

ROAD SAFETY STATISTICS AND INDICATORS

CASE STUDY - SERBIA



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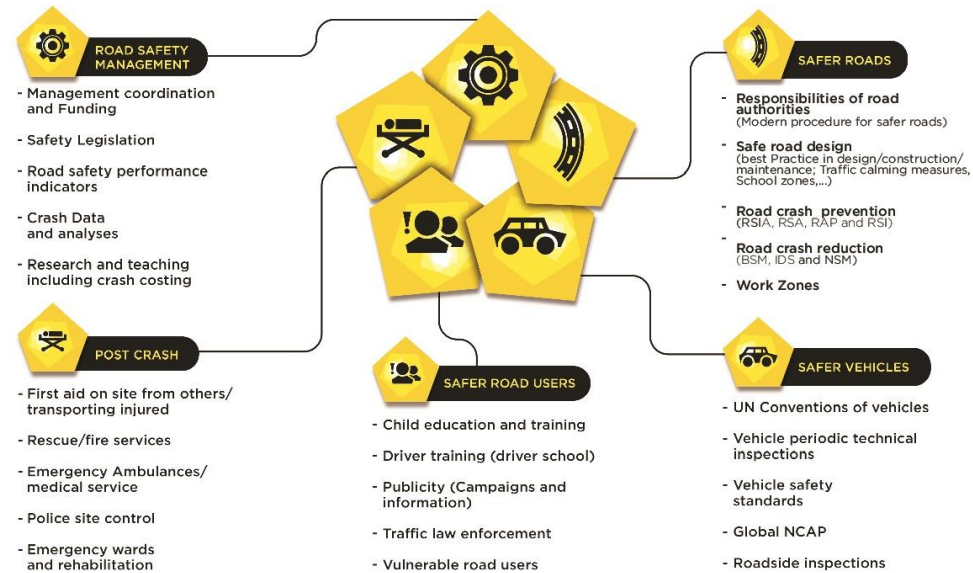
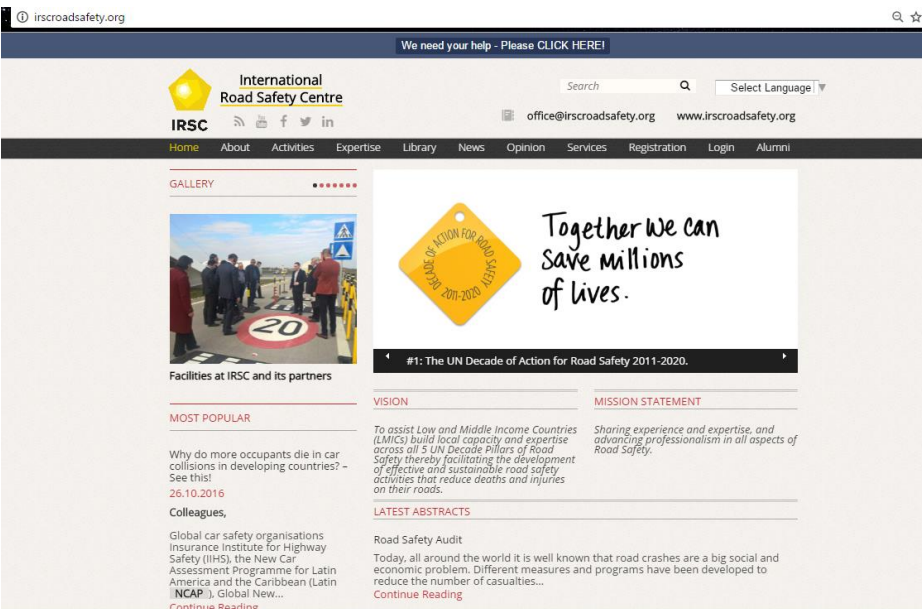
IRSC

International Road Safety Centre
Deputy president



International Road Safety Centre (www.irscroadsafety.org)

is platform for RS activities, transfer and cooperation in all 5 RS pillars

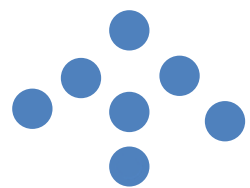




IRSC

CONTEXT?

ROAD SAFETY MANAGEMENT
(ISO 39001)



TARGET STATE



ROAD SAFETY MEASURES



CURRENT STATE



IRSC

WHY DO WE COLLECT DATA?

Prepare and implement **RS STRATEGY**

- Define the **current state** / to quantify/
- Define the **wanted (target) state** / to quantify/
- Evaluate the **RS countermeasures** / to measure effects/
- **Monitor** implementation of RS Strategy
- “BENCHMARKING” ...

WHAT DATA TO COLLECT? (1/2)

TRADITIONAL/ MODERN APPROACH?



WHAT DATA TO COLLECT? (2/2)

- **Final outcomes** / Fatalities, injuries, road crashes/

- **RSPI / RS performance indicators**
- **Capacity and integrity** of individuals and institutions,
- **Organization** of RS activities
- **RS Activities**
- **Environment** / Legislation and other Circumstances/
- **Awareness, Attitudes, Knowledge** about risks in traffic,
- **Total socio-economic costs** of Road crashes

HOW TO COLLECT DATA

- Serbian experience - (1/5)

- **Capacity and integrity** of individuals and institutions,
- **Organization** of RS activities
- **RS Activities**
- **Environment** / Legislation and other Circumstances/

Expert's REVIEW (WB projects, EBRD ...)

- Twining project Sweden-Serbia, SweRoad, 2002-2004
- Tony Bliss, ...
- Breen, Howard, ...
- Louis Berger, 2015...

HOW TO COLLECT DATA

- Serbian experience - (2/5)

Some data we collected by EU projects ...

