



Roundtable - New Trends and Opportunities in Road Safety
Atlanta, June 19, 2017

Exploiting Data for Road Safety Decision Making

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Initial Considerations

- Road Safety is a typical field with high risk of **important investments not bringing results.**
- Absence of **monitoring** and accountability limits seriously road safety performance.
- Decision making in road safety management is highly dependent on appropriate and **quality data.**
- Very often we look where the data are and **not where the problems** and solutions are.



▶▶▶ Data needed for Road Safety Decision Support

Data to identify the problems

- Crash data
- Risk exposure and performance indicators

Data to identify the solutions

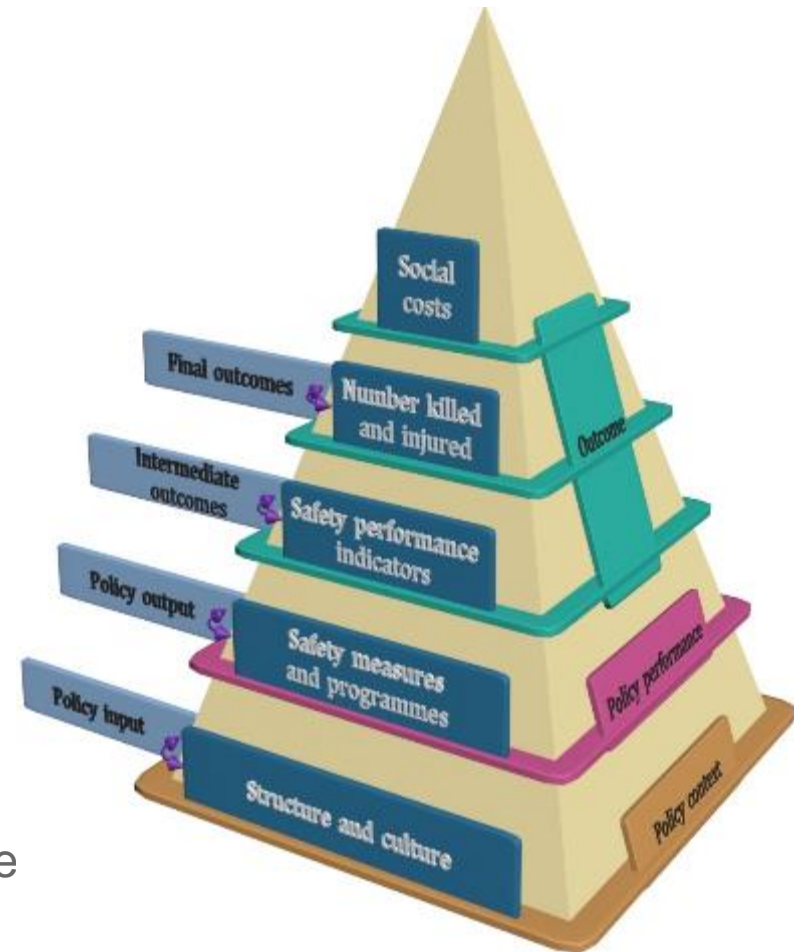
- data on measures implementation
- data on measures effectiveness

