

EIB Jaspers

CAPACITY BUILDING FOR SUSTAINABLE URBAN MOBILITY PLANS

ROAD SAFETY AND STREET DESIGN

23-24 September 2024

Source: Unsplash @Ulrichslau Petrushevich



Getting started with your neighbour (discuss in pairs of two)

- What are the main road safety issues you perceive where you live?
- What are typical road safety responses? What makes them (in)effective to your opinion?

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Importance of road safety in SUMPs

- Monetized societal costs of traffic unsafety are many times higher than the costs of traffic jams and environmental pollution, among other things (see example of calculation for the Netherlands)
- Apart from immense personal suffering in people's lives

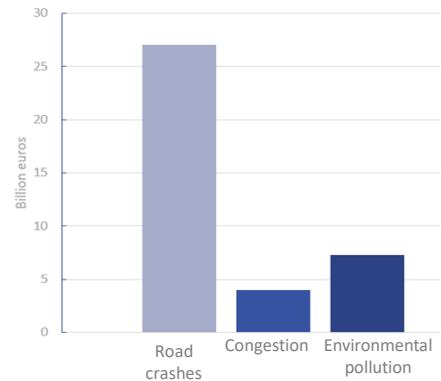


€ 6.5 M per road death



€ 0.7 M per serious road injury

Indication of societal costs of road deaths and road injuries for the Netherlands
(source: SMOV <https://swov.nl/en/fact-sheet/road-crash-costs>)



Total societal costs of road crashes, congestion and environmental pollution compared for the Netherlands
(source: SMOV <https://swov.nl/en/fact-sheet/road-crash-costs>)

Key Message: "Road crashes cost the Netherlands €27 billion in 2020, far exceeding other traffic-related social costs."

The social costs of road crashes in the Netherlands in 2020 are estimated at **€ 27 billion** (between € 15 and € 36 billion), equivalent to 3% (1.9-4.5%) of the gross domestic product (GDP). This is significantly higher than other traffic-related social costs such as **traffic congestion (€ 3.5 to € 4.6 billion)** and **environmental damage (€ 7.3 billion)**. The costs amount to about € 6.5 million per road death and € 0.7 million per serious road injury. Half the costs are attributable to serious road injuries, while the share attributable to road deaths is smaller (15%). The other costs (about one third of them) are the result of road crashes with less serious outcomes. The costs exceed those of previous estimates and their bandwidth has increased, mainly because new research shows that the human costs are considerably higher than was assumed.

SMOV <https://swov.nl/en/fact-sheet/road-crash-costs>



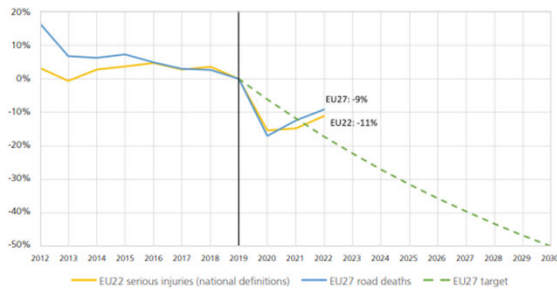
SLIDE WITH SHORT MOVIE Source: Transport Accident Commission Victoria

This movie particularly highlights the personal suffering associated with road accidents, apart from the huge social costs

<https://www.youtube.com/watch?v=k2tOye9DKdQ>

'Vision Zero' 2050: EU road safety ambitions

- Decline in road deaths and seriously injured in Europe
- Between 2012-2022: in some countries improvement, in some countries there is stagnation in traffic safety
- In a lot of countries extra effort is needed to reach 'vision zero', exact challenge varies by country



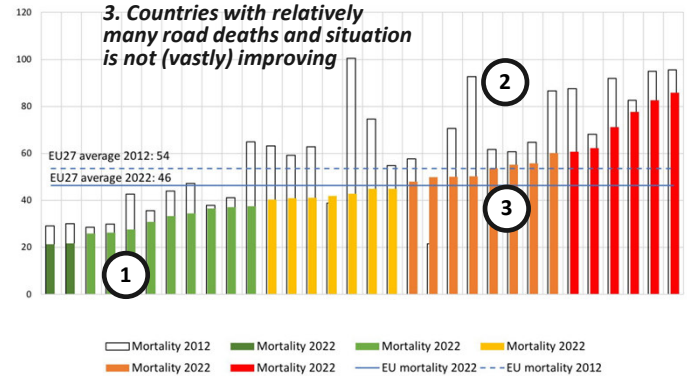
Evolution of road deaths and seriously injured in Europe
Source: 17th Annual Road Safety Performance Index (PIN Report)



Capacity Building for Sustainable Urban Mobility Plans – Road safety and street design



1. Countries with relatively few road deaths, risk of relapse
2. Countries with relatively many road deaths, but situation is vastly improving
3. Countries with relatively many road deaths and situation is not (vastly) improving



Change in road deaths per million inhabitants between 2012 and 2022
Source: 17th Annual Road Safety Performance Index (PIN Report)

Key message: Vision Zero represents a paradigm shift in road safety, prioritizing human life and health through a systemic, ethical, and data-driven approach.

Originated in Sweden in 1997.

Objective: Eliminate all traffic fatalities and severe injuries.

Message: No loss of life is acceptable.

Using the graphs and the images in the following slides the presenter will show what has been happening and why it is important to introduce this concept in the SUMPs as one of the key subjects and objectives.