- **Awareness, Attitudes and Knowledge**



The screenshot shows a web browser window displaying the SARTRE website. The browser tabs include Google, Базис, Integrise, sartre ri, and SARTRE. The address bar shows the URL www.attitudes-roadsafety.eu. The website header features the SARTRE logo and a navigation menu with links for Home, Members area, Project, Consortium, Results, Publications, and News. A large banner image shows a busy street scene with a cyclist and a pedestrian. Below the banner, the main heading reads "Social Attitudes to Road Traffic Risk in Europe". A news section on the left lists two items: "Road Safety on four continents" (15.05.2013) and "SARTRE4 final conference" (06.11.2012). The main content area features a "Final conference Sartre4 November 8th, 2012 in Brussels" announcement, stating that the final report and booklet are now available. A search bar and a "Publications" link are also visible. The footer mentions project co-financing by the European Commission's Directorate-General for Mobility.

SARTRE:

- **Social Attitudes to Road Traffic Risk in Europe**

HOW TO COLLECT DATA

- Serbian experience - (3/5)

Police collect data about final outcomes ...

- **Final outcomes** /Fatalities, injuries, road crashes/

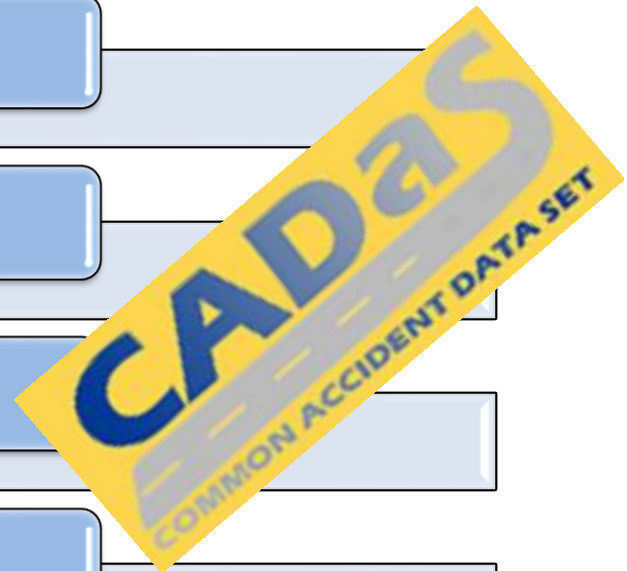
CADaS – Common Accident Data Set, (2016)

1. Data about road accidents

2. Data about road

3. Data about road users

4. Data about persons



HOW TO COLLECT DATA

- Serbian experience - (4/5)

Data about costs collect by ad-hoc survey ...

- **Total socio-economic costs** of Road crashes

Belgrade university, Economic institute ...

- **Total socio-economic costs of road crashes**

Use literature -existing results of international (WB, PIARC, ...) and national surveys from similar countries

(2000)



Total RC&C Costs

RC&C

What is between
????

RS countermeasures

RS Strategy and Act. plan

PROBLEM

(2005)

Today – in the future

Total RC&C Costs

RC&C

RSPI – Road Safety
Performance Indicators

RS countermeasures

RS Strategy and Act. plan

PROBLEM

HOW TO COLLECT DATA

- Serbian experience - (5/5)

Data about RSPI collect by regular survey
twice per year ...

RSPI – Road Safety Performance Indicators

RTSA and Belgrade university - FTTE

- **Spring survey:** April, May 2013, 2015, 2016, 2017.
- **Autumn survey,** September 2013, 2015, 2016, 2017

