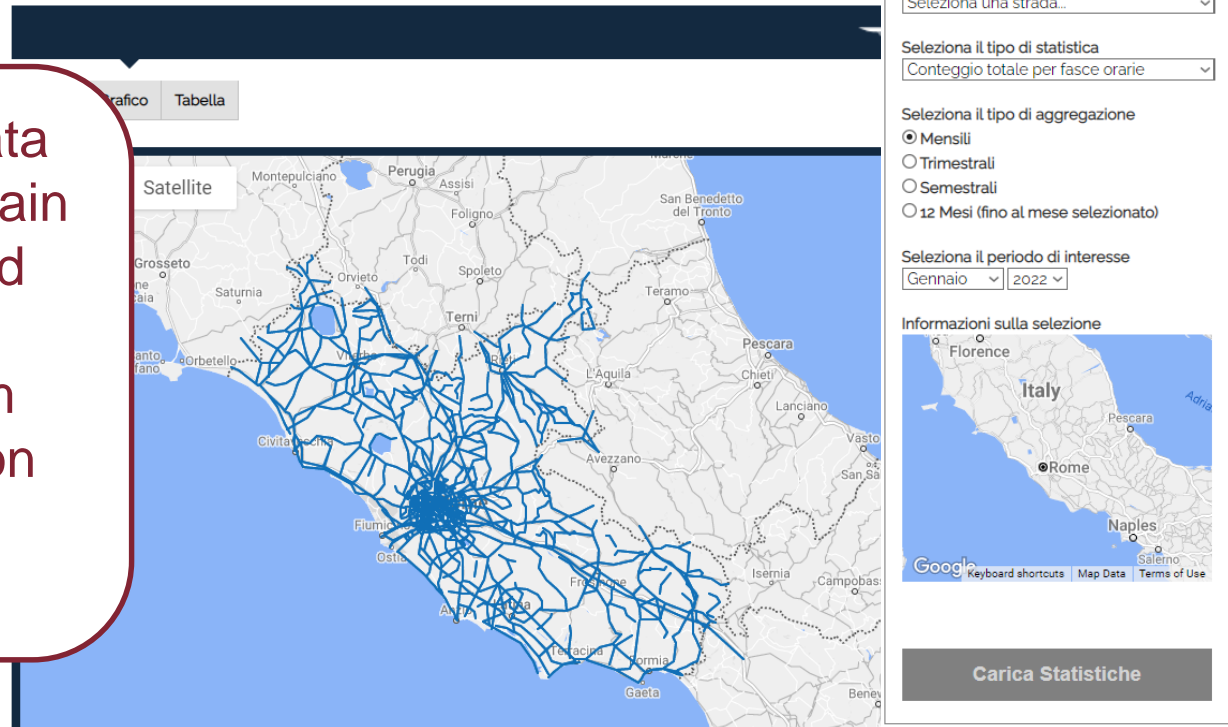


Statistiche dei Floating Car Data (FCD)

Fonte Infoblu - Elaborazione QMap

FCD derivati da black box. Stima pari al 10% del totale degli autoveicoli circolanti nella regione Lazio. La stima è fatta in base ai dati dell'Archivio Nazionale dei Veicoli gestito dalla Direzione Generale Motorizzazione del Ministero delle Infrastrutture e dei Trasporti.

- Floating Car Data (FCD) on the main network updated regularly
- Traffic data from fixed cameras on the regional network