Vision zero 2050. EU Road safety ambitions:

Left figure:

Motivation for Vision zero:

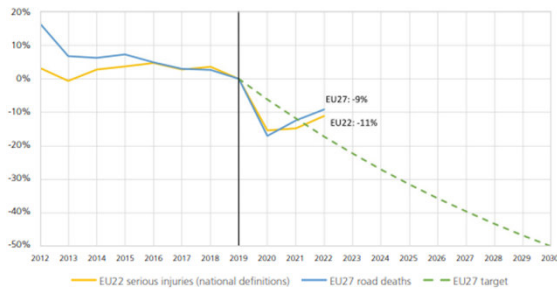
- Each year: 20.000 deaths on EU-roads
- Decrease in traffic fatalities is too slow, increase in serious injuries since 2020
- € 124 billion costs for society each year

Right figure:

Relative change in road deaths per million inhabitants for different countries between 2012 and 2022 (ETSC Road Safety Performance Index). We distinguish three categories here: 1. Countries with relatively few road deaths, risk of relapse 2. Countries with relatively many road deaths, but situation is vastly improving 3. Countries with relatively many road deaths and situation is not (vastly) improving

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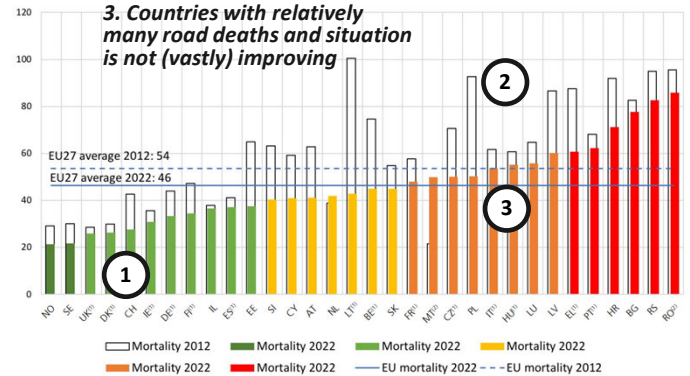
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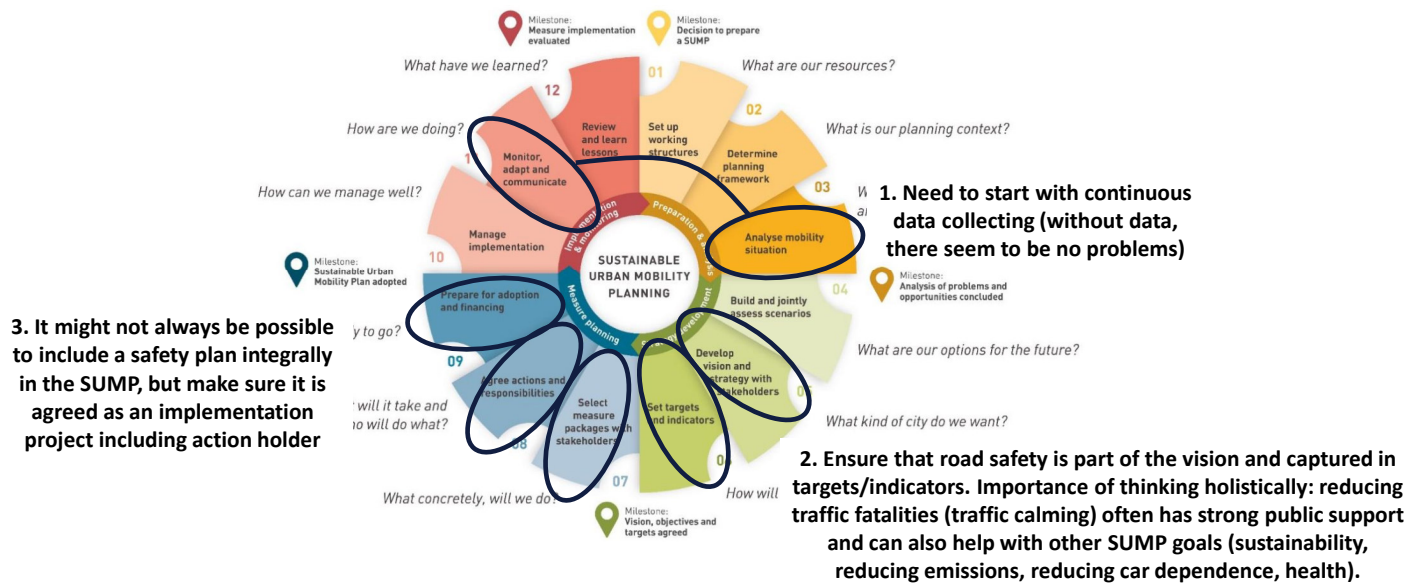
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figure:

Securing road safety in SUMP



road safety is an important component in a sump. ensure that proper data collection also takes place in the area of safety. This is prerequisite to include it properly. Also ensure that the importance of road safety is included in visioning. Indicators for road safety should also be identified for later evaluation. Finally, realising a fully-fledged safety plan is not always possible within a SUMP plan itself. In such cases, however, it is important to name actions (including action holders and finances) to develop a safety plan as an elaboration project after the SUMP itself has been adopted.

Collect proper data: starting point to achieve road safety in SUMPs

Why data is so important?

