

## POLICY BRIEF

# MOBILITY AT SCHOOLS

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## INTRODUCTION

In 2014, 1,654 children between the ages of zero and 14 are killed in road crashes in Brazil. In addition to these fatalities, more than 14,000 children were hospitalized as result of road crashes. The trend is that road crashes, which are already the leading cause of death for young people aged 15-29, become the fifth leading cause of death in the world by 2030.

Perception of reduced safety, due to severity of road crashes, has caused significant changes in the choice of transport modes, reducing the use of active modes of transport in benefit of motorized vehicles, including children commuting. Advances in education in Brazil are related to an increased number of children moving to schools. Between 2005 and 2014, the number of 4-5 year olds enrolled in basic education in the country rose from 72.5% to 89.1%. In the same period, there was also an increase in access to basic education for children and young people aged 4 to 17, from 89.5% to 93.6%. As result of urban violence, these children tend to use motorized modes to access school.

Various social, cultural, economic and urban conditions in Brazilian cities have led kids to be increasingly deprived of contact with the public space. The health consequences are serious and affect

millions of children, who suffer from conditions such as juvenile diabetes, obesity, vitamin D deficiency, and attention deficit disorder. The impaired relationship with the city causes in them a growing feeling of not belonging.

***Children are victims of a city that is not prepared to receive them.***

Urban mobility of children has been extremely affected by the city conditions and adult overprotection. The city should provide projects and activities to improve the quality of life of its residents, particularly the vulnerable groups, such as children. Learning in the city, from the city and from its people, focusing on experiential learning, is critical for education, health and human development.

Knowing and appropriating the space in which we live give us a frame of reference and the feeling of belonging. Often kids cannot draw a mental map, which relates one place to another and gives meaning to urban life. That is why it is important to engage them in the development of the city and active mobility from an early age. Children are full citizens and know how they can improve the environment where they live.

*Working on urban references, mental maps and the sense of belonging from an early age means working from childhood on our right to the city in every aspect.*

The school is part of the everyday life of children and teenagers. The center of a daily activity, it is around teaching institutions that they walk, experiment and experience sensations and fears that go beyond the classroom. All this has an impact on their perceptions. Therefore, the travel to school could educate and help in the development of children as urban citizens.<sup>i</sup>

Perceptions of the city and of how each detail helps define the everyday travel practices can be observed in surveys carried out between 2011 and 2015 at schools in Paraisópolis and Jardim Ângela, in the city of São Paulo. Motorized vehicles, especially those used for student transport, is the first choice of many parents for their kids' transport because of their perception of unsafety along the school route (intense traffic,

narrow and poor quality sidewalks, dark and poorly lit streets, high rates of violence).



*Drawing by a second grade student from School Arquiteto Luís Saia, São Paulo, about his travel to school.*

Researching how students get to and from school followed by analyzing their perceptions, leisure routines and daily activities should be the central goal of any work intended to improve the relationship of the school population with their neighborhood and city.

## HOW TO ADDRESS ROAD SAFETY AND ACTIVE TRANSPORT

Despite the bad examples from their parents and other adults in evading traffic rules, children are taught from an early age about the risks they face on the streets and how to preserve their lives and integrity. However, in addition to these basic rules, teaching road safety to kids should be based on questions such as "Why can't I ride a bike?", "Why can't I play outside?" and "Why can't I walk to school?".

If they ask these questions to their parents, they will learn that they did ride their bikes when they were kids. They will learn that the street was a place to meet their friends and have fun, that walking was natural and healthy. Such contrast creates an environment for reflection, providing an opportunity to encourage kids to become more inquiring.

***Why does my street have to be this way? And more importantly: Can it be different?***

Talking about active transport to kids in a hostile environment is, therefore, not only unwise, but ineffective. Explaining to a child that they should use the pedestrian crossing (when often there is not one), or respect the traffic light (when the waiting time for crossing is long) is not pedagogical. It is rather a way to make them conform to a reality that seems unquestionable. Active transport is only possible in non-hostile environments, in public spaces where the right to use the streets is exercised and demanded by all. Conducting activities to make the kids reflect on the impacts of traffic helps them organize their questions and then seek the best solutions.