Many RS performance indicators



Organization and management



Behaviour of road users



Safe Vehicle

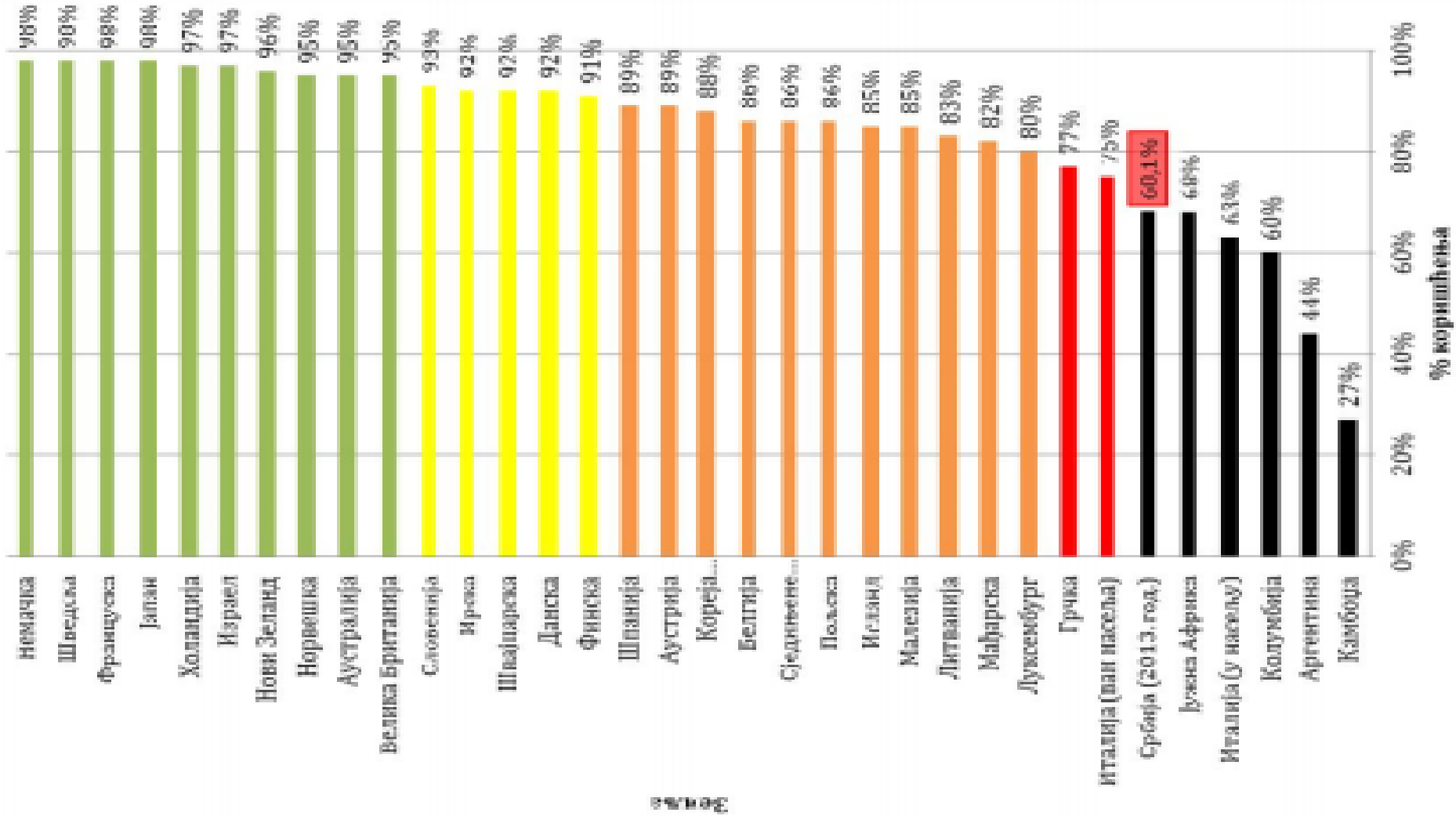


Safe Roads

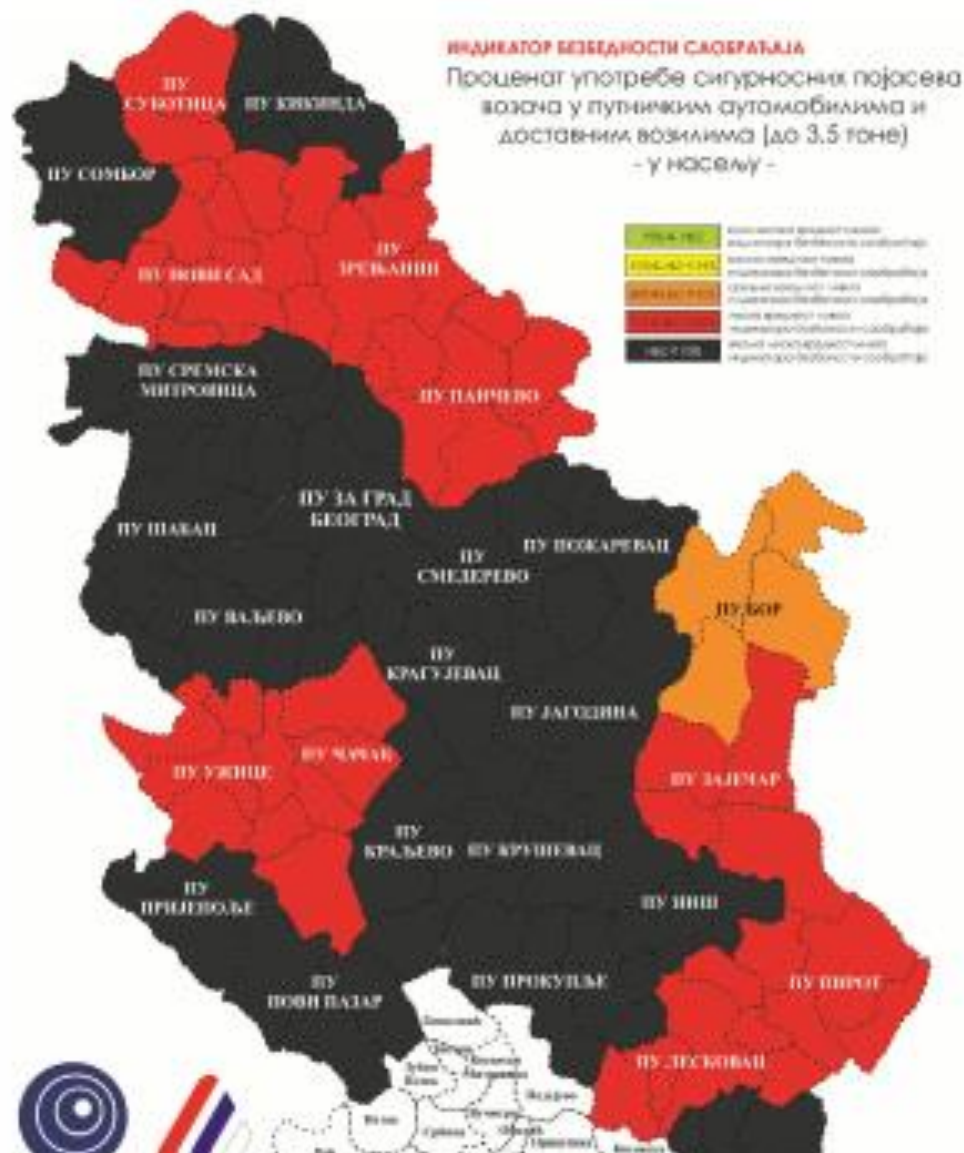
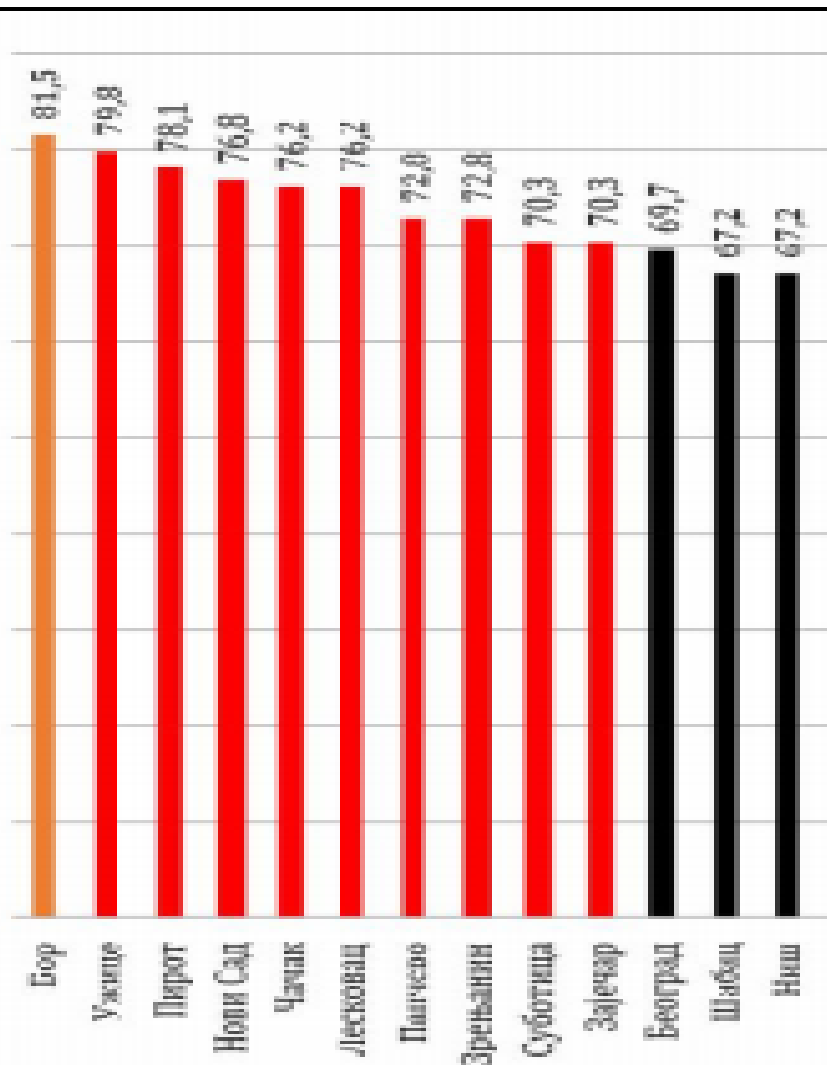


