





## MEET THE WRITERS

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As a young teacher and road safety advocate myself, I know the danger children and adolescents run on their way to get an education and have a better future. I hope this policy brief provides a clear picture of the problems we confront in making cities safer and schools more accessible for these students. The first step is a real partnership between youth, their families, schools, civil society organizations and governments. We must work together and take decisive action to save lives right now!"

Working with young people to tackle road safety in Kenya, I see first hand every day the scale of the problem and the power that youth have to solve it. I believe all humans deserve a fair and just environment that allows and enables them to explore, and develop their innate potential - this must include safe journeys to school for all children and young people. We hope that leaders at every level will stop blaming us and start working with us, and with children and youth worldwide, to make safe access to quality education for all a reality."



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### OVERVIEW

Education plays a central role in shaping future chances for children and youth and their ability to reach their full potential. Every child's right to education is recognised in the UN Convention on The Rights of the Child.¹ Equitable and inclusive access to education and lifelong learning opportunities also sits at the heart of the Sustainable Development Goals (SDGs) and their mission to leave no one behind.

SDG 4 further enshrines these rights, calling for:

- · free and equal access to primary and secondary education;
- equal access to affordable technical and vocational or tertiary education, including university;
- access to education for vulnerable groups such as indigenous peoples or those living with disabilities.<sup>2</sup>

The New Urban Agenda (NUA), agreed upon at the Habitat III conference in 2016, also highlights equal access to education and employment for youth as a path to sustainable, equitable development, including meaningful youth participation with safe and healthy journeys to school for every child listed as a priority.<sup>3</sup>

Despite the global mandate and human rights framework calling for equal access to education, many children and young people still miss out on this fundamental right. In 2018 an estimated 258 million children and youth, more than one in five, were out of education.<sup>4</sup> Furthermore, a 2020 analysis by the International Labour Organization (ILO) and The Swedish International Development Cooperation Agency (SIDA) estimated that 22.4% of 15 to 24-year-olds are not in education, training or employment globally.<sup>5</sup>

This prevents millions of children and youth from reaching their full potential. Lack of education perpetuates cycles of poverty and structural inequalities by further limiting access to opportunities and socio-economic participation. UNESCO analysis found that an estimated 60 million people could escape poverty with two more years of schooling. <sup>6</sup>

<sup>1</sup> https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child

<sup>2</sup> https://sdgs.un.org/goals/goal4

<sup>3</sup> https://unhabitat.org/sites/default/files/2019/05/nua-english.pdf

<sup>4</sup> http://uis.unesco.org/en/topic/out-school-children-and-youth

<sup>5</sup> https://sustainabledevelopment.un.org/content/documents/26634NEET\_Sida\_brief.pdf

The COVID-19 pandemic has caused a massive setback for child rights and access to education, wiping out 20 years of progress. 790% of children globally have had their education disrupted by the pandemic and the immediate shift to remote learning disproportionately impacted those children with lack of access and resources for digital learning. Many children and youth did not return to education following this period of disruption, with more marginalised and vulnerable groups facing greater barriers to continued learning.

There are many other factors that prevent children and youth accessing education including gender; poverty; disabilities; child labour or early marriage; conflict; malnutrition, and more. To ensure all children and young people are able to access quality education, these issues must be addressed.

What also must be considered is how children and youth access education, and the necessity that the physical school environment guarantees safety, security and inclusive access to education for all children and youth. SDG 4 recognises this need, calling for educational facilities to be child, gender and disability responsive, to create safe and inclusive learning environments. We argue that a safe way to and from school, by delivering safe and sustainable mobility, is a major factor in achieving this goal.

Many of the children who are victims of road traffic injury are poor. Attempts to address road safety for children are, therefore, inextricably linked to notions of social justice and should be part of global efforts to reduce poverty. For countries in a phase of rapid motorization – many of them middle-income countries – roads are often built without due consideration for the communities they pass through. Historically, this was also the case in high-income countries. A shift in mindset is desperately needed to ensure that roads everywhere serve the needs of and are safe for all who use them, including children, but also other vulnerable groups such as pedestrians, cyclists and Motorcyclists. 12

Such a change is crucial to save lives, but also to support healthy lifestyles more broadly. It is vital for creating sustainable cities and communities, and ensuring good health and wellbeing for all.<sup>13</sup>

The Global Youth Coalition for Road Safety performed a review of evidence and is calling on decision-makers to commit to simple changes.

<sup>7</sup> https://sdgs.un.org/goals/goal4

<sup>8</sup> https://www.hrw.org/news/2021/05/17/pandemics-dire-global-impact-education#

<sup>9</sup> https://www.hrw.org/news/2021/05/17/pandemics-dire-global-impact-education#

<sup>10</sup> https://www.globalcitizen.org/en/content/10-barriers-to-education-around-the-world-2/

<sup>11</sup> https://sdgs.un.org/goals/goal4

<sup>12</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

<sup>13</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

## KEY DÁJA



#### **\$ 60** MILLION

people could escape poverty with two more years of schooling



children and youth are killed every day due to road traffic crashes



children miss out on school due to road traffic injury every year



children, 258 million children and youth globally, are out of education



children and youth under 20 are injured by road traffic crashes



Road traffic injury costs almost every country up to 3% of its GDP



Road traffic fatalities and injuries linked to the journey to and from education, with many crashes happening less than 500 metres from school