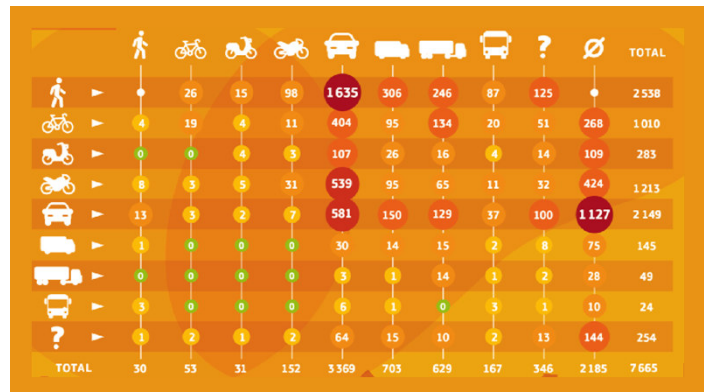
- 'Without data, there seems no problem to solve'
- Data indicate where the problems are.
- Data let us track the progress of traffic safety

What are the common challenges?

- Current data is incomplete or unreliable.
- Process behind data collection is not optimized.

What can be done?

- Involve stakeholders in the data gathering and analysis processes (Police, Emergency services, NGOs, Municipalities).



Example of importance of proper data:
which mode of transport causes deaths in which mode of transport?
Source: https://road-safety.transport.ec.europa.eu/document/download/23a030b4-8732-44af-ba89-0efe2f6086ec_en?filename=EU_Road_Safety_Results_conference_2022-Presentations.pdf

There are some important tools to achieve road safety policies into SUMP's.

First of this is collecting proper data

- If the data collection process is currently bad, and one of the steps is to improve it. Communicate clearly that it is almost certain that in the first few years (or until the process is working well) the number of road safety related incidents will increase and this is not necessarily an indicator that your city is doing a "bad job" in road safety.
- Data protection is essential, the data collected needs to be treated with compliance with the latest legislation. This is something that also needs to be worked on with the rest of the stakeholders involved in the process.

The diagram is an example of the importance of data:

- Too many fatalities occur without any other involved in the incident.
 - > Implies user error – speeding/poor driving etc.
 - > Or Poor vehicle safety/design to prevent mortality etc.
- Pedestrians are the most vulnerable road users vehicle (specially in urban settings)
- Cars generate the highest number of fatalities when involved in an incident.
- Heavy vehicles involved in multiple fatalities with pedestrians and cyclists. [Importance of good visibility in urban environments]
- https://road-safety.transport.ec.europa.eu/document/download/23a030b4-8732-44af-ba89-0efe2f6086ec_en?filename=EU_Road_Safety_Results_conference_2022-Presentations.pdf

Collect proper data: starting point to achieve road safety in SUMPs

- Example: important data to be included in data collecting (include in accident forms for police or hospital emergency departments)
- Example: ask emergency departments, in addition to police registration, to accurately record all incoming traffic casualties for two weeks annually to calibrate the registration rate of police registration.
- Example: open an interactive website where residents can mark where they experience dangerous traffic situations

Table 2.1. Minimum Set of Crash Variables

Crash	Traffic unit	Person
Crash ID		Person ID
Date	Traffic unit type (e.g., pedestrian, cyclist, passenger car)	Date of birth
Time	Special function of vehicle	Gender
Weather conditions	Registration year	Road user type (pedestrian, driver, passenger)
Lighting conditions (daylight, dark, with/without lighting, dusk/dawn)	Country of registration (e.g., foreign, national)	Injury severity (slight, more than 24 hours in hospital, fatal)
Crash type (e.g., with pedestrian, single, two vehicles turning, two vehicles NO turning)	Vehicle maneuver (e.g., turning, overtaking, etc.)	Alcohol test (not tested, not applicable, positive, negative, unknown)
Location: X coordinate (latitude) and Y coordinate (longitude)		Drug use
Road type (e.g., motorway, expressway, national road, local road)		Safety equipment
Section type (e.g., bridge, tunnel, bend, gradient, straight)		Nationality (national, foreigner—possibly by relevant country grouping)
Junction type (not at junction, crossroad, roundabout)		MAS injury severity (Maximum (M) Abbreviated Injury Scale (AIS) rated from AIS 0 – no injury, to AIS 6 – death) (AAAM 2016).
Speed limit		
Surface conditions (dry, snow/ice, wet, slippery)		
Crash severity		

Source: Adapted from AAAM 2016; Azzouz 2019; and CARE Team 2018.

Data that tends to be gathered in the event of a road crash
(source: globalroadsafetyfacility.org)



Result of internet survey in which population was asked to indicate most dangerous traffic situations on the map
(source: Mobilityplan Leeuwarden, NL, 2024)

Key message: The data gathering process is complex and it may be different in each city or country. Analyze what works in your city and try to improve it.

It is important to set a process and that all stakeholders are involved in it.

Each stakeholder has its own set of tasks, and it is hard to communicate the importance of gathering data.

Involving them and making them part of the road safety plan is one way to make them part of the solution.

Making a good analysis of bad data is impossible, the quality of the data is crucial for the result and the potential to improve road safety.

Without good data, there are big limitations in the policies that can be put in place.

All the stakeholders that can be involved in the event or a road crash and can manage data.

- Police (Usually the first responders)
- Fire brigade (Also can be first responders in some cases)
- Doctors (especially important for seriously injured patients)
- City officials (centralize multiple sources of data and process it)
- NGOs (important stake holder)
- Judiciary system (more information can be gathered in some cases)
- Emergency services (Especially important for injuries and seriously injured patients)

table:

Data that tends to be gathered in the event of a road crash.

Depending on the severity of the event, the available data and time to gather may vary.

Some information can be connected after the fact, but there is crucial information that needs to be gathered in the moment.

