

## Preparation of a Road Safety Strategy for the City of Addis Ababa

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### Abstract

*Many low and middle-income countries do not have strong crash and injury data systems. The experience of Addis Ababa is that the available data can be used, and augmented, to identify critical road traffic crash patterns and support good practice road safety management. The preparation of a road safety strategy in the city highlights the need to ensure high quality analysis of safety issues is integrated with straightforward participatory processes, and the importance of institutional arrangements to ensure plans are able to be followed through and resources effectively allocated to the issues that matter most. This paper reports on a critical diagnosis of road safety issues in a major African city, and the preparation of a good practice road safety strategy.*

### Background

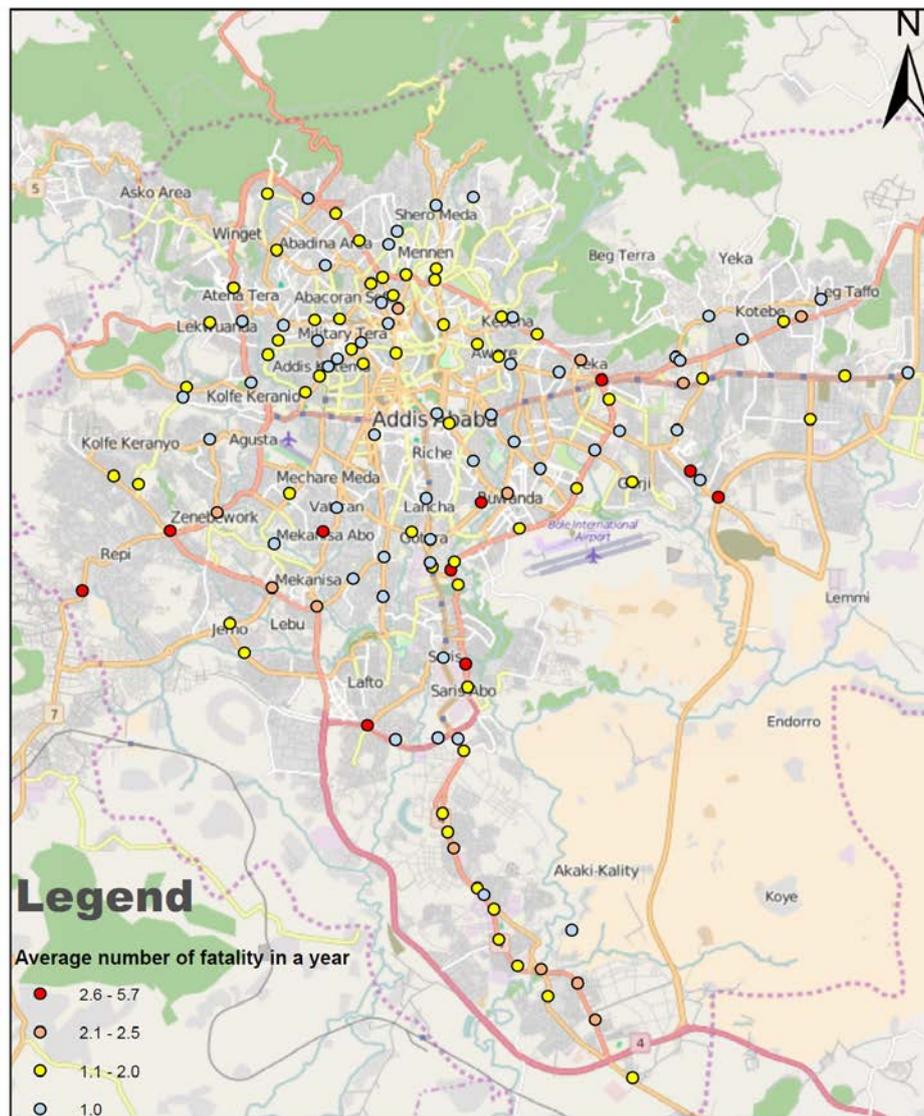
The Addis Ababa Police Commission reports that an average 391 people lost their life each year on Addis Ababa streets in the three years to 2014/15. However, the World Health Organization (WHO) estimates that the actual number of road traffic related fatalities in Ethiopia could be as much as six times the reported fatality figure.

Although the city's crash data is widely regarded as incomplete, a study of three years of the Police crash reports that were available identified where and when crashes were occurring, the road characteristics and vehicles types involved, the vehicle maneuvers being undertaken and the victims. The findings are summarised in Table 1 below, in terms of the available crash evidence, and the implications for future improvement. Figure 1 locates frequent fatal crash sites.