## #1 KILLER OF CHILDREN AND YOUTH ROAD TRAFFIC INJURY

Globally, road traffic injury is the leading cause of death for those aged 5 to 2914, with close to 1000 young people dying every day on the world's roads. 15 10.5 million children and young people under 20 are injured by road traffic crashes each year, with almost 7 million living with road traffic injury at some point in their lifetime.<sup>16</sup>

An estimated 1.3 million people worldwide die every year from road traffic crashes. Over 90% of fatalities occur in low-and-middle-income countries (LMICs), and more than half of these deaths are vulnerable road users such as pedestrians, cyclists and motorcyclists. 17

In 2019, unintentional injury is the leading cause of death and disability for adolescents and 115.000 adolescents died in road traffic crashes. 18 Road traffic

<sup>14</sup> World Health Organization. Road traffic injuries [Internet]. World Health Organization. 2020. Available from: https://www. who.int/news-room/fact-sheets/detail/road-traffic-injuries

<sup>15</sup> Global Health Estimates 2015: Deaths by Cause, Age, Sex, by Country and by Region 2000-2015. Geneva, World Health Organization; 2016.

<sup>16</sup> Clarke, R. (2020) Lost futures: The global burden of injuries on children, Background paper ahead of 3rd Road Safety Ministerial, FIA Foundation

<sup>17</sup> https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

<sup>18</sup> https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions

crashes cause an estimated injury or disability in 10.5 million children and youth under 20 years old, every year. <sup>19</sup> An estimated two million children miss out on school every year due to road traffic injury or fatality. <sup>20</sup> Injuries and disabilities directly related to road traffic injury prevent children and youth accessing education and limit their return to schooling.

## CHILDREN AND YOUTH AT RISK ACCESSING EDUCATION

Evidence suggests that for many young people road traffic injury and fatalities are linked to the journey to and from school. A 2017 study of crashes involving children and adolescents in Mexico City revealed that **up to 74% of crashes occurred less than 200 metres from schools.** As the statistics show, the journey to school is also likely to be where many children and youth are forced to navigate streets that do not protect them.

Many children and youth are vulnerable to injury on their way to school without adequate protection from safe infrastructure, legislation, policies, or safety items such as quality helmets for children travelling by bike or motorcycle, and quality car seats and seat belts for children who travel by car or bus. The journey to school epitomises early independence for children and youth, and is likely to be the first journey undertaken independently of caregivers. A study in Southern Ghana revealed that children as young as four were making their way to school alone. <sup>22</sup>

In 2016, an estimated 76,000 children and youth under 20 were killed as pedestrians.<sup>23</sup> The majority of children and adolescents in LMICs tend to walk to school<sup>24 25</sup> and many children experience road traffic injuries as pedestrians on this journey. The Transportation Research Board estimates that in the U.S. 100 children are killed and 25,000 injured walking to or from school.<sup>26</sup> In Chile, 90% of child pedestrian fatalities

<sup>19</sup> Clarke, R. (2020) Lost futures: The global burden of injuries on children, Background paper ahead of 3rd Road Safety Ministerial, FIA Foundation

<sup>20</sup> https://www.childhealthinitiative.org/media/367850/every-journey-spreads-lr.pdf

<sup>21</sup> Unidad de Geotecnología en Infraestructura y Sustentabilidad - Universidad Nacional Autónoma de México. Cuantificación de atropellamientos en zonas de escuelas de nivel preescolar y primaria, Ciudad de México. 2017.

<sup>22</sup> https://www.fiafoundation.org/media/391038/rights-of-way-spreads.pdf

<sup>23</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directionsInjury Prevention 2021;27:77-84.

<sup>24</sup> Instituto Nacional de Estadística y Geografía. Movilidad cotidiana: Movilidad escolar. Principales resultados de la Encuesta Intercensal 2015. 2016.

<sup>25</sup> Fundación Gonzalo Rodríguez. El traslado de los niños a la escuela y la seguridad de los entornos escolares; 2018.

<sup>26</sup> https://www.cbsnews.com/news/school-zones-dangerous-for-kids/

occurred within 500m of an educational establishment, with 70% of these within 250 metres.<sup>27</sup>

The reasons children and youth are particularly vulnerable to injury as pedestrians is often they do not have crosswalks or separated sidewalks to protect them from road traffic. The roads they share with vehicles often have high speed limits, or little enforcement making the route to school especially treacherous. Of the 54 countries assessed by the International Road Assessment Programme (IRAP), 88% of pedestrian travel in those countries is considered infrastructurally unsafe or very unsafe because of these factors.<sup>28</sup>

Children and adolescents are especially vulnerable to these road conditions at different stages of their development. Pounger children are limited by their physical, cognitive and social development. Due to their small frames, it is harder for children to see past vehicles, and to be seen by drivers. Poung children lack adequate risk perception and have difficulty judging speed and proximity of vehicles. Children are more susceptible to serious head injury than adults due to their softer heads. As children enter adolescence, they are more likely to take risks on the roads. More boys than girls are injured as pedestrians, and this is likely to be linked to more risk taking behaviour and gender stereotypes related to masculinity.

## High vehicle speeds increase the risk and the severity of a road traffic crash. $^{36}$ Pedestrian fatality risk is 10% at 37 km/h but 50% at 59 k/hm and 90% at 80 km/h. $^{37}$

A recent U.S. study revealed how school zones are not as safe as they should be: only around four out of ten areas around schools have speed restrictions of 30 (km/h) or less, and three out of ten crossings lack designated crosswalks.<sup>38</sup>

Where children are not walking to school, they are often still using modes of transport that puts them at risk. In South East Asia for example, a World Health Organization study in 2014 found 70% of all registered vehicles are motorcycles and the most

<sup>27</sup> CONASET Análisis espacial de puntos críticos de atropellos de niños en zonas de Establecimientos Educacionales, Santiago, Chile. – translated.

