Enhancing Road Safety

1. Why should we focus on road safety?

Due to urbanisation and economic growth, people and vehicles are flowing into the cities and urban areas in ever higher numbers - leading to more road accidents at the same time. In cities and urban settlements, especially Vulnerable Road Users (VRUs) like pedestrians and cyclists are exposed to a higher risk of road accidents involving death or severe injury. This paper explores a number of measures contributing to higher urban road safety and provides basic guidance for policy-makers and interested citizens.

“We will take measures to improve road safety and integrate it into sustainable mobility and transport infrastructure planning and design. Together with awareness-raising initiatives, we will promote the safe-system approach called for in the Decade of Action for Road Safety, with special attention to the needs of all women and girls, as well as children and youth, older persons and persons with disabilities and those in vulnerable situations. We will work to adopt, implement and enforce policies and measures to actively protect and promote pedestrian safety and cycling mobility, with a view to broader health outcomes, particularly the prevention of injuries and noncommunicable diseases, and we will work to develop and implement comprehensive legislation and policies on motorcycle safety, given the disproportionally high and increasing numbers of motorcycle deaths and injuries globally, particularly in developing countries. We will promote the safe and healthy journey to school for every child as a priority.”

New Urban Agenda §113

There are more than 1.25 million road fatalities every year

There are more than 50 million injuries on roads every year

Low and middle-income countries account for 90% of the above

Budget burden: 3-5% of respective country’s GDP

Do you know the burden of road accidents in your city?

Data source: WHO; Pictures: flickr/SUTP
2. What can I do as a mayor?

In order to protect your citizens, you as a mayor have several administrative options in order to reduce these avoidable deaths and the appalling financial and social burden that may be assigned to the victims and their families.

► Bring together the respective departments and raise awareness

It is key to identify all departments related to transport in your city such as traffic departments, traffic police but also other stakeholders such as driving schools and transport companies. You as mayor can influence the debate and raise awareness for road safety. Citizen forums can help to reveal the most pressing issues concerning road safety.

► Establish a responsible organisation that manages road safety activities

Formalize meetings of the responsible organisations under your patronage and develop a programme of coordinated activities to reduce fatalities and injuries. This process is a multi-sector approach and cooperation with different stakeholders is key.

The establishment of a local-level road safety council or committee (LRSC) or other permanent steering groups under your chairmanship can be a way to go forward. Your deputy or a trusted adviser and a representative of the local business association or the local media can complete the steering committee. A LRSC frequently also includes representatives of the key city departments and local NGOs.

The LRSC is responsible for:

- Cooperating with relevant institutions
- Establishing a database to enhance the understanding of the problem
- Creating a detailed road safety plan
- Planning road safety actions
- Establishing periodic surveys
- Preparing regular reports about road safety

In the regular meeting sessions the LRSC will manage and coordinate road safety actions, with each stakeholder contributing as needed. You as the governing leader should discuss and approve the main strategic documents and reports as well as insist on an annual report on LRSC’s activities and actions.

3. What to do as a Local Road Safety Council?

The following steps provide basic guidance for an LRSC. However, these guidelines may be adapted to your local circumstances and the needs of your city.

Develop an urban database to analyse and understand the problem

Planning road safety actions should be based on reliable data in order to being able to fully judge the situation. The LRSC of your city may conduct (via academic or other relevant institutions) basic road safety assessments concerning:

- assessing capacity and integrity of the key institutions
- identifying road safety performance indicators (e.g. percentage wearing seat belts front and back seat, road crossing incidents)
- collecting and updating road safety statistics
- measuring and raising awareness of road users regarding road safety aspects

When conducting surveys and analysis, consult and coordinate actions with traffic police, transport companies and other relevant stakeholders.

The results of the surveys should be systematically stored in an integrated, digital, local road safety database. The database should be widely accessible so that all stakeholder organisations as well as citizens can obtain the information. Data about road crashes should always be geo-referenced to easily identify road accident hot spots (e.g. including GPS coordinates).

Often, traffic police or other agencies collect accident data but might be reluctant to allow public access to their databases. A wide accessibility can also contribute to better and more exact road safety data.

► Develop an integrated road safety programme

The LRSC usually prepares a road safety action plan to which multiple stakeholders contribute. In order to keep it updated and strategically aligned, an evaluation and update every two to five years is recommended. A national road safety strategy may provide further guidance or set relevant standards that should be taken into account at local level. During the elaboration of the road safety programme, take into account the current road safety situation and the actual problems that need to be addressed in your city. The planned activities should have clearly specified annual targets that state improvements in relation to the current status.

► Change attitudes and behaviour by raising people’s awareness

Road safety is an important topic and every citizen can contribute to a safer road environment. Publicity campaigns can inform people about the most common risks and misbehaviours on the streets such as driving under influence, speeding, disobeying traffic rules or not wearing seatbelts. Eventually, the aim is that people question the attitude of themselves as well as of others and gradually start to change and demand change. Means of raising awareness include various public communication tools, such as:

- Media coverage
- Road side information panels
- Educational measures (e.g. traffic school for children, driver education courses)
- Information leaflets and posters

However, you have to be aware of the fact that there is a debate about the effectiveness of these actions. It has been proven to be most effective if the actions are paired with legislative changes and administrative enforcement. In order to quantify the success of your awareness-raising measures better, you could also think of regular surveys that would capture how they are perceived by the citizens (e.g. as a part of general traffic safety surveys).