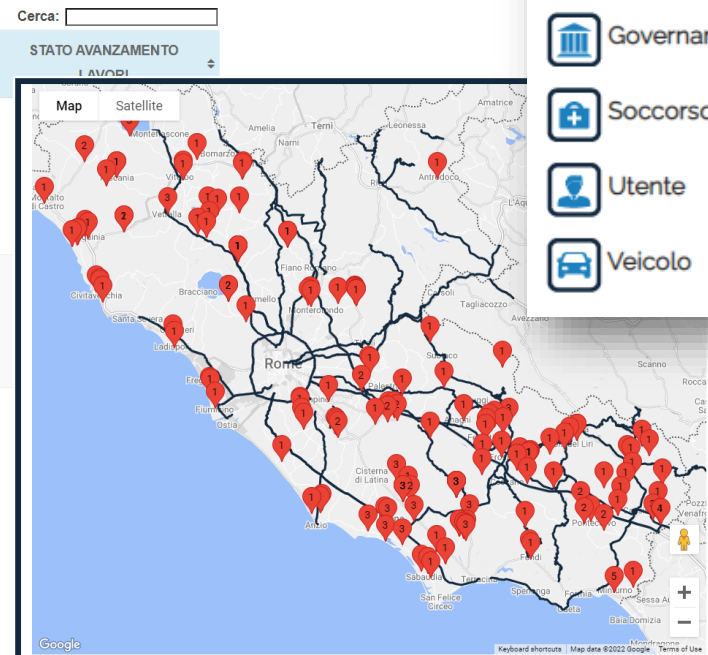
Monitoring Plan/Program implementation

- National Road Safety Plan measures
- Works on Regional Road Network



Visualizza 35 elementi

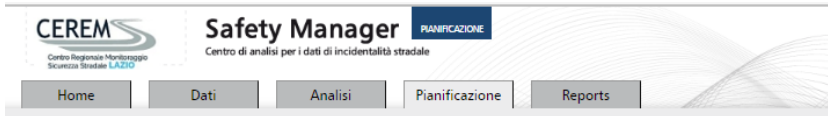
N.	ENTE - STRADA REGIONALE	OGGETTO DELL'INTERVENTO	IMPORTO DA QUADRO ECONOMICO	STATO AVANZAMENTO
1	SR 156 DEI MONTI LEPINI	Barriere di sicurezza e barriere antirumore varie tratte - Rifacimento giunti e piano viabile su tre viadotti - Lavori di messa in sicurezza varie tratte - Messa in sicurezza intersezione con SP 277 - OPERE COMPLEMENTARI	€ 790.000,00	
2	S.R. 148 PONTINA	S.R. Pontina (exSS 148) - Risanamento acustico presso le unità immobiliari di proprietà della Comunione Consorzio Tenuta di Decima dal km.17+853 al km.19+176	€ 2.380.000,00	
3	S.R. 630 AUSONIA	S.R. Ausonia - Realizzazione di golfi di fermata bus CO.TRA.L. e attraversamenti pedonali in località Penitro nel comune di	€ 240.000,00	



* Tutte le Categorie

- Infrastruttura
- Governance
- Soccorso
- Utente
- Veicolo

Planning Road Safety



Pianificazione

Crea Nuova Elaborazione Elenco Progetti

Mappe



Questa sezione permette di visualizzare su mappa gli incidenti stradali caricati nella banca dati e di interrogare tali dati.

+ Aggiungi nuovo


Grafici



Questa sezione permette di realizzare analisi statistiche sui dati di incidentalità stradale caricati nella banca dati e di visualizzarle in forma grafica.

+ Aggiungi nuovo

Tabelle



Questa sezione permette di visualizzare i dati di incidentalità stradale caricati nella banca dati.

+ Aggiungi nuovo


Scelta Interventi



Procedimento di scelta degli interventi per la sicurezza stradale

+ Aggiungi nuovo

Elementi critici



Scelta degli interventi - Classificazione della sicurezza della rete esistente

+ Aggiungi nuovo

Cause e contromisure



Scelta degli interventi - Contromisure

+ Aggiungi nuovo

Reports, Studies

Tools supporting:

- Critical sites selection
- Analysis of accident causation
- Countermeasure selection
- Cost-Benefit Analysis
- Countermeasure evaluation

Training activities

Dissemination

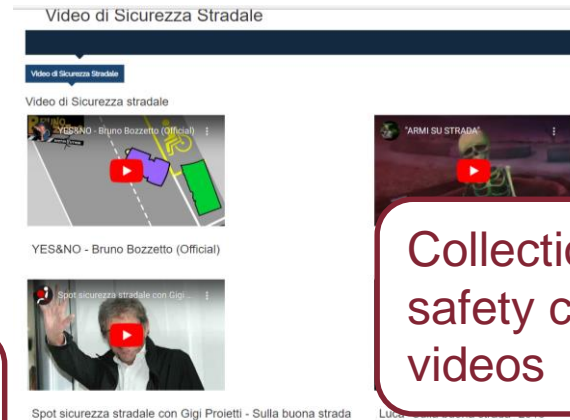


"Safety in ... game" app:
interactive questionnaire aimed
at youngsters

ALLACCIARLE SE VUOLE



Events & Workshops



Collection of road
safety campaign
videos

Nome	Categoria	Ambito	Costi	Benefici	File
Inserimento Segnaletica Avanzata in Presenza di Curve Altimetriche	Infrastruttura	Curve altimetriche	2	0	
Modifica delle Caratteristiche Altimetriche dell'Infrastruttura	Infrastruttura	Curve altimetriche	5	1	
Riconfigurazione e Ricollocazione			5	3	
Installazione di Delineatori			2	2	
Inserimento di Marker			2	2	
Realizzazione Strisce Loro Carreggiata			2	2	
Installazione/Manutenzione Planimetriche			1	2	
Incremento Pendenza Trasversale	Infrastruttura	Curve planimetriche	4	3	

"Regional, National
and International
road safety 'Good
Practices'

Conclusions

- Cooperation with academia → Evidence based policy making
- Tools+HelpDesk → Active involvement of multiple actors in the region
- Integration of multiple data sources → Sound road safety analyses
- Training and Dissemination → Road safety culture

Thank you for your attention!

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www.ctl.uniroma1.it
info@ctl.uniroma1.it