<sup>28</sup> International Road Assessment Safety Program. 3 Star or Better [Internet]. Available from: https://irap.org/3-star-or-better/

 $<sup>29 \</sup>quad https://www.who.int/roadsafety/week/2015/Ten_Strategies_For_Keeping\_Children_Safe\_on\_the\_Road.pdf$ 

<sup>30</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

<sup>31</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directionsInjury Prevention 2021;27:77-84.

<sup>32</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

<sup>33</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

<sup>34</sup> https://www.who.int/roadsafety/week/2015/Ten\_Strategies\_For\_Keeping\_Children\_Safe\_on\_the\_Road.pdf

<sup>35</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directions/njury Prevention 2021;27:77-84.

<sup>36</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directions/njury Prevention 2021;27:77-84.

<sup>37</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directions/njury Prevention 2021;27:77-84.

<sup>38</sup> MacKay JM, Steel A, Wilson A, Rosenthal K, Green A. Alarming Dangers in School Zones. Washington, D.C: Safe Kids Worldwide, October 2016.

common mode of transport related to child road traffic injuries<sup>39</sup> in the region. In India and Thailand 96% of children injured riding motorcycle were not wearing a helmet.<sup>40</sup> In Bangkok, 7 out of 10 children did not wear helmets on their journey to school, if travelling by motorcycle.<sup>41</sup>

## POVERTY, ROAD SAFÉTY, AND EDUCATION: A VICIOUS CYCLE

Road safety, education and poverty are undoubtedly interlinked, causing a vicious cycle that prevents achieving multiple SDGs.<sup>42</sup> Over 90% of road traffic fatalities are in LMICs, with over 50% of those deaths being vulnerable road users such as pedestrians, cyclists or motorcyclists.<sup>43</sup> **Road traffic injury costs almost every country up to 3% of its GDP.<sup>44</sup>** This compounds inequalities experienced between and within countries.

Education is a route out of poverty and a development priority, yet provision and access to quality education for the poorest communities are still insufficient and insecure. Lack of investment in the infrastructure and services in the poorest areas, whether formal or informal settlements, holds children, youth and whole communities back from health, opportunity and equal social participation, further perpetuating poverty and related inequalities.<sup>45</sup>

With little investment in infrastructure and safe school zones, children and youth are often forced to walk long distances to reach their schools, using roads that are not safe for them. Home to school distance has an impact on enrollment rates in education, often combining with other social and economic factors to prevent enrollment or lead to students dropping out.<sup>46</sup>

Rural and poor communities are most affected by low enrolment rates in primary education.<sup>47</sup> Students across Sub-Saharan Africa are on average more than 2

<sup>39</sup> World Health Organisation, Motorcycle-related injuries in children (2014)

<sup>40</sup> World Health Organisation, Motorcycle-related injuries in children (2014)

<sup>41</sup> World Health Organisation, Motorcycle-related injuries in children (2014)

<sup>42</sup> https://www.fiafoundation.org/connect/publications/rights-of-way

<sup>43</sup> https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

<sup>44</sup> https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

 $<sup>45 \</sup>quad https://www.hrw.org/report/2021/05/17/years-dont-wait-them/increased-inequalities-childrens-right-education-due-covid\#$ 

<sup>46</sup> Majgaard, Kirsten and Alain Mingat. 2012. Education in Sub-Saharan Africa: A Comparative Analysis. Washington, D.C.: World Bank. DOI: 10.1596/978-0-8213-8889-1. License: Creative Commons Attribution CC BY 3.0

<sup>47</sup> Majgaard, Kirsten and Alain Mingat. 2012. Education in Sub-Saharan Africa: A Comparative Analysis. Washington, D.C.: World Bank. DOI: 10.1596/978-0-8213-8889-1. License: Creative Commons Attribution CC BY 3.0

kilometres from education.  $^{48}$  Enrolment rates drop to  $^{41}$ % where children have more than 5 kilometres to walk to school.  $^{49}$  These long journeys to schools as pedestrians put children and youth at risk - both from road traffic injury, but also from violence and harassment, jeopardising their access to learning and the development of their skills and capabilities.

Road traffic injury and unsafe road environments directly and indirectly impact children in the poorest areas and their access to education. This is the case in high income and low-middle-income countries. In London, UK, the pedestrian injury rate for children from the most deprived areas is higher than that of those from the least deprived areas. So Studies in South Africa have shown it is poorer economic groups who have the highest rates of injury. This is due to a number of factors; poorer areas tend to be closer to major roads; these areas see little investment in road safety; and often poorer communities tend to walk or cycle, meaning they are more exposed to the risk of unsafe road conditions.

In addition to being high-risk of injury as vulnerable road users in these environments, they are at risk of being further plunged into poverty if a family member is involved in a road traffic crash.<sup>53</sup> High healthcare costs have a huge financial impact on families. Children may be forced to work or care for an injured family member instead of attending school, or may cease education because families can no longer afford the costs of education.<sup>54</sup>

Children and youth from the poorest communities (and their families) are facing greater risk and greater barriers to access to quality education: the one thing that could break the cycle of poverty. Lack of investment in road safety and education provision in the poorest areas reinforces socio-economic inequalities and holds back progress across the SDGs.