- Place and time of the accident.
- Condition of the road and weather.
- Drug or alcohol use.
- Signs of cause of the accident (rubber marks, traffic light status)

Right side: example of the result of an internet survey in which residents were asked about dangerous locations in the city where they live (Leeuwarden in the Netherlands)

Source: <https://www.globalroadsafetyfacility.org/publications/guidelines-conducting-road-safety-data-reviews>

Collect proper data: starting point to achieve road safety in SUMPs

(see slide 6 , point 1)

- Divide yourselves in pairs of 2.
- Talk with each other and discuss the 3 most relevant challenges you are facing regarding road safety data collection.
- Select 1 and list 3 things that can be blocking that process.
- Which are the stakeholders that you can involve to solve this (Police, Emergency services, Media, NGOs, Other municipal areas).

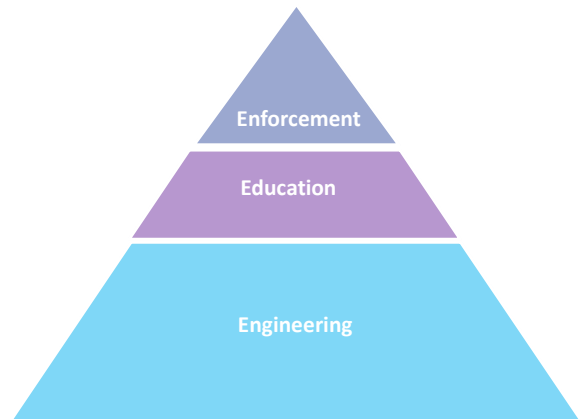


Source: Unsplash - Jason Goodman

Holistic and integrated approach of safety in SUMP (triple E)

(see slide 7 , point 2)

1. Engineering: safe design of infrastructure as key (precondition)
 - Design safer roads and vehicles.
 - Implement traffic calming measures.
 - Vulnerable users in mind
2. Education: teaching people to make proper use of infrastructure and recognize their own limitations
 - Promote road safety awareness.
 - Teach safe driving behaviours.
3. Enforcement: last resort for persistent unsafe situations (high cost, but effective)
 - Enforce traffic laws consistently.
 - Use technology to monitor compliance.



Three Main Components:

Engineering: Describe examples like safer road designs, improved vehicle safety features, and traffic calming measures.

- Design safer roads and vehicles.
- Implement traffic calming measures.
- Vulnerable users in mind

Education: Stress the need for continuous road safety education and public awareness campaigns.

- Promote road safety awareness.
- Teach safe driving behaviours.

Enforcement: Highlight the role of law enforcement and the use of technology (e.g., speed cameras) to ensure compliance.

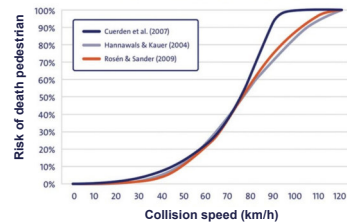
- Enforce traffic laws consistently.
- Use technology to monitor compliance.

Zoom in:

1. good infrastructure crucial to improve Road Safety

Human capabilities and limitations as a basis for engineering

1. Respect for limited tolerance to external forces of human body (speeds, masses)
2. Acknowledge people will always make mistakes
3. Acknowledge a shared responsibility amongst all parts of the system, strengthening each part of the system multiplies their effects and improves forgiveness.

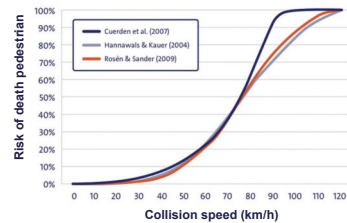


Human body can handle collisions up to about 30 km/h
Source: SWOV Netherlands

An ideal Safe System implementation programme addresses key components
<https://www.itf-oecd.org/sites/default/files/docs/safe-system-in-action.pdf>

Human capabilities and limitations as a basis for engineering

1. Respect for limited tolerance to external forces of human body (speeds, masses) → **Homogeneity** of mass, speed and direction
2. Acknowledge people will always make mistakes → **Forgivingness** of infrastructure
3. Acknowledge a shared responsibility amongst all parts of the system, strengthening each part of the system multiplies their effects and improves forgiveness. → **Recognizability** and predictability of infrastructure based on balance between function-form-use of infrastructure

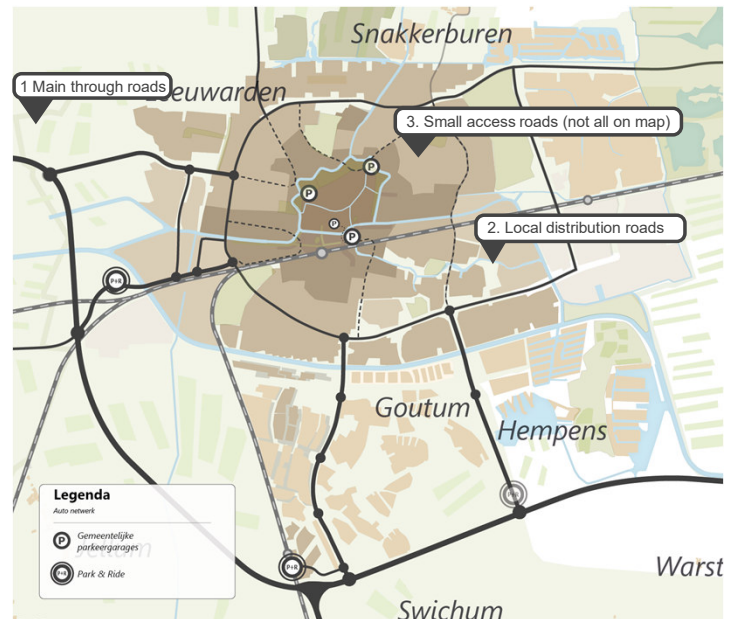


Human body can handle collisions up to about 30 km/h

Source: SWOV Netherlands

Road categorization as a tool

- Flows of car traffic have major impact on traffic safety: a road categorization helps with bundling car flows to improve road safety
- Two options of implementing road categorization in a SUMP (see slide 7, point 3): as a part of the SUMP itself, or specified as a task in a road safety plan to be elaborated (as a later elaboration of SUMP)
- Design categorization together with stakeholders, using data



Example of road categorization of Leeuwarden (The Netherlands)

Source: Beleidskader mobiliteit Leeuwarden, 2024

Road categorisation is an important handle within engineering. In particular, this involves directing car traffic along the right routes, as car and freight traffic in particular has a major impact on ultimate road safety.