## TOOLS

Choosing activities that present the city as something in permanent transformation rather than a static and unchanging construction should be the starting point for any pedagogical activity to address key issues such as road safety and occupation of urban spaces.

Some methods choose to accept the city as it is and, based on this premise<sup>ii iii</sup>, propose ways to teach children to adopt a safer attitude. They suggest, in short, that compliance with traffic laws and rules is crucial for reducing the number of crashes. These activities do not allow the kids to question the city they are offered, denying them the role of active agents. These methods treat them as future drivers instead of future citizens.

On the other hand, from the viewpoint of a constantly changing city, the first points to be determined are how and why the school surroundings negatively affect the children. Which factors lead kids (and their parents and teachers) to adopt a conformist attitude to protect them from a dangerous and therefore prohibitive world out there. These are attitudes of intimidating consequences, such as "do not play", "do not walk", "do not question".

### *Workshops: the importance of the play*

Placing children as builders of the city is the first challenge<sup>iv</sup>. As they build it, they will discover that the city could be different. Later, they will find out that those who build it determine who will be benefited and who will be injured.

### *1. Street Audit*

Extra-class activities that encourage kids to audit the condition of the sidewalks they use every day without realizing many important details allow them to begin reflecting on the issue<sup>v</sup>. Instead of accepting the dangers of the streets as natural, they begin to question why it could be different.



*Street audit performed by children in São Paulo. (Photo: Irene Quintáns)*

### *2. City occupation*

Bringing children to public spaces helps them understand that urban spaces belong to everyone and should be places for citizenship, playing and sharing, where people are the priority. These are moments to discuss what it means to take care of the city and what are the rights and duties of each one so as to contribute to a better world.

*Encouraging children to ask questions is a step towards optimal answers, which should lead them to demand in the future new models of city and requalification of urban spaces.*



*Third grade students of School Arquiteto Luís Saia, São Paulo, discussing the urban environment. (Photo: Alexandre Pelegi)*

### 3. Street design

Designing streets so that more people can have space to move around and get together is an activity that, when done in a fun way, allows kids to access the sphere of awareness of what is possible and doable, also understanding the notion of redistribution of the urban space<sup>vi vii viii</sup>. In this activity, children draw people in the context they wish to see on the streets. Usually the streets have more bicyclists and especially pedestrians.



Street drawing activity with first graders from School Darcy Ribeiro. (Photo: Irene Quintáns)

### 4. Films about road safety

Using the abundant production of films about road safety<sup>ix</sup> is another tool for fostering reflection and debate. The way different cities deal with the issue – whether using strong and straightforward images or dealing with violent issues in a subtle manner – provides an opportunity to set up a program focused on the profile of the children or on the issue at hand. Additionally, it encourages them to use other forms of expression, such as cinema, to express their concerns, questions and fears.



High school student presenting his opinion after the screening of films about road safety at School D. Pedro I, São Paulo. (Photo: Irene Quintáns)

### 5. Walking bus and bike bus

The travel to and from school is an activity that could educate children and help in their development. The student transport law determines that student transport should be provided by the government, but the only option offered is usually motorized transport. Initiatives such as "walking bus" and "bike bus", common in European cities, allow kids to safely get to and from school on foot or by bicycle, encouraging the use of active transport from an early age.

### 6. School routes

Identifying the most commonly routes used by kids to get to and from school can be done by conducting origin-destination surveys with students. Analysis of the data collected enables the identification of the children's profile and behavioral habits, as well as the points perceived as conflicting along the routes. By determining the school routes, it is possible to engage with local residents and businesses to assign people responsible for the children's safety along the school route, who will act as "watchpersons".

# RECOMMENDATIONS

## 1. Developing a new vision of city

Thinking about school safety areas requires more than simply developing technical manuals and specific legislation. Brazil's legal frameworks have shown significant advances<sup>xi</sup>, but failed to engage the school communities in a deep debate about the design of cities. Significant prevention and reduction of crashes around schools requires more than traffic signaling projects. There must be awareness campaigns for drivers and pedestrians to respect and observe the signs or campaigns demanding intensive and permanent enforcement.<sup>xii</sup> Workshops should be held to educate kids on how to safely interact with the city and how they could contribute to creating healthier urban centers.