<sup>48</sup> Majgaard, Kirsten and Alain Mingat. 2012. Education in Sub-Saharan Africa: A Comparative Analysis. Washington, D.C.: World Bank. DOI: 10.1596/978-0-8213-8889-1. License: Creative Commons Attribution CC BY 3.0

<sup>49</sup> Majgaard, Kirsten and Alain Mingat. 2012. Education in Sub-Saharan Africa: A Comparative Analysis. Washington, D.C.: World Bank. DOI: 10.1596/978-0-8213-8889-1. License: Creative Commons Attribution CC BY 3.0

<sup>50</sup> Edwards, P., Green, J., Roberts, I., Grundy, C., and Lachowycz, K. (2006) Deprivation and road safety in London. A report to the London Road Safety Unit. London: LSHTM

 $<sup>51 \</sup>quad https://www.fiafoundation.org/media/391038/rights-of-way-spreads.pdf$ 

<sup>52</sup> https://www.grsproadsafety.org/wp-content/uploads/New-Fact-Poverty-PDF.pdf

<sup>53</sup> https://www.fiafoundation.org/media/391038/rights-of-way-spreads.pdf

<sup>54</sup> https://www.fiafoundation.org/media/391038/rights-of-way-spreads.pdf

# UNSAFE SCHOOL JOURNEYS DISPROPORTIONATELY IMPACT THE MOST MARGINALISED

The struggle to access education, and navigate long journeys in treacherous environments disproportionately impacts marginalised groups, such as children and youth living with disabilities, and young women and girls.

Beyond the direct relationship between road traffic injury and education, unsafe road conditions and inaccessible school environments hamper the access of children and youth living with disabilities more broadly. An estimated 32 million children with disabilities are out of school each year.<sup>55</sup>

There are many reasons why children with disabilities are excluded from accessing their right to education. Discrimination, poverty, lack of funding and resources to accommodate specific needs are major barriers.<sup>56</sup>

Children and youth living with mobility-related disabilities are less likely to be able to access education due to long journeys without sidewalks, lack of suitable and affordable public transport and inaccessible school environments that prevent their educational attainment.<sup>57</sup> Without safe, inclusive and accessible infrastructure to ensure education for all, children and young people living with disabilities face major challenges developing the relevant skills for future employment.

A 2014 study in Zambia revealed that children living with disability are three times more likely to drop out of education than their non-disabled peers. The same study explored barriers of people living with mobility limitations revealing that children and youth faced significant struggles to access services and education due to uneven and undesignated gravel paths along roads and around institutions. 59

Paved footpaths are not standard construction in Zambia, adding to road traffic injury risk for vulnerable road users and inaccessibility for child and youth living with mobility limitations. Of youth enrolled in university education, only 3% of them were living with disabilities including mobility limitations, and unemployment was

<sup>55</sup> https://www.hi-us.org/inclusive\_education

<sup>56</sup> https://www.hi-us.org/inclusive\_education

<sup>57</sup> Inclusive Education For Children With Disabilities

<sup>58</sup> Banda-Chalwe M, Nitz JC, de Jonge D. Impact of inaccessible spaces on community participation of people with mobility limitations in Zambia. Afr J Disabil. 2014;3(1):33. Published 2014 Oct 14. doi:10.4102/ajod.v3i1.33

<sup>59</sup> and a-Chalwe M, Nitz JC, de Jonge D. Impact of inaccessible spaces on community participation of people with mobility limitations in Zambia. Afr J Disabil. 2014;3(1):33. Published 2014 Oct 14. doi:10.4102/ajod.v3i1.33

significantly higher than amongst people living with disabilities compared those living without, 54.5% to 42.0% respectively.<sup>60</sup>

Young women and girls are also further marginalised in their struggles to access education and to receive learning that is free from gender-stereotyping. While primary education shows an almost equal enrolment between girls and boys the gap widens at secondary level education with only 24% of countries worldwide reaching gender parity for upper secondary education.<sup>61</sup>

There are many converging factors that contribute to young women and girls' falling participation in education as they get older, including child marriage, poverty, pressure to stay at home to care for family members, and gender based violence. <sup>62</sup> Lack of safe and secure journeys to school reinforce particular barriers experienced by women and young girls in trying access to education.

Access to education is a crucial gateway for girls to escape poverty, access future opportunities and reach their full potential.<sup>63</sup> Yet lack of road safety and personal security is a major contributor to missing out on education. A 2012 UN Women study of women in Kigali found that 42% are concerned about accessing education for fear of violence or harassment, increasing to 55% after dark.<sup>64</sup>

A 2019 study of mobility patterns of adolescent girls in 3 districts of Delhi highlighted poor road conditions, such as lack of access to footpaths. This meant that many girls skipped school during inclement weather. Lack of safe footpaths, and lack of public transit points within walking distance intersect with feelings of vulnerability to unwanted attention, with street harassment cited as a major reason to abandon education in one of the surveyed locations. 66

<sup>60</sup> Banda-Chalwe M, Nitz JC, de Jonge D. Impact of inaccessible spaces on community participation of people with mobility limitations in Zambia. Afr J Disabil. 2014;3(1):33. Published 2014 Oct 14. doi:10.4102/ajod.v3i1.33

<sup>61</sup> https://www.unicef.org/education/girls-education

<sup>62</sup> https://www.unicef.org/education/girls-education

<sup>63</sup> https://www.un.org/sustainabledevelopment/blog/2017/06/millions-could-escape-poverty-by-finishing-secondary-education-says-un-cultural-agency/

<sup>64</sup> https://stopstreetharassment.org/resources/statistics/statistics-academic-studies/

<sup>65</sup> safetipin-safe-mobility.pdf (fiafoundation.org)

<sup>66</sup> safetipin-safe-mobility.pdf (fiafoundation.org)

## HUMAN ERROR IS INEVITABLE, BUT SERIOUS ROAD TRAFFIC INJURY IS NOT

Human error is inevitable, especially for children and adolescents who are still developing physically and cognitively. Road crashes will happen, but deaths and serious injury due to road traffic injury are an avoidable outcome with the right systems in place.