Post crash care and activities

% of SEAT BELT USE – FRONT SEATS (AROUND THE WORLD)



% of SEAT BELT USE – FRONT SEATS (AROUND REGIONS IN SERBIA)



RS DATABASE HAS TO BE ...

- Accessible (Web portal),
- Comprehensive,
- Optimal data coverage
- Accurate,
- Updated
- Harmonized with other countries,
- Integrated data from different sources,

THE MAIN PROBLEM

IACCESSIBILITY (WEB PORTAL)

- (NON-SENSITIVE) **DATA OF PUBLIC INTEREST HAS TO BE ACCESSIBLE** and
- **PERONAL** (SENSITIVE) DATA **MUST NOT** to be visible for public

CASE STUDY - SERBIA

INTEGRATED ROAD SAFETY DATABASE

- **INTERFACE** - Every institutions send **depersonalized data** to Road Traffic Safety Agency
- RTSA has established **Integrated Road Safety Database**
- RTSA create different **reports**,
- IRS Database is open and free for everyone on the **Internet** (abs.gov.rs)

MAIN SOURCES OF DATA (CASE STUDY – SERBIA)

Ministry of Interior Affairs /POLICE/

- Road Crashes Data (crashes, vehicles and persons involved in the crashes),
- Driving schools,
- Stations for vehicle inspections,
- Registered vehicle,
- Traffic offences (2016),
- Driver's licences (2016).

MAIN SOURCES OF DATA

(CASE STUDY – SERBIA)

Road Traffic Safety Agency (RTSA)

- RS Performance Indicators
- Public and Traffic Risks
- Laboratories for tachographs,
- Drivers whose driving license suspended
- Theory Lecturers, instructors and examiners at driving schools,
- Tram drivers and professional drivers,
- Coordination bodies for RS at local communities (Local RS councils)

MAIN SOURCES OF DATA (CASE STUDY – SERBIA)

Public Enterprise “Roads of Serbia” (PERS)

- “Reference system of state roads”
- Traffic signs (2008).
- Average annual daily traffic – AADT (2015).
- Automated traffic counters on the roads (2016).
- Black spots (2007. и 2011. година).
- Bridges (2016).
- Tunnels (2014).
- ITS equipment on the state roads (2015).
- International E roads (2016).

Road Traffic Safety Agency Serbia

INTEGRATED ROAD SAFETY DATABASE

ABS.gov.rs

Google преводалац x Насловна | Агенција за x

abs.gov.rs

Република Србија
Агенција за безбедност саобраћаја

Кабинет директора | Контакт | Информације о раду | Јавност рада | Јавне набавке | Контакт

НАСЛОВНА ВЕСТИ САОПШТЕЊА ПРОПИСИ КОНТАКТ ПРЕТРАГА

НИКАД НЕМОЈ...
да заборавиш да вежеш појас.

Милан Шолађа (37)
Неприлагођена брзина и тренутак непажње. Трајна повреда кичмене мождине.

Сектор за возаче

- Лиценце
- Возачи правцаја / туристичког воза
- Возачи којима је одузета дозвола

Сектор за возила

- Хомологације и увоз возила
- Импортирање возила
- Таксифран
- Провера статуса предмета за возила која се увозе као употребљавана
- Табела корисника постројенат сојула

Сектор за превенцију и локалне самоуправе

- База података
- Статистика
- Исправљачки и пројекти
- Статистика локалне самоуправе

Сектор за превенцију и локалне самоуправе

- Капачице
- Едукације
- Безбедност саобраћаја у локалним самоуправама
- Публикације

ИСПИТИВАЧИ
СЕМИНАРИ
УНАПРЕЂЕЊА
ЗНАЊА

ПРЕДАВАЧИ
ИНСТРУКТОРИ

ПРОВЕРА СТАТУСА ПРЕДМЕТА ЗА ВОЗИЛА КОЈА СЕ УВОЗЕ КАО УПОТРЕБЉАВАНА

БАЗА ПОДАТАКА о обележјима безбедности саобраћаја у Републици Србији

abs.gov.rs/vesti/13122016/licna-prica-milan-solajda

САРАДЊИ ИЗМЕРУ АГЕНЦИЈЕ ЗА БЕЗБЕДНОСТ САОБРАЋАЈА И КК ЦРВЕНА ЗВЕЗДА МТС...