Macroscopic data

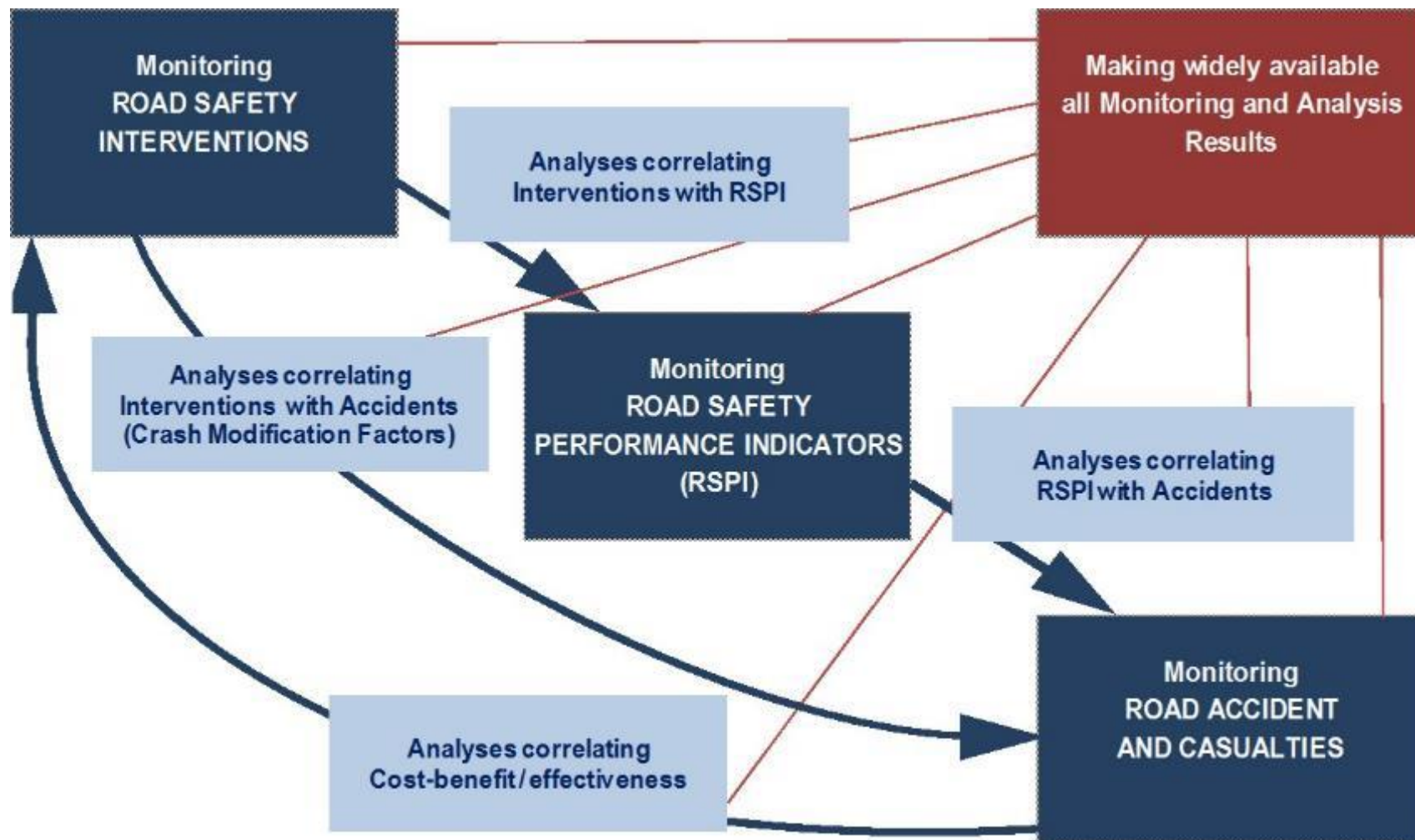
- for the whole population
- for a city, region, country, globally

Microscopic data

- driver, passenger pedestrian behaviour and performance
- junction, road segment, small area performance
- specific accident analysis data



Monitoring and Analysing Road Safety Performance



»»» Critical Data Properties

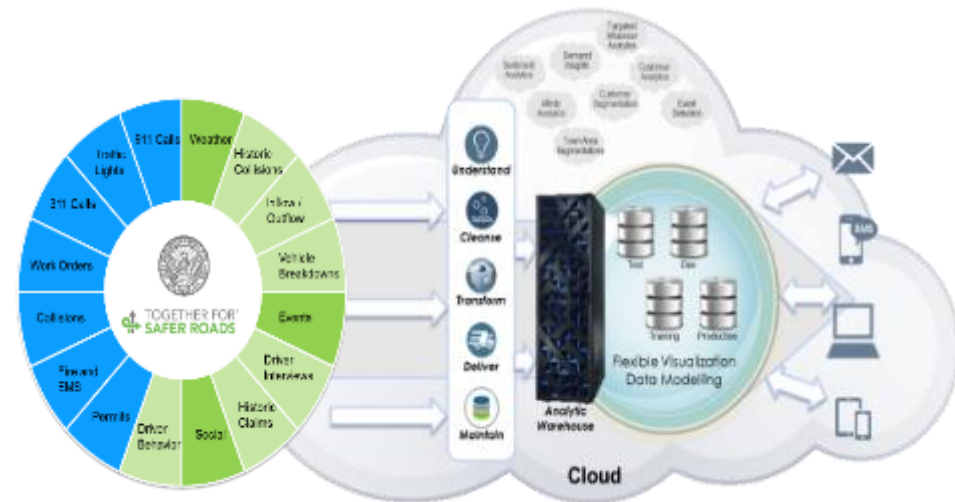
- Crash data are meaningful only if they are combined with **exposure data** (crash per km driven, per traffic characteristics, per time, etc.)
- Crash causalities are revealed when crashes are correlated with **safety performance indicators** (behaviour, infrastructure, traffic, vehicles)
- The **evaluation of safety measures** effectiveness provides valuable information, necessary for matching problems with solutions
- Analysis of **high resolution data** reveals hidden and critical crash properties