The Safe System approach to road safety accepts this reality, meaning children, youth and all road users do not have to pay an unacceptably high price for their mobility. Through a system of safe infrastructure, safe speeds, safe vehicles, safe road users and post crash care it is possible to mitigate human error.<sup>67</sup>

However, road traffic crashes are often seen as an issue of personal responsibility or bad luck rather than a tragedy that is entirely preventable with the right systems in place. Governments are responsible for implementing transport systems that work for all, yet framing road traffic crashes as 'accidents' makes it too easy to shirk responsibility.

## For too long young people have been disproportionately impacted by unsafe roads and the limits these environments place on their independent mobility.<sup>68</sup>

And yet, children and youth are often further marginalised by being blamed for the injuries and fatalities they endure. As a result, they are targeted with road safety education. Road safety is the responsibility of all road users, yet children and adolescents are still developing and prone to error of judgement.<sup>69</sup>

Road safety education alone is not enough to save lives if the rest of the system does not protect children and youth. Targeting youth in this way perpetuates a victim blaming culture of individual responsibility when in reality it is governments that need to address systemic issues putting lives at risk.

To protect children and youth, the Safe System approach should be focused on educational institutions to save lives and remove infrastructural barriers that prevent many from accessing education. Such focus on school zones can have a ripple effect for whole communities, making the urban environment safer, inclusive and more accessible for all.

<sup>67</sup> https://www.transportation.gov/NRSS/SafeSystem

<sup>68</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directions/njury Prevention 2021;27:77-84.

<sup>69</sup> Cloutier M, Beaulieu E, Fridman L, et alState-of-the-art review: preventing child and youth pedestrian motor vehicle collisions: critical issues and future directions in prevention 2021;27:77-84.

## SOLUTIONS ALREADY EXIST TO SUPPORT SAFE JOURNEYS TO EDUCATION

This means, first and foremost implementing low-speed streets of 30 km/h or less in the school neighbourhood to dramatically reduce the risk to children and youth. These zones should encompass a 500-1000m radius around the school area<sup>70</sup>, potentially further. Besides reducing noise and air pollution, this is a viable countermeasure to children's crash risk in the vicinity of schools.<sup>71 72</sup> **Reducing speeds saves lives**: for every 1 km/h less in mean speed, fatal/injury crashes reduce by about 4%.<sup>73</sup>

School areas should also have safe infrastructure that allows children and youth of all abilities to walk and cycle safely. Proven interventions governments can invest in include traffic calming measures such as rumble strips, speed bumps, narrowed roads, assigned on-and-off bus stops, footpaths and cycle paths separated from motorised traffic, raised crosswalks, visible signage and street lights. The safe infrastructure design should be developed using Universal Design Principles to ensure the accessibility and safety needs of a diverse range of abilities, disabilities and characteristics are incorporated.

Schools could also consider implementing "School Streets' during pick up and drop off times that closes the school environment to cars; this reduces risk of road traffic injury, but also improves air quality and provides safer roads for active travel such as walking and cycling.<sup>77</sup>

There are existing tools to assess school environments and make them safer with low-cost interventions. For example, road safety NGO Amend, pioneered the School Area Road Safety Assessments and Improvements (SARSAI) methodology to ensure children can access education safely. This means making tailored infrastructure

<sup>70</sup> World Resources Institute, Global Road Safety Facility. Low speed zone guide, 39-40. 2021. doi.org/10.46830/wrigb.18.00063

<sup>71</sup> Tay R. Speed compliance in school and playground zones. ITE Journal, 79(3), 36; 2009

<sup>72</sup> Zhao X., Li J., Ding H., Zhang G. & Rong J. A generic approach for examining the effectiveness of traffic control devices in school zones. Accident Analysis & Prevention, 82, 134–142; 2015.

<sup>73</sup> Sun D, El-Basyouny K, Ibrahim S, Kim AM. Are school zones effective in reducing speeds and improving safety? Canadian Journal of Civil Engineering [Internet]. 2018. doi.org/10.1139/cjce-2018-0060

<sup>74</sup> Poswayo A., Kalolo S., Rabonovitz K., et al. School Area Road Safety Assessment and Improvements (SARSAI) programme reduces road traffic injuries among children in Tanzania. Inj Prev: 2018; 0:1–7.

 $<sup>75 \</sup>quad https://globaldesigningcities.org/publication/global-street-design-guide/designing-streets-people/designing-for-motor-ists/traffic-calming-strategies/$ 

<sup>76</sup> Making cities inclusive: safe mobility for persons with disabilities in developing countries, HI, 2018

<sup>77</sup> http://schoolstreets.org.uk

<sup>78</sup> https://prizeforcities.org/project/sarsai

modifications where children are at risk in the school environment, coupled with educational programmes for students.<sup>79</sup>

Where children and youth are using motorised transport, legislation and enforcement of mandated seatbelt or helmet laws will greatly reduce injury risk. This includes ensuring school buses have seatbelts, and that children and youth have access to affordable helmets that meet specific safety standards, if travelling to school by motorcycle.