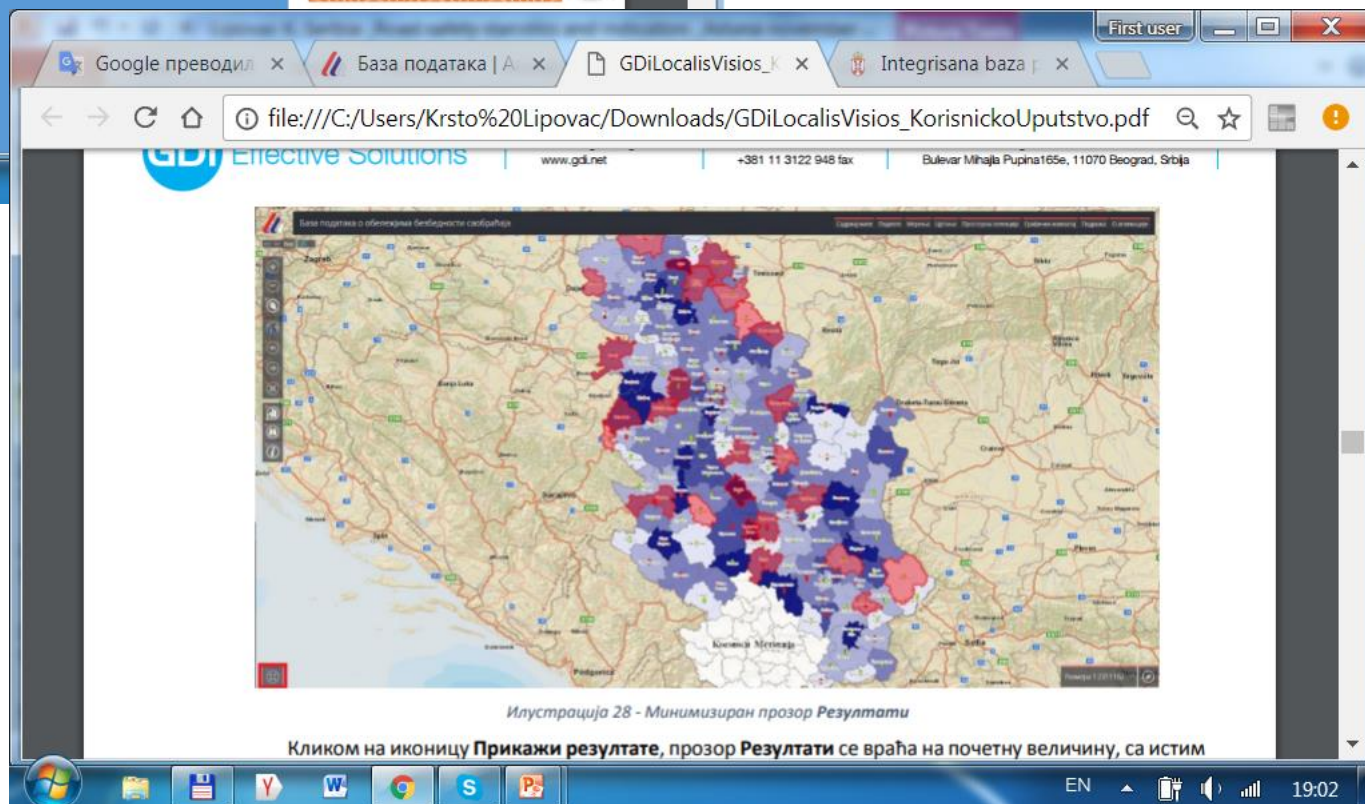
ABS.gov.rs

USERS MANUAL

GDi LOCALIS Visios

Корисничко упутство v1.0

DATA
Tables,
Graphics
Maps,
Reports



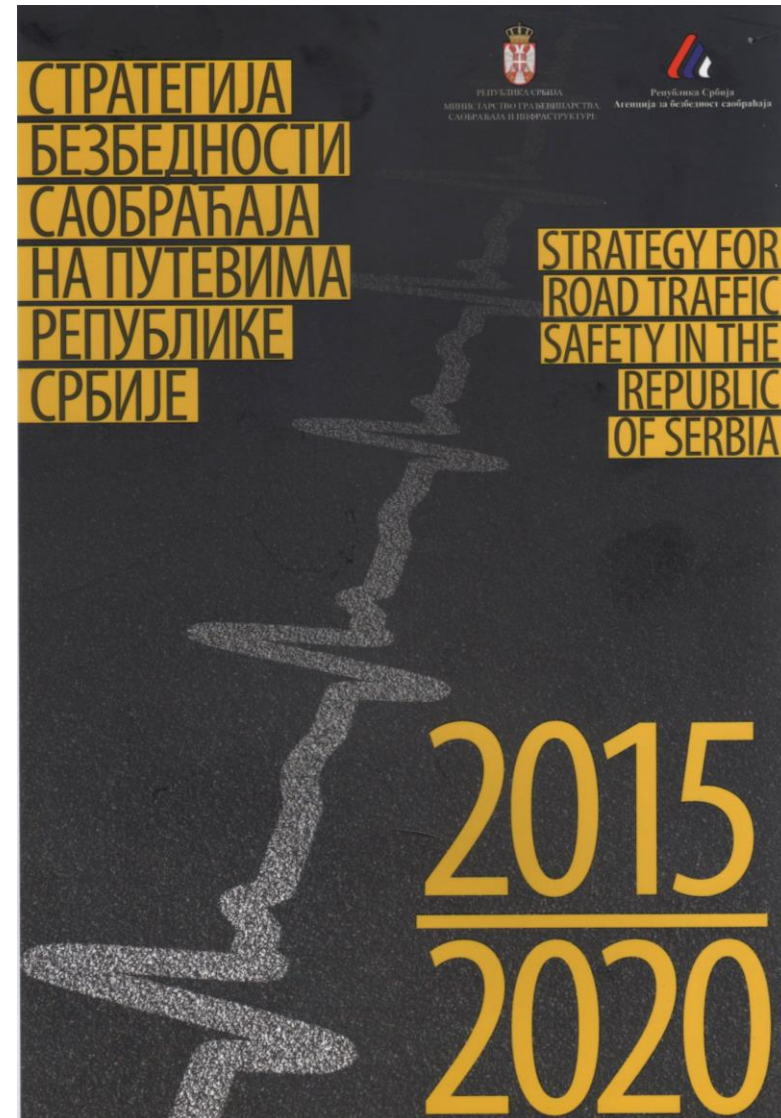
USE DATA FOR Road Safety Management

To define TARGET STATE

MISSION

VISION

GOALS



QUALITATIVE AND QUANTITATIVE GOALS

- Improve **RS System**
- Improve **capacity** and **skills** of individuals and institutions;
- Improve **coordination** and **cooperation**;
- Improve **knowledge**, **awareness** and **attitudes** about road safety.