**Table 1: Available evidence and their implication**

Evidence	Implication
<p><i>Most affected road user</i></p> <ul style="list-style-type: none"> <li>Pedestrian (86% of victims)</li> </ul>	<ul style="list-style-type: none"> <li>Addis Ababa is a pedestrian city</li> <li>Lack of attention to pedestrians</li> </ul>
<p><i>Road related characteristics of crashes</i></p> <ul style="list-style-type: none"> <li>Major undivided two-way roads</li> <li>At-mid block (73%)</li> <li>Good pavement condition (84%)</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrians in conflict with high speed vehicular traffic</li> <li>Unsegregated vehicular and pedestrian traffic</li> </ul>
<p><i>Vehicle maneuver before crash</i></p> <ul style="list-style-type: none"> <li>Most vehicles are moving straight ahead or overtaking another vehicle (67%)</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian in conflict with high speed vehicular traffic at-mid block locations</li> </ul>
<p><i>Time and days of fatal crash</i></p> <ul style="list-style-type: none"> <li>Most fatal crashes happen during afternoon and night times (12 p.m. to 5 a.m.), and peak late at night (12 a.m. to 5 a.m.).</li> </ul>	<ul style="list-style-type: none"> <li>Impaired pedestrians in conflict with vehicles driven by impaired drivers.</li> <li>Higher traffic speed during night times and on weekends as density of traffic is lower</li> <li>Lack of lighting at crossings during night time</li> </ul>
<p><i>Vehicle type</i></p> <ul style="list-style-type: none"> <li>More than half of fatal crashes involve light vehicles</li> <li>59 % of fatalities involve commercial goods and passenger transport vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrians in conflict with high speed vehicular traffic</li> <li>Long hour driving, sleep deprivation and infrequent work times</li> </ul>

**Figure 1: Frequent fatal crash sites in Addis Ababa**



The City of Addis Ababa successfully applied to join nine other cities around the world in the Bloomberg Initiative on Global Road Safety (BIGRS). This facilitated a number of support projects, funded by BIGRS, and delivered in partnership with the city's Transport Programs Management Office.

The Africa Transport Policy Program (SSATP) established road safety as one of three pillars of its Third Development Plan 2015-18. Road safety management capacity and the need for policy and strategy development was identified as a need at a city level, as well as at a country level. In support of learning for all its Member Countries, SSATP work with the City of Addis Ababa to develop a road safety strategy, developing a framework for the city's work with BIGRS and future activity.

## Method

A simple strategy development process was followed:

1. Bilateral engagement with and enrolment of major stakeholders
2. Rapid knowledge transfer on critical issues for road safety in Africa
3. Analysis of available data, and assessment of current road safety management capacity
4. Multilateral engagement to identify:

- a. an overall vision, and quantitative targets
  - b. critical road safety issues in the city
  - c. strategic directions to provide lasting road safety improvements
  - d. major implementation initiatives directly linked to the vision and critical issues
  - e. institutional road safety management arrangements for implementing the strategy, including governance, monitoring and evaluation and funding
5. Preparation, stakeholder review, and revision of a draft strategy document
  6. Validation and publication of a final strategy endorsed by political leadership.

## Results

The resulting *Addis Ababa Road Safety Strategy* approved by the City Cabinet was launched in March, 2017. It envisions Addis Ababa city free from road trauma by 2030, and sets two targets: to halve the number of deaths and severe injuries from road traffic crashes by 2023; provide access to safe, affordable, accessible and sustainable transport systems for all by 2030.

The strategy establishes seven strategic directions:

1. Developing a road safety management system,
2. Focusing on main roads, where trauma is most concentrated
3. Prioritizing pedestrians first, second and third
4. Enforcing key safety laws, supported by awareness creation
5. Improving crash and injury data management
6. Improving post-crash trauma response
7. Demonstrating and scaling up investment.

The 2017-2030 strategy is straightforward, adopts safe system principles, and is well aligned with the UN Sustainable Development Goals. It nominated the Addis Ababa Road Traffic Management Agency as the lead agency for the strategy and established an Addis Ababa Road Safety Council, chaired by the Deputy Mayor.

A three-year implementation plan was prepared, based on the seven directions, and the first implementation report is promising, including improvement of 11 locations with more than three fatalities, installation of speed humps at 47 crash locations, and improvement of night visibility by installing new street lights and maintaining existing ones.

Reported fatalities in the first six months decreased by 7% in the city compared with the previous year, and with a 19% increase nationwide.

## Conclusions

Good practice road safety strategies can be effectively developed in African cities by: undertaking critical analysis of available data; using expert inputs in straightforward participatory processes; and developing ongoing management and implementation arrangements. The stronger the institutional capacity and arrangements, the more likely a strategy setting exercise can provide a genuine platform for tackling road safety at a city level.

## References

City of Addis Ababa (2017) *Addis Ababa Road Safety Strategy*, Ethiopia.

Jiregna Hirpa (2016). *Fatal Injury Crash Data Analysis and Directions to Reverse the Growing Rate of Road Traffic Related Fatality in Addis Ababa*, EACE JOURNAL, Vol.8-No 7.