Because flows of car traffic have major impact on traffic safety, bundling car flows to improve road safety

Making residential areas car-free (not allowing through traffic)

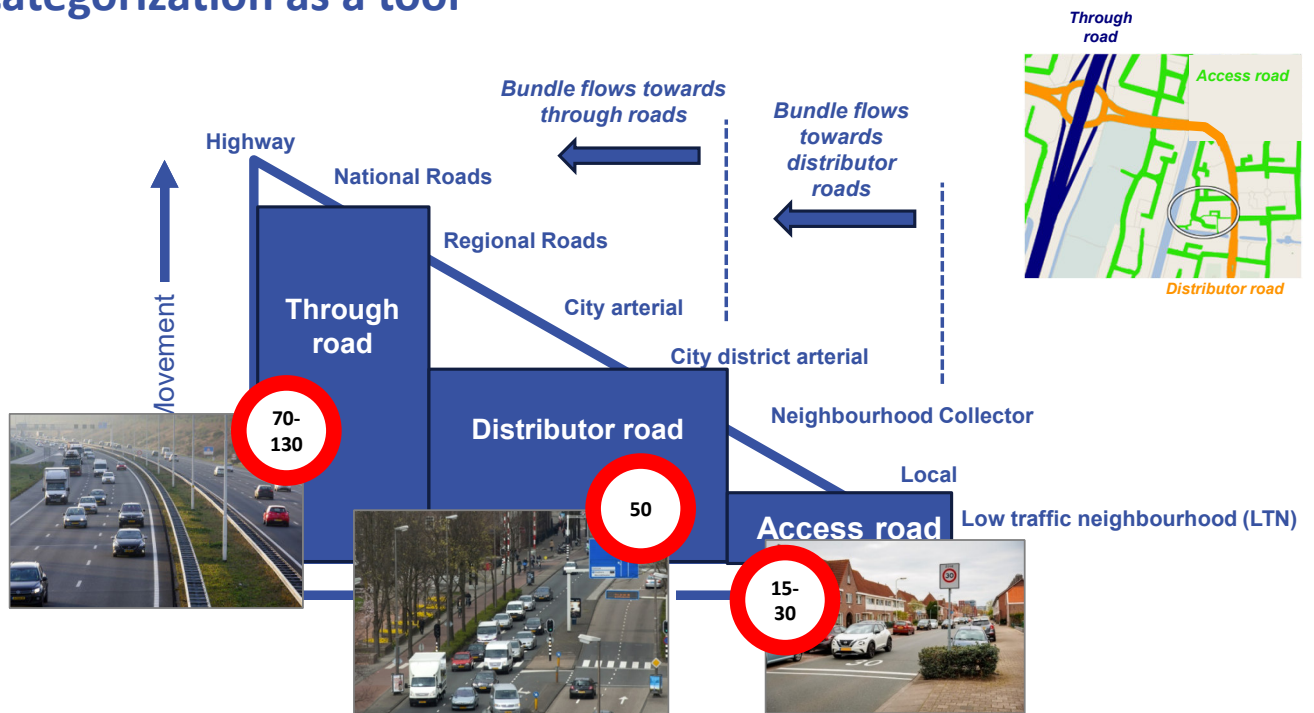
bundling car traffic via limited number of routes, also results in concentration of risk locations in limited number of places where measures are needed

There are two ways of implementing road categorization into sumps.

Design categorization together with stakeholders. Think of police, different road authorities within SUMP area, specialists on logistics, lobby parties on active mobility, elderly). Besides that: use data such als traffic counts and traffic predictions by traffic modeling (if available)

right an example of a categorisation as created for a sustainable urban mobility plan for the city of Leeuwarden in the Netherlands

Road categorization as a tool



- SLIDE WITH DYNAMIC ELEMENTS POPPING UP
- Road categorization from viewpoint of car traffic can be explained based on
- **access**: how accessible does a place need to be (many destinations =highly accessible)? (x-axis) and
 - **movement**: how much emphasis is on moving in this road (y-axis)? (Highway = high movement)

15-
30

Street design and safety features: access roads



Source: Ljubomir Žarković



Source: Goudappel

50

Street design and safety features: distributor roads



Source: Goudappel



Source: Goudappel

The accompanying images are meant to give an impression of each type of road from the previous slides. What are key features and where do the features differ. This is especially important because while ensuring road safety is important at an overall network level (categorisation), real success is only achieved through accurate design at street level (detail level)

Top left - **Shared spaces 0-15 km/h**

- Pedestrian street (Low traffic neighbourhood (LTN))
- Only emergency services can access.