All countries which quantified targets are more successful

- **RS Performance Indicators**;
- Reduce number of road **crashes**, **fatalities** and **injuries**;
- Reduce total socio-economic **costs** of Road Crashes

QUANTITATIVE GOALS

	2015	2016	2017	2018	2019	2020
Attitud						
(sp						
be						
Crash						
Fatalities	51			380	365	
Serious Injures	3.448		.250	2.040	1.888	
Costs (mil \$)	950		790	740	690	

FINAL GOALS (2020)

What we want to achieve?

INTERMEDIATE GOALS

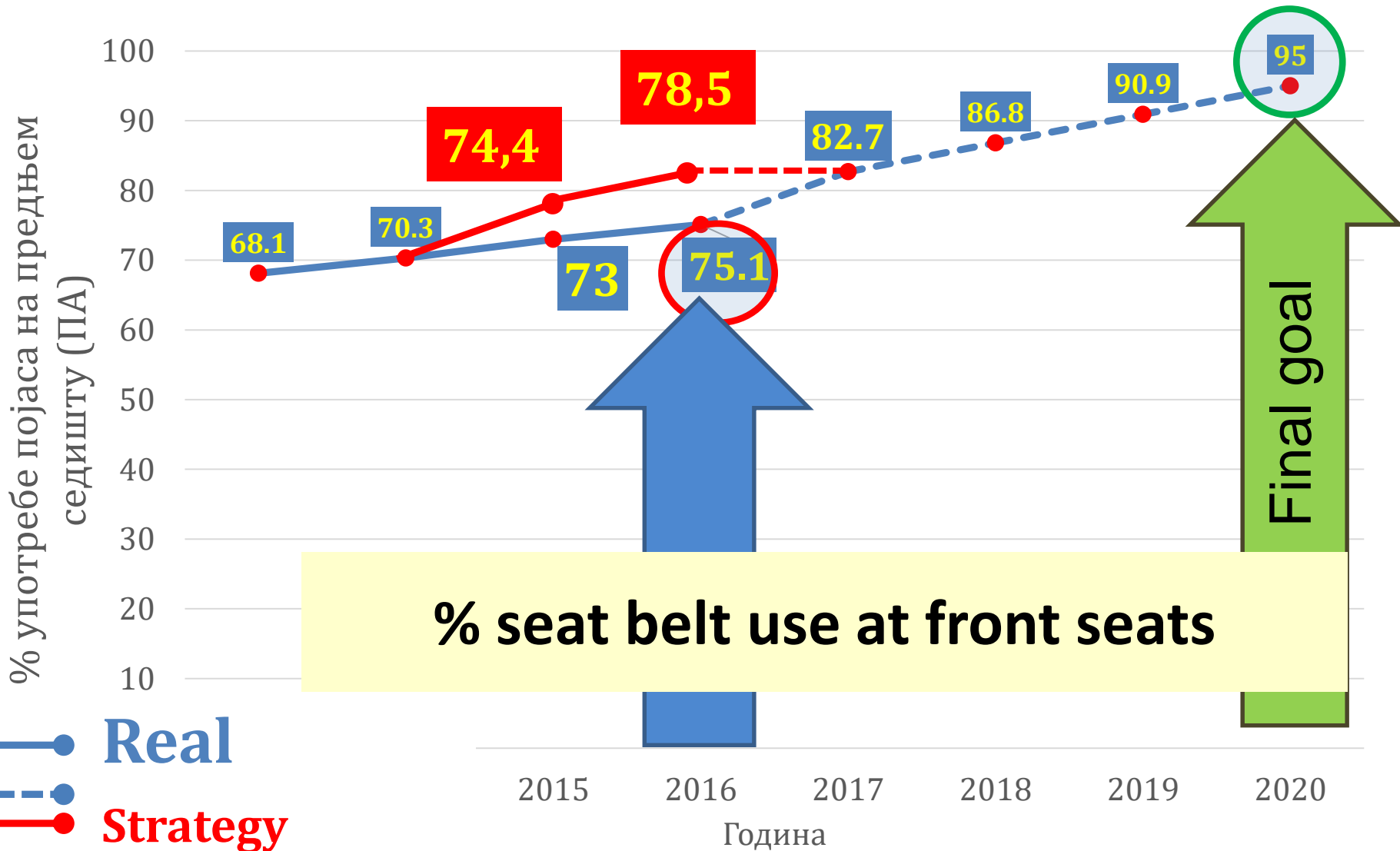
(2015, 2016, 2017, 2018, 2019, 2020)

How we want to achieve final goals?