As part of the safe system approach to road safety, it is also important to consider road safety education as a way to ensure children and youth are empowered to play their role in road safety. Children and youth should be offered age-appropriate road safety education, plus extensive driving skills-based programmes and permits for older children and youth.

It is also crucial to work with children and youth from all groups and communities on solutions to understand where they feel unsafe on their journey to and from school, and reflect this information in policy change and implementation.

## LOCAL ACTION FOR A GLOBAL ISSUE: YOUTH IMPACT

Local Actions are innovative community-level projects implemented by members of the Global Youth Coalition for Road Safety. 80 The projects showcase youth-led solutions to road safety and access to quality education at community level.

#### Road safety and quality education: A youth issue

As youth, we aim to contribute to the implementation of the Global Plan on Road Safety, and work in collaboration with national authorities to make roads safer for children and youth on their journey to school or university, especially when walking, cycling or using public transport.

<sup>79</sup> https://prizeforcities.org/project/sarsai

<sup>80</sup> https://claimingourspace.org/localactions

#### SAFE SCHOOL ZONE DESIGN LED BY YOUTH - INDONESIA

#### Titis Efrindu Bawono and Transportologi Team, Local Actions Winners, 2021

"Safe infrastructure for youth is essential because it guarantees their wellbeing to learn, play, and access to quality education and a better future as the next generation. We believe that youth injuries and deaths due to a lack of safe infrastructure is unacceptable and could be prevented.

Youth should be involved because they are the ones who can explain their needs and what makes them feel safe. They are also the most affected group on the road as the most victims of traffic crashes. Until now, youth have not been in a position to influence any political decisions or policies about their safety on the road. Thus, youth involvement is fundamental to creating solutions for safer roads."



Image 1: Project Team and students during an activity.

#### **ROAD SAFETY ISSUES IN INDONESIA**

WHO estimates that more than 30,000 people lost their lives due to road traffic crashes in Indonesia in 2019.<sup>81</sup> IRAP Star Rating analysis of fatalities in 2016 shows the majority of deaths are pedestrians and cyclists using one or 2 star rated roads.<sup>82</sup> These roads are likely to have high speed limits, little or no sidewalks and crosswalks for pedestrians, or separate lanes for cyclists.<sup>83</sup>

Indonesia has not yet implemented road safety audit and inspection for new infrastructure development in urban areas and in school zones, so it has become

<sup>81</sup> World Health Organization, Global Health Observatory data repository

<sup>82</sup> https://www.roadsafetyfacility.org/country/indonesia

<sup>83</sup> https://irap.org/3-star-or-better/

difficult to communicate latent road safety risks and urge the government to improve road safety.<sup>84</sup> Traffic crashes are the leading cause of death for youth aged 15-29, globally. Traffic crash data in Indonesia also show the same occurrence.<sup>85</sup>

## So we (Transportologi) decided to take action as young people and advocate for road safety.

#### THE LOCAL ACTION PROJECT

In Surakarta, the establishment of the Manahan flyover alone has led to 12 crashes and 2 deaths since 2017, according to media reports. The crashes are not the only road safety problems that occurred around Manahan flyover area. There are underlying road safety risks that impact Junior High School 1 in Surakarta City which is located beside the flyover of due to lack of safe facilities such as pedestrian crossings and sidewalks. Students usually use the climbing area of the flyover to cross the road which puts them at risk of death or injury every day on their way to school.

In 2021, we collaborated with Junior High School 1, Surakarta supported by the Global Youth Coalition for Road Safety, to work on the following objectives:

- Ollaborate with youth and communities to design safer school environment including pedestrian facilities and traffic calming interventions;
- Advocate with youth for safer street infrastructure, encouraging more stakeholders to comply with the safer street participatory design;
- O Advocate with local government stakeholders to implement the changes

Using the Star Rating for Schools methodology<sup>87</sup> to assess the school environment and consulting with students at the school, we produced designs to improve the area.

The design includes the provision of sidewalks, bike lanes design, pedestrian crossing installation in safer locations, limiting the speed to 30 km per hour in the area, and other traffic calming measures to slow down the vehicle speed so that students and other road users are safer on the road.

<sup>84</sup> Youth Participation in School Safety Zones Assessment using Star Rating for Schools in Surakarta City, Indonesia Estiara Ellizar, Sukma Larastiti, Titis Efrindu Bawono, Windu Mulyana, and Cahyadi Kurniawan

<sup>85</sup> Youth Participation in School Safety Zones Assessment using Star Rating for Schools in Surakarta City, Indonesia Estiara Ellizar, Sukma Larastiti, Titis Efrindu Bawono, Windu Mulyana, and Cahyadi Kurniawan

<sup>86</sup> Youth Participation in School Safety Zones Assessment using Star Rating for Schools in Surakarta City, Indonesia Estiara Ellizar, Sukma Larastiti, Titis Efrindu Bawono, Windu Mulyana, and Cahyadi Kurniawan

<sup>87</sup> https://starratingforschools.org/



Image 2: Initial Proposed Design by the Students and iRAP SR4S Recommendation, Source Youth Participation in School Safety Zones Assessment using Star Rating for Schools in Surakarta City, Indonesia, 2nd International Traffic Safety Conference 2022 (ITSC 2022) Paper, March 2022

#### **ADVOCACY IMPACT SO FAR**

The road designs, which were developed with the participation of students, were proposed to the government and by October 2021, the Transport Agency installed a road marking, pedestrian crossing, and rumble strips as traffic calming measures.