Top right - **Mix of bicycle and car 30 km/h, Raised intersection platforms 30 km/h**

- Pedestrian on side walks.
- Brick pavement
- Raised intersection platform or speed bumps, no priority intersections (right of way)

Top left - **Separated sidewalks and bicycle paths.**

- Preferably separated from moving vehicles.
- Protected crosswalks

Top right - **Design for busy distributor road,**

- 2x2 car lanes, no parking

15-
30

Shared space
0-15 km/h

Street design and safety features: access roads



Source: Ljubomir Žarković



Source: Goudappel

Mixed
traffic,
raised
intersection
platforms
30 km/h

50

Street design and safety features: distributor roads



Source: Goudappel



Source: Goudappel

15-30

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Mixed traffic,
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30 km/h

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Separated
sidewalks and
bicycle paths.



Source: Goudappel

Street design and safety features: distributor roads



Source: Goudappel

Design for busy
distributor
road, separated
car directions

70-
130

Street design and safety features: through roads



Source: Goudappel



Source: Goudappel

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Top left – **Less stops**

- Through traffic without stopping with high capacity thanks to intersections combined with flyovers. Multiple lanes, physically separating directions
- Urban living and housing physically separated from traffic function.

Top right – **No level crossing**

- No level crossings of walking and cycling, only with flyovers or tunnels
- Intersections require a lot of space

70-
130

Street design and safety features: through roads

Less stops,
City life and
traffic are
separated



Source: Goudappel



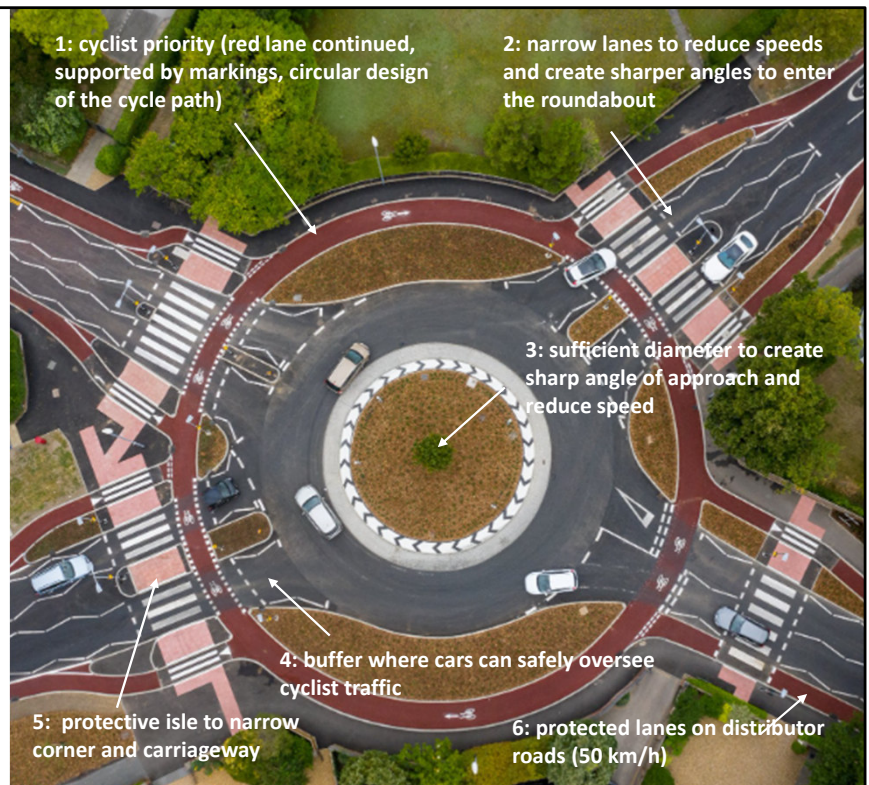
Source: Goudappel

No level
crossing

Safe design of street (micro level) determines success

- Design a road categorisation at total network level is important precondition and starting point
- Devil is in the detail: ultimate road safety is only achieved thanks to good micro-level design (phase following after categorization on network level)
- The required level of detail is an argument for developing a road safety plan separately after adoption of the SUMP

Example of importance of detailed design of roads and intersections to ensure road safety
Source: DTV, RHDHV, Cambridge first dutch styled roundabout



Road categorisation is an important handle within engineering. In particular, this involves directing car traffic along the right routes, as car and freight traffic in particular has a major impact on ultimate road safety.

But ultimately road safety is determined by the quality of designs on the street (micro level). This sheet makes it clear that a network-level categorisation plan alone is not enough, but elaboration is needed. The need for detailed elaboration is an argument for a detailed and specialised road safety plan after the SUMP. In that case, however, it is important to lay this down in the SUMP as one of the follow-up actions after the SUMP

Zoom in:

2. education to help people in traffic safety behavior

Road safety education strategies

- Risk factors (especially young people, elderly) and misbehaviour (young adults)
- Focus on receptive target groups (children, people facing new life choices such as new residents from abroad)
- Targeting multiple age groups require different approaches.
- Tackle bad practices that need to improve.
- Generate positive reinforcement where possible.



Source: Unsplash @National Cancer Institute



Source: Unsplash @Alexandre Boucher



Source: Unsplash @sporlab

Targeting Multiple Age Groups:

Children:

Interactive lessons and games. (Knowing the street sign, what are the meaning of traffic lights)

School-based programs. (Get your bike license, Safe-pedestrian badge)

Teenagers:

Driver education courses.

Car-care/vehicle safety introduction courses.

Peer-to-peer programs and simulations.

Adults:

Workplace safety seminars.

Community workshops and online courses.

Seniors:

Refresher courses.

Mobility and pedestrian safety workshops.

Risk factors and Misbehaviour:

Identify Common Misbehaviours:

Speeding

Alcohol

Mobile phone/distracted driving.

Use of the seat belt.

Education and Awareness Campaigns:

Use of real-life stories and testimonials.