RS GOALS in Serbia /RSP INDICATORS/

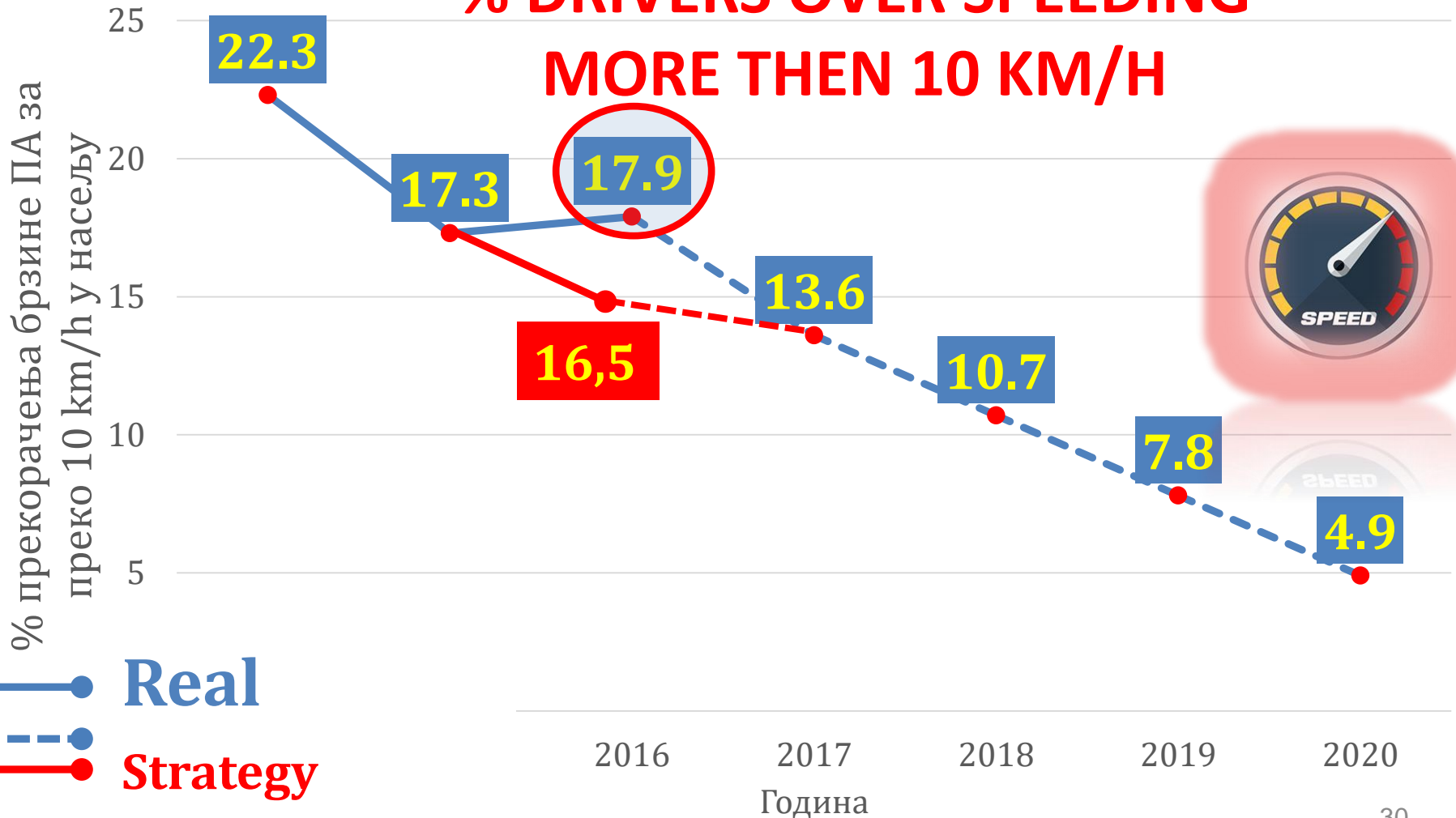
p/6	RSPI	2013. (2014)	2016.	GOAL 2020.
1	% HELMETS USE	93,7	90,6	99
2	% SEAT BELT - DRIVER	69,9	77	95
3	% SEAT BELT - IN THE FRONT	68,1	75,1	95
4	% SEAT BELT - REAR SEATS	3,1	10,1	85
5	% CHILD SEAT-CHILDREN UNDER 3 YEARS	32	40,2	95
6	% DRIVERS OVERSPEEDING MORE THEN 10 km/h - URBAN STREETS	22,3*	17,9	4,9
7	% DRIVERS OVERSPEEDING - URBAN STREETS	57,6*	53,8	19
8	% DRIVERS OVERSPEEDING RURAL ROADS	39,5*	34,2	19
9	% DRIVERS UNDER ALCOHOL INFLUENCE - URBAN STREETS	1,08	0,67	0,1
10	% DRIVERS UNDER ALCOHOL INFLUENCE - RURAL ROADS	0,84	0,75	0,1