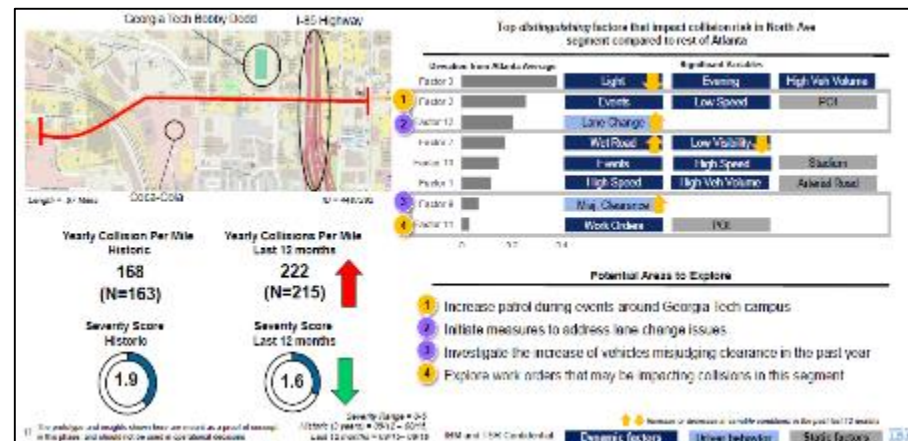
»»» The Atlanta Exemplary Project

TSR Members together with the City of Atlanta brought together for the first time:

- very recent data
- high resolution data
- highly diversified data
- powerful data analytics tools

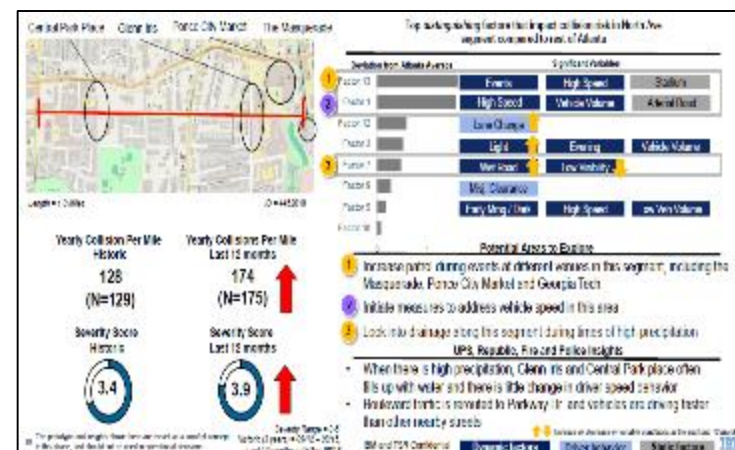


Important insight on North Avenue crash characteristics and causalities was delivered



Atlanta Project Leverage

- High added value from TSR Members **synergies** (data and analysis)
- Important new potential in collecting and analysing **high resolution** safety data
- More insight on the crash causalities will derive by working with **safety performance indicators**
- The next big step should be to link crash causalities with respective **measures**
- Automated procedures will increase the **transferability** of the process



TSR and Global Road Safety Data

- The global character of TSR is ideal for **global data synergies**
- Development of successful projects and **transferable methodologies**
- Bringing together **big and global data** allowing for:
 - reliable international comparisons
 - valuable exchange of experience
 - efficient monitoring of road safety performance
- Support **road safety management** at city, region, national and international level



»» Concluding Remarks

- **Digitalisation** opens great new data possibilities for evidence based road safety decision making at all levels
- New potential for **data driven seamless procedures** from safety problems identification to selection and implementation of optimal solutions
- New increased **net present value of road safety data**, available for early problem detection and prompt and customised decision support
- TSR Members have a role to play in developing new efficient and **transferable methodologies**





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