Promote consequences of risky behaviours.

Typical Bad Practices in Road Safety:

Educational Interventions:

Demonstrations and visual aids.

Public service announcements (PSAs).

Communicate the data you collect.

Positive Reinforcement:

Reward Safe Behaviours:

Recognition programs and incentives. (Road safety NGOs)

Certificates and prizes for good practices.

Community Engagement:

Highlighting role models and success stories.

Social media campaigns showcasing positive behaviour.

Examples of road safety education

- Demos for schoolchildren
- Trainings (for example bicycle training)
- Campaignes (to reduce misbehaviour)
- Apps, social media (for example where people can point out dangerous situations on the map)



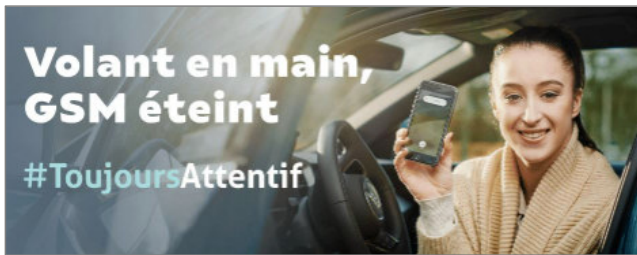
Demo 'blind spots' in traffic

Source: We Love Cycling, Ste Mo



Traffic & bicycle instructions

Source: <https://www.nieuwsblad.be/>



public campaigns (including alcohol use, phone use, drug use, speeding, visibility)



App: safe school routes

Source: Traffic Agent



Bicycle safety check service

Source: www.fietzersbondalphenaaandenriijn.nl/

Demo “blind spots” in traffic

Description:

This example is used to educate people about the size of the blind spots in big vehicles. It can be used in trucks and/or busses. Creates a better understanding about the dangers on the street and awareness for the road users.

Target group:

Drivers, Pedestrians and cyclists.

Objective:

Improve awareness and road safety for vulnerable road users.

Traffic & bicycle instructions

Description:

Used in educational environments to stimulate the use of active modes and to teach kids how to navigate complex situations in the street and improve road safety in general.

Target group:

Kids

Objective:

Promote active modes and road safety knowledge.

Public campaigns

Description:

This can be very broad. From alcohol, phone use and other distractions, to speeding, etc. The end goal is to get to as many people as possible.

Target group:

Depends on each campaign. Young adults, adults, etc.

Objective:

Reach a broad audience and create lasting impact.

App: Safe school routes

Description

Apps can be used as another type of campaign. This can also be known as serious games, where begin the game the end goal is to communicate a good practice or create awareness.

Target group:

Children and young adults.

Objective:

Reach to a different audience than traditional campaigns.

Bicycle safety check/services

Description:

Municipalities or NGOs can run this workshops in multiple points of the city (usually with high bicycle traffic) or around specific dates and events. The end goal is to promote road safety within cyclists, by improving their safety equipment and maintenance of their bike

Target group:

Cyclists

Objective:

Create awareness and promote safe cycling practices.

Citizen's involvement: Use tactical urbanism as a tool.



Source: City of Buenos Aires, Argentina

Introduction to tactical urbanism as a tool for involving the community and demonstrating street redesigns.

Key Points:

Citizen Engagement:

- Involve the community in planning and implementation. (Potential co-creation opportunities in workshops)
- Gather feedback and ideas directly from residents.
- Generates a sense of ownership and collaboration in solving the problem.

Rapid Implementation:

- Use low-cost, temporary materials (e.g., paint, planters, pop-up parks).
- Quickly demonstrate potential improvements. (reduced speed, improved use of the space)
- Allow for real-time adjustments based on community feedback. (before the final implementations some changes can be made to the proposed design)

Visibility and Impact:

- Create visible changes that can be easily experienced.
- Showcase benefits such as improved safety and placemaking.
- Use pilot projects to test and refine ideas before permanent installation.

Zoom in:

3. enforcement to enforce good behavior where bottlenecks remain despite good infrastructure and education

Enforcement

- Roles of different institutions
 - Police and law enforcement
 - Local Government
 - National Government
- Enforcement strategies
 - Speed
 - Impaired driving
 - Seat belt and child seats
 - Distracted driving
- Best Practices
 - Data-driven strategies
 - Public awareness and involvement
 - Tools to help enforcement
 - Collaboration with stakeholders
- Integration into SUMPs
 - Policy alignment with other objectives
 - Stakeholder involvement
 - Funding and resources allocation
 - Monitoring and evaluation

Including suggestions on the “how to” instead of only “what”?
This cannot be used as a remedy to not implement good street redesigns.

Roles of Different Institutions:

Police and Law Enforcement:

- Conduct traffic stops and checkpoints.
- Enforce traffic laws and issue citations.

Local Government:

- Implement local road safety policies.
- Install and maintain enforcement equipment.
- Ensure budget allocation for enforcement.

National Government:

- Set national road safety standards.
- Provide funding and resources.

Enforcement Strategies:

Speed Enforcement:

- Speed cameras and radar guns for enforcing agents.
- Speed signs.

Impaired Driving Enforcement:

- Sobriety checkpoints.

Random and targeted breath testing.

Seat Belt and Child Restraint Enforcement:

Regular compliance checks.

High-visibility enforcement campaigns.

Automatic systems with camera detection.

Distracted Driving Enforcement:

Mobile phone usage detection.

Targeted enforcement during peak times.

Best Practices:

Data-Driven Enforcement:

Use accident data and traffic studies to target high-risk areas.

Public Awareness Campaigns:

Combine enforcement with education to change behaviour.