## 2. Design a Master Plan of Active Transport

Designing a Master Plan of Active Transport (MPAT) is crucial to give active mobility a prominent role. The MPAT must be integrated into the Urban Mobility Plan and into the Urban Master Plan, complying with guidelines, actions, instruments and goals for the transport by foot and bicycle established in it. The main instruments of the MPAT are levels of detailing for the implementation of plans of walkable and cycling routes, including actions of education, management and financing. These details can involve directives for quantitative and qualitative assessment

of sidewalks and cycling routes, infrastructure patterns, signaling and information systems regarding the active transport, the proposition of a priority urban network of walkable and cycling routes for the city and the definition of guidelines for educational campaigns.

## 3. Engaging different actors

In addition to engaging parents, students and teachers in the basic measures to reduce the main factors causing road crashes, it is paramount to pressure the authorities to decisively participate in the urban redesign project to make this effort meaningful and effective. The city should be designed and built based on the pillars of child safety and more free space to people as possible. A city where children are driven out of spaces that should be naturally theirs (a space to share and play) is a sick city.<sup>xiii</sup>

## 4. Expanding the notion of road safety

For an urban environment to be safe, it takes more than simply eliminating crashes. Road safety projects focused exclusively on road crashes data fail to address the whole complexity of cities and their many risks. More elaborated data should be included in the study of road safety in order to address the interaction between the different modes of transport, such as origin-destination surveys, audits and preferred school routes.

<sup>i</sup> NATIONAL CENTER FOR SAFE ROUTES TO SCHOOL. How children get to school. 2011.

<sup>ii</sup> BRASIL. Manual de acessibilidade espacial para as escolas – o direito à escola acessível. Ministry of Education, Secretariat for Special Education. 2009.

<sup>iii</sup> WATANABE, R. M. Sinalização de Áreas Escolares. 2000.

<sup>iv</sup> RED OCARA. Experiências e Oficinas no espaço público. Available at <http://www.redocara.com>

<sup>v</sup> MANSILLA, V. Kit Detector de Obstáculos. Argentina. 2016. Available at: <http://trecediecinueve.wixsite.com/1319x/kit>

<sup>vi</sup> BLOOMBERG. Bloomberg Philanthropies escolhe dez cidades e cinco países para participar da nova fase da iniciativa Global Road Safety. 2015. Available at <https://www.bloomberg.com.br/2015/02/12/bloomberg-philanthropies-escolhe-dez-cidades-e-cinco-paises-para-participar-da-nova-fase-da-iniciativa-global-road-safety/>

<sup>vii</sup> WRI BRASIL CIDADES SUSTENTÁVEIS. Ruas completas por mais qualidade de vida nas cidades. 2014. Available at <http://wricidades.org/content/ruas-completas-por-mais-qualidade-de-vida-nas-cidades>

<sup>viii</sup> WRI. O Desenho de Cidades Seguras. 2016.

<sup>ix</sup> GLOBAL ROAD SAFETY FILM FESTIVAL. Available at <http://www.roadssafetyfilm.org/index.php/en/>

<sup>x</sup> DENATRAN. Sinalização de áreas escolares. 2000.

<sup>xi</sup> GABRIEL, E. Manual - Como você e a comunidade escolar podem conquistar segurança e bem-estar usando essa Lei. Área escolar de segurança. Lei Municipal 14.492/2007, São Paulo. Available at <http://www.eliseugabriel.com.br/novosite/pdf/manual-area-escolar.pdf>

<sup>xii</sup> SAFE KIDS WORLDWIDE. Brazil's Model School Zone Project. Available at [http://www.redocara.com/posts-de-noticias-2/hoxmzaal726/br04\\_Zona-Escolar-Modelo-no-Trnsito\\_Santa-Rita-Paraba](http://www.redocara.com/posts-de-noticias-2/hoxmzaal726/br04_Zona-Escolar-Modelo-no-Trnsito_Santa-Rita-Paraba)

<sup>xiii</sup> CNN. UNICEF: Air pollution kills 600,000 children yearly. 2016. Available at <http://edition.cnn.com/2016/10/30/health/air-pollution-children-unicef/>