► Plan, build and improve infrastructure

It is crucial that road safety is an elemental concern while planning new roads. An independent safety specialists can help to evaluate all new road proposals in regard of their safety standards. However, you as a mayor, the LRSC as well as other municipal bodies such as the
local road authority can also increase the safety of already existing infrastructure. Comprehensive road safety inspections of existing roads should be implemented periodically (e.g. every 5 years). Blackspots and hazardous locations should be identified every year.

Implementing safe infrastructure includes traffic signs, road marking and delineation as well as the improvement of road surfaces. Changing infrastructure in order to increase road safety can also be the first element in a Sustainable Urban Mobility Plan (SUMP) which addresses more strategic topics such as reducing traffic, improve public transport systems and encourage walking and biking. Eventually your city becomes more liveable and road safety is high.

Factors for successful publicity campaigns:
- Link awareness-raising measures to specific problems
- Address specific target groups
- Clearly define the objective
- Evaluate the impact of the measure

Establish sustainable funding to enable the implementation of safety programmes
Road safety funding has to be sustainable and independent of a changing political environment. Your annual road safety plan should include a list of proposed interventions and estimated funding needed for their implementation. For that, measures can be classified into different parts (see box). Besides using funds derived from the current city budget, consider raising additional capital from traffic fines or external sources of funds and technical assistance such as donor support or loans from development banks.

Implement speed management
The key safety problem for vulnerable road users is motorists that are driving at an excessive speed and the absence of safe and effective walking and cycling facilities (separated road space, safe crossings etc).
The local authority is responsible for speed management within the city, on the local arterial roads and streets. It is particularly important to reduce speed to under 50 km/h on urban roads and to even lower levels (e.g. 30 km/h or 20 km/h) in areas where large numbers of pedestrians can be expected. “Safe Routes to School” are a very popular scheme where the roads around a school are made safer for children or in designated residential areas where children may be playing on or close to roads. Implementation of traffic-calming objects (small green spaces straight linearity of roads, bumpers etc.) to reduce speeds is another crucial and easy-to-integrate process for a long-term road safety improvement.

Emergency response: Reducing road fatalities cannot be achieved only by improving road conditions; a well-developed rescue system is also needed. If injured people are provided with a fast medical treatment, the number of fatalities can be substantially reduced. Therefore, the development of a coherent emergency response system in your city is an important step towards more road safety.

One part of the funds should be related to regular activities and capacity building of key stakeholders such as schools, traffic police, local government, driving schools, traffic inspectors, improvement of infrastructure safety, improvement of traffic law enforcement, research and surveys.
The second part of the funds is related to the actual interventions and must be estimated for all activities in the action plan and then added to the road safety budget.

4. Where to learn from?
When undertaking activities aimed at achieving a real improvement, it is always beneficial to have a look at other cities and countries which already have developed road safety measures and strategies. Indeed, to ensure a satisfying implementation of your projects, it is crucial that you translate those best practice examples into your respective regional context.

- Vision Zero: In Sweden, the philosophy is that no fatal or serious injuries need occur on any roads providing that the vehicle, driver and infrastructure adhere to standards which are currently achievable. This includes user-, vehicle-, infrastructure- and organisational-related measures as well as a well-functioning rescue service.
- Vision Zero Action Plan: New York City made a commitment to decisively confront traffic fatalities and injuries on its streets. The fundamental message of Vision Zero is that death and injury on city
streets is not acceptable and that serious crashes will no longer be regard as inevitable. Vision Zero focuses on these key points:

- There is no acceptable level of death and injury on the streets of NYC.
- Traffic deaths and injuries are not accidents but crashes that can be prevented
- The public should expect safe behaviour on the streets of NYC and participate in a culture change

The programme should involve as many stakeholders in the field of road safety as possible. The City of London (Canada) developed a comprehensive Road Safety Strategy 2014-2019 with the goal to implement programs that will bring a 10% reduction in fatal and injury collisions by 2019.

• DEKRA Vision Zero – Interactive Map: The interactive map shows that the Vision Zero target can be reached. The map shows towns and cities with over 50,000 inhabitants in selected European countries, the USA and Japan that reported no deaths caused by road accidents in built-up (urban) areas in at least a single year in the period from 2009 to 2013. Additionally, DEKRA published the Road Safety Report 2015 where many examples of best practices are presented.

• Funding: In Serbia municipalities receive 30% of the traffic fines collected in their jurisdiction and the funds are used to develop and implement community road safety plans (currently, over 160 local community road safety plans are being implemented in Serbia).

• In Germany road safety has been improved in a holistic approach for more than 40 years now. Infrastructure-related measures like zebra crossings and speed reduction to 30 km/h in residential areas have been implemented. Making user-related measures like the usage of seat belts and child seats mandatory. Rescue services like emergency helicopters and emergency telephones contribute to a steady and substantial decrease in road accident-related fatalities and injuries. Since the 1970s, when the vast majority of road safety measures were implemented, traffic fatalities dropped by almost 80% and injuries went down by 45%. All that with the total vehicle fleet increasing by almost 300%, from 16.8 million to 50.1 million.