Expand the visibility of the checkpoints.

Technology Integration:

Utilize advanced technologies to improve enforcement (e.g., ANPR, red-light cameras).

Collaboration and Partnerships:

Foster cooperation between police, local authorities, and community groups.

NGOs can be a valuable partner for enforcement and outreach.

Integration into SUMP:

Policy Alignment:

Ensure road safety enforcement strategies align with SUMP objectives.

Stakeholder Involvement:

Include enforcement agencies and other stakeholders in the planning process.

Funding and Resources:

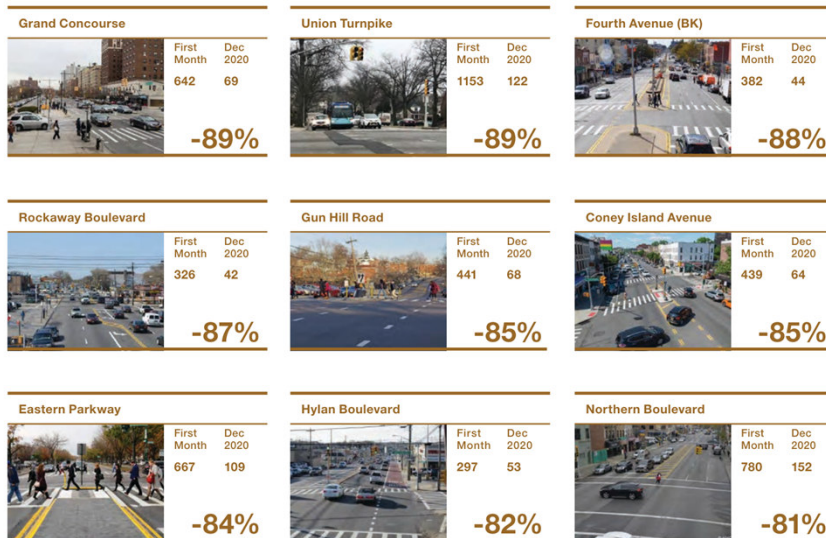
Allocate resources for road safety enforcement initiatives.

Monitoring and Evaluation:

Regularly assess the effectiveness of enforcement measures.

Example – Speed Cameras in NYC

Decline in Average Daily Speeding Violations in Camera-Enforced School Speed Zones Along Key Corridors



Source: NYC DOT



Mobile speed cameras to make people aware of the speed limit in different places
Source: Meppeler courant (NL)

NYC has a plan to implement multiple speed cameras across the city. Most of them are placed in data-driven locations and close to school zones. For example, in the graph in the left this is the results of 9 speed cameras placed. All of them reduced the number of average daily speeding violation in more than 80%.

The answer the municipality gives to **“Why use speed cameras?”** is clearly answered in the 2 words...“Speeding kills.” and then continues with “Speed cameras are an effective and fair technology which has been proven to save lives. In 2019, data showed that injuries at speed camera locations dropped 14 percent and speeding dropped by over 70 percent during the hours of operation at locations where cameras were active”

<https://www.nyc.gov/html/dot/downloads/pdf/speed-camera-faq.pdf>

<https://www.nyc.gov/html/dot/downloads/pdf/speed-cameras-vision-zero-case-for-speed-cameras-24-7.pdf>

Integrating SUMP and Road Safety Plans



Jason Goodman

■ Road safety plan structure

- Diagnosis of traffic safety.
- Safe Infrastructure.
- Enforcement and safe vehicles.
- Education and communication.
- Stakeholders and citizens involvement.



Source: CROW



Capacity Building for Sustainable Urban Mobility Plans – Road safety and street design

30



Funded by the European Union

Key messages:

Highlight the need for SUMP and Road Safety Plans to work together for achieving common goals such as enhancing urban mobility and reducing traffic fatalities.

Emphasize the use of data-driven decisions and best practices to ensure effective implementation and continuous improvement.

Stress the importance of involving diverse stakeholders, including government agencies, local communities, and transportation experts.

Mention the use of public consultations, workshops, and partnerships to gather input and foster collaboration.

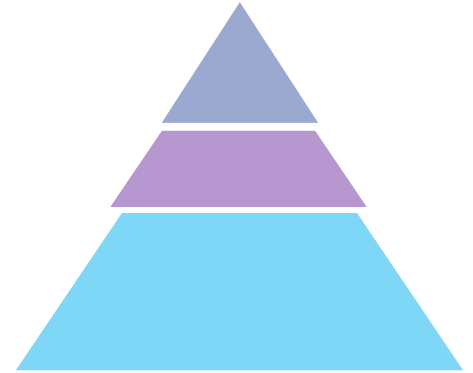
Build a unified framework:

- How Vision Zero and the Safe System approach guide both SUMP and Road Safety Plans.
- Emphasize the shared goal of creating safer, more sustainable cities.

This should be an iterative process, where the Road safety plan feeds the SUMP process, and later the SUMP should provide feedback to improve future versions of the road safety plans. Both should work together towards the same goals and therefore this is a positive feedback loop.

Key take-aways

- Road safety is a key part of a SUMP
- Data requirements and analysis is crucial
- Use the concepts of Safe system and Vision Zero
 - Good Engineering designs safe roads (is the basis)
 - Good Education communicates how to behave in the road
 - Good Enforcement controls that the road is use properly
- Ensure citizens acceptability of the measures
- Protect the vulnerable users



Source: CROW

Key message: Reinforce the comprehensive approach needed to integrate road safety into SUMPs. Using the safe system and vision zero approach to ensure a safer, more sustainable urban mobility for everyone.