Image 3: Before and After Proposed Design Implementation in Manahan Flyover Area. Source Source Youth Participation in School Safety Zones Assessment using Star Rating for Schools in Surakarta City, Indonesia, 2nd International Traffic Safety Conference 2022 (ITSC 2022) Full Paper, March 2022.

As an interim solution, the local government implemented some, but not all of our design changes. Due to our ongoing advocacy with key stakeholders, we received a commitment in March 2022 that the implementation of our recommended design would continue.

We hope that safer road design in this area will lower traffic deaths and fatalities, protecting students on their journey to and from school.

### ROAD SAFÉTY CHALLENGES FOR INTERNATIONAL STUDENTS ACCESSING UNIVERSITY CAMPUS - BELGIUM

#### Linda Nekesa Masibo, Local Actions Winner 2021.



The first time I left home was when I moved from Kenya to Belgium. The road safety situation is very different in Hasselt, to Nairobi where I grew up. Hasselt has a cycling culture, which Nairobi does not. I wanted to cycle, yet safety information was not easily accessible or available in a language I speak. Although cycling is encouraged, experiences did not always live up to expectations.

Although I should have been safe cycling, I did not feel this way. Confusion causes low reaction times, and low reaction times mean you are less safe. I want all journeys in and around the university campus to be safe, and for students to have the tools and knowledge to enjoy cycling.

This inspired my Local Actions project to address these issues, particularly for international students. Education is really powerful; it gives you knowledge and access to future opportunities. That is why safe access to education is incredibly important."

#### **ROAD SAFETY ISSUE IN BELGIUM**

International students are facing challenges in adapting to mobility systems, when they come from other regional contexts; this affects their educational experience in the new environment. In Belgium, international students, especially those from non-European countries have very divergent road safety experiences and behaviours.



Image 4: Students joining the #MovingSafe2Hasselt Campaign actions

As a international student from Kenya, Linda compared the road safety situation in both countries, and with her initiative #MovingSafe2HasseltUniversity, she contributes to raising awareness on road safety, sustainable mobility and quality education among the International students that are joining Hasselt University in Belgium.

#MovingSafe2Hasselt University is an online road safety education and awareness campaign at Hasselt University in Belgium for international students from outside the European Union. The project aims to increase traffic knowledge, skills, and awareness and to promote positive attitudes towards road safety among 80% of the international students at Hasselt University. The project team is composed of international students coming from Kenya, Tanzania, Cameroon, Albania, Luxemburg, India and Nigeria, all studying Transportation Sciences at Hasselt University.

#### **ADVOCACY IMPACT SO FAR:**

#MovingSafe2Hasselt has engaged international students on safe and sustainable mobility in and around campus through workshops, needs assessments and training.

Linda Nekesa and her team from Hasselt University developed and conducted needs assessment surveys to understand better the travel patterns and common safety-related issues experienced by international students in Belgium.

Through the local actions project, Hasselt University plans to improve mobility within and around the campus. Linda and her team are working with Hasselt University to address the issues they gathered from the survey.

## PEER TO PEER EDUCATION AND COMMUNITY ENGAGEMENT -

#### Nkumbuye Ami, Local Actions Winner, 2021

Back in our country, we as students come from different schools. Every week, we hear of one of our colleagues' students dying because of road traffic injury. Surprisingly, the ones who are always blamed are the students. It is time to stop blaming students and start engaging them because they are part of the solution to the global road safety crisis that we are facing, especially in Low-and-middle income countries." Rwanda Student Statement on Road Safety



Nkumbuye Amie is a medical Doctor at Kabutare District Hospital, and Local Action winner 2021. He is the founder and president of Vision Zero Youth Council Rwanda chapter.



I call on everyone to join the road safety movement. Road traffic deaths and injuries are preventable." **Nkumbuye Ami** 

#### **ROAD SAFETY ISSUE IN RWANDA**

At Kigali community level, there exists several challenges to the safety of pedestrians and cyclists; high-speed limits, poor road infrastructure, lack of adequate post-crash care, and lack of awareness of road safety. Students and their families face this reality everyday, particularly while trying to access education.

Through the Traffic Care Youth Initiative Project, Ami's Local Action aimed to tackle these three road safety challenges to contribute to a decrease in morbidity and mortality related to road crashes in primary and secondary students in Kigali, and the Southern Province.

- The Ministry of Education to put age appropriate road safety education on the curriculum
- The Ministry of Infrastructure to prioritise '3 -star or better' roads around schools with lower speed limits and safe crosswalks and sidewalks.

#### **ADVOCACY IMPACT SO FAR:**

Ami's project is already having an impact in the community. To support better road safety education, 44 teachers and over 3000 students have been reached by the road safety and post crash care training. To build awareness and support within the community for road safety solutions such as lower speeds, the social media campaign and radio show both aimed to engage youth, and reached over 40,000 people. The Rwanda Student Statement has been presented to Traffic Police, with particular emphasis on lowering speed limits to 30 km/h around schools in an effort to protect students.

## ADVOCACY ASKS

Through the Local Actions, Youth Leaders are calling decision makers to implement the Global Plan on Road safety, and to collaborate on delivering these recommendations:

- Mainstream meaningful youth engagement in schools safe zones assessment, by using iRAP Star Rating for Schools methodology for an evidence-based policy.
- Oniversities must work with students to ensure safe and sustainable mobility for all to access their educational infrastructure, including road safety courses that reflect the city context, and frequent consultation with students to understand safety challenges.
- Work closely with youth and authorities from the community level up to national level, in order to promote the inclusion of road safety in primary and secondary school curricula, to address quality education for all.