Use data for **MONITORING IMPLEMENTATION** RS Strategy in Serbia

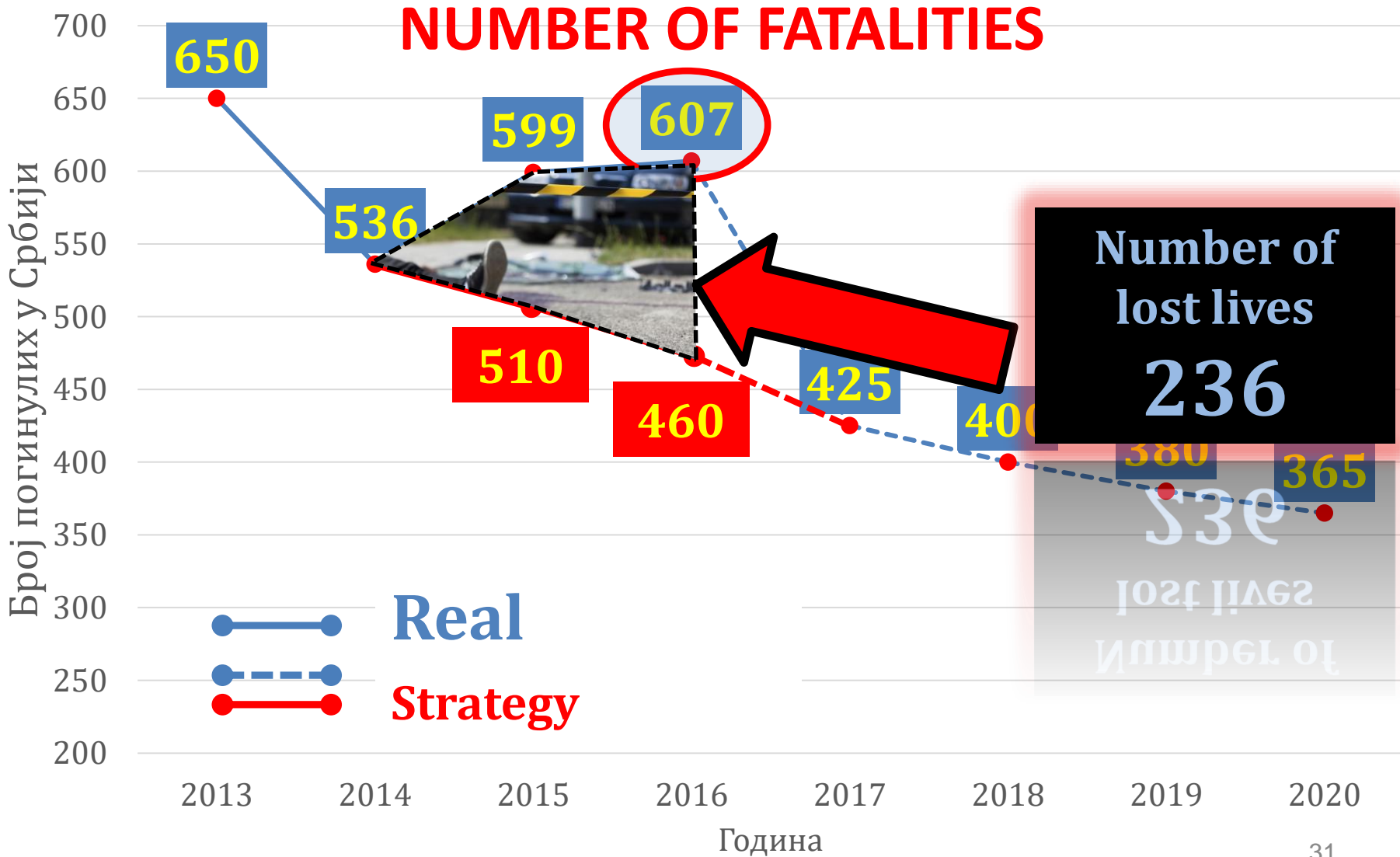


Use data for **MONITORING IMPLEMENTATION** RS Strategy in Serbia

% DRIVERS OVER SPEEDING MORE THEN 10 KM/H



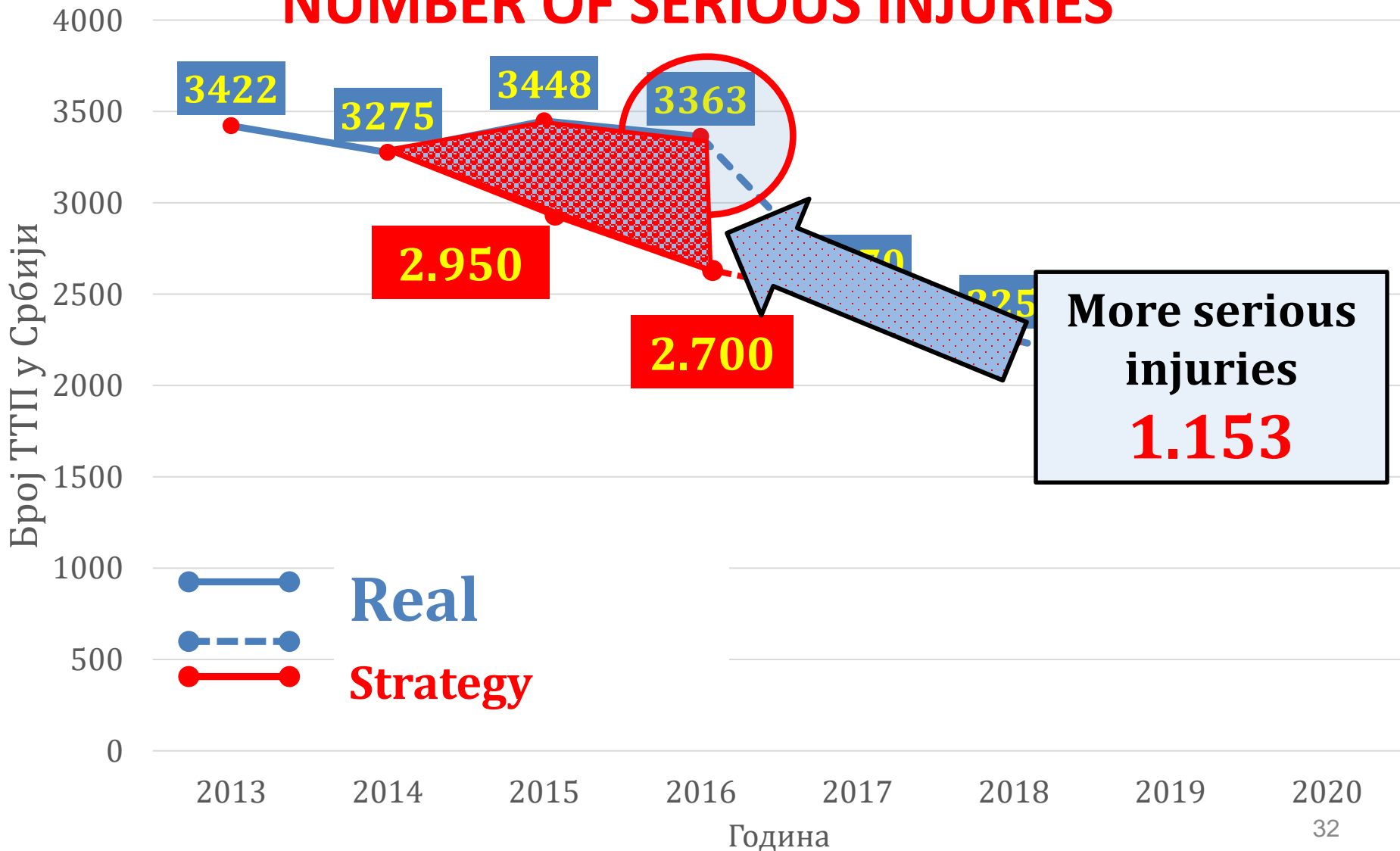
Use data for **MONITORING IMPLEMENTATION** RS Strategy in Serbia



Use data for **MONITORING IMPLEMENTATION**

RS Strategy in Serbia

NUMBER OF SERIOUS INJURIES



After that analyze
we improve our activities and
almost achieved Strategy goals!

**RS INTEGRATED DATABASE –
PRECONDITION FOR RS
MANAGEMENT**

IMPROVE DATABASE?

Improve RS System