## RECOMMENDATIONS

#### **Governments should:**

- 1. Set and enforce 30km/h or less speed limits in densely populated areas, prioritising school zones (500-1000m around school area), universities and other places where children and youth live, learn and play.
- 2. Provide protective infrastructure for safe walking and cycling that separates pedestrians and cyclists from traffic. Use traffic calming measures to slow traffic by design, provide crosswalks and signage, and a complete network of pavement or cycling routes.
- 3. Promote a safe and accessible school environment based on Universal Design Principles, providing accessible features for a wide range of impairments which represent cost-effective and efficient measures to rapidly enhance safety and inclusion.
- 4. Consider restricting the use of vehicles outside schools and universities, such as road closures during peak arrival or leaving times.
- 5. Enact legislation, with due following enforcement and penalties for the responsible adult, that introduces mandatory use of helmets and seatbelts.
- 6. Mainstream meaningful engagement of children and youth, ensuring representation for a diverse range of backgrounds and abilities, to address their needs when designing school or university environments by consulting them and their parents.
- 7. Include road safety education within the school curriculum, making sure that a children/youth-friendly methodology is being used.

#### **Civil Society Organizations should:**

- 1. Raise awareness of the impacts of road traffic injuries on children and youth.
- 2. Advocate low-speed streets with protective infrastructure by design where children and youth live and play.
- 3. Use evidence-based programs and advocacy tools (e.g.: SARSAI method<sup>89</sup>, SR4S app<sup>90</sup>) to measure, manage and communicate the risks that children and youth face on the journey to school to make the case for change.

#### Schools and Universities should:

- 1. Implement and enforce school drop-off/pick-up policies working with the local traffic agency whenever necessary.
- 2. Work with local authorities to close school streets to private vehicles to limit road traffic close to the entrance.

<sup>89</sup> See fn. 21.

<sup>90</sup> Star rating for schools [Internet], iRAP, Available from: https://www.starratingforschools.org

3. Advocate for 30km/h or less speed limit in school zones, as well as other areas where children and youth live and play.

#### Youth and Youth-led Organizations should:

- 1. Raise awareness and advocate for 30km/h or less speed limit in school zones and identify areas to address on their routes to school.
- 2. Act as a role-model for the community by observing road safety best practices.
- 3. Supporting the school road safety curriculum as a peer educator.

## CONCLUSION

Education is one of the great hopes for escaping poverty and is central to the SDG promise of leaving no one behind. However, millions of children and youth still face multiple barriers accessing their right to education which reinforces structural inequalities and prevents their equal social and economic participation.

SDG 4 aims to deliver equitable and inclusive life-long learning opportunities for all. It is not possible to achieve this goal without considering the journeys children and youth will take to access education. Road safety and education are converging issues that both greatly impact children and youth - their health, wellbeing and future potential.

There is no safe way to the future if there is not a safe way to school. Access to education for children and youth is jeopardised by transport systems that do not protect them from road traffic injury, particularly when walking or cycling. Lack of investment in road safety and education provision in the poorest areas reinforces socio-economic inequalities and holds back progress across the SDGs. This exacerbates other barriers to education such as gender-based dricrimination and violence, or disability, further marginalising vulnerable groups.

It is clear School/University environments with safe, inclusive and accessible infrastructure can address some of these challenges to access education, as well as prevent road traffic injuries that are likely to happen close to school. Governments must invest in simple infrastructure, low-cost solutions outlined in this paper, to ensure every school/university is a safe, inclusive and accessible place. This means also adhering to Universal Design Principles to ensure the school environment is accessible for a wide range of abilities, disabilities and other characteristics<sup>91</sup>.

Governments must also invest in more educational facilities to prevent long, treacherous journeys to school. In doing so they would limit risk of road traffic injury.

<sup>91</sup> https://www.washington.edu/doit/what-universal-design-0

This would also remove the risk of harassment or gender-based violence faced by young women and girls on their journey to school, as well as increase the likelihood of school enrolment for children and youth living with disabilities.

With this paper we call for an end to the victim-blaming culture children and youth endure when it comes to road traffic injury and for governments to accept their responsibility by adopting the Safe System approach to road safety. Educational settings must be a priority. Road safety education has a role to play in empowering children and youth to navigate their journeys to school/university safely and independently. However, road safety education alone is not enough to save lives if the rest of the system does not protect children and youth. We are calling for systemic change.

Schools and civil society organisations are called upon to bring about this change by implementing the practices and policies recommended here. **Governments,** however, are the only ones who can push this policy change forward on a national scale. Political will and public investment are essential to that.

Children and youth have the right to be consulted on the leading issues impacting their lives and this is especially urgent for the converging issues of road safety and access to education. It is crucial that decision-makers at every level consult children and youth from all communities to ensure school zones are safe and inclusive for a diverse range of needs. It is important to understand where children and youth feel unsafe on their journey to and from school, to reflect this information in policy and implementation, and to co-design safe school environments.

Such changes are an opportunity to answer the 2030 Sustainable Agenda call for us to "build and upgrade education facilities that are safe and inclusive" and achieve the Global Plan of Decade of Action for Road Safety targets. It's time to take action!

As young people, we commit to speaking up and working with those with power to make streets safe and healthy for all, and particularly for children and young people in support of their right to access quality education.

<sup>92</sup> SDG 4, target 4A.



Initiator: Partner:





