

GADRRES Comprehensive School Safety Policy Case Studies Series



#### South Korea

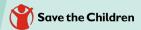
Pillar 3: Risk Reduction and Resilience Education

#### **Organisations:**

- Ministry of Land, Infrastructure and Transport (MOLIT)
- Ministry of Education, Science, and Technology (MoEST)

## **Schools Impacted:**

11,563 public and private schools





#### **C&A Foundation**

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## Mainstreaming Road Safety Education for Children in South Korea

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### Overview

In South Korea, the journey to school is an everyday hazard for many children. Between the years of 1988 and 2014, South Korea made a series of policy changes that lowered national child traffic fatalities by nearly 97%. These policy changes began in 1995, and included both formal and informal educational approaches to roadside safety for children and adults. The policies created school zones, increased penalties for traffic violations, and integrated road safety education into kindergarten and elementary schools. Both helped decrease child traffic fatalities over the next two decades. The number of child roadside deaths dropped from 1,766 in 1988 to 53 in 2014 (Sul et al., 2014). The rate of traffic fatalities per 100,000 children in South Korea is currently 1.3, the same rate as the Organisation for Economic Cooperation and Development (OECD) country average. South Korea's successful road safety policies provide a model for other governments to emulate.

Keywords: South Korea, traffic accidents, traffic park, roadside safety training, school zones

## Hazard and Education Context

South Korea's economy grew rapidly from 1980 to 2010, with its Gross Domestic Product increasing thirty-fourfold. With the growth, a larger proportion of the population bought cars, increasing registered vehicles on the road from under 530,000 in the early 1980s to 19.4 million in 2015. Traffic accidents and related fatalities increased proportionally throughout the 1980s. Traffic fatalities peaked in 1991, killing 13,429 people, including 1,566 children. Most fatal road accidents involving children in South Korea were vehicle-to-pedestrian collisions in urban areas. The death of these children highlighted a need to improve safety protocols for children who walk to and from school, especially in cities (Sul et al., 2014).

In South Korea, the Ministry of Land, Infrastructure and Transport (MOLIT) is responsible for developing traffic safety policies. MOLIT oversees the National Transportation Safety Master Plan, a comprehensive document that defines traffic safety policy goals and outlines the roles various government ministries play to meet the goals. In addition to MOLIT, the Ministry of Education, Science, and Technology (MoEST), which designs and oversees the national curriculum in public and private schools, and the Road Traffic Authority, which coordinates traffic safety education for licensed drivers and the public, played enormous roles in reducing child traffic fatalities. Together, MoEST and the Road Traffic Authority collaborated to design and incorporate road safety education into the formal national curriculum (Sul et al., 2014).

## Building Evidence and Public Support for Road Safety Policies

Civic and research organisations focusing on road safety and child welfare played a substantial role in developing road safety education initiatives in the early 1990s. These organisations researched and published road accident data to convince the national government to take action. The Korea Green Mother's Society, a non-profit focused on improving road safety conditions for children, helped pressure the government to develop road safety policies. The group was founded in 1971, and has consistently lobbied presidential, mayoral, and gubernatorial candidates to pledge to support child road safety policies. With 530,000 members nationwide – most of whom are mothers of young children – such pressure is often effective. Government-affiliated institutions, such as the Road Traffic Authority and the Korea Transport Institute, published policy research and recommendations, which also prompted the national government to develop traffic risk reduction policies in the early 1990s.

Politicians were highly receptive to the call from these organisations to take actions reducing traffic-related child deaths. Policies aimed at saving children's lives are less often subject to the partisan disputes of everyday politics. Lending support to pro-child causes may politically benefit elected officials. With the launch of a road safety campaign in 1992, the political climate was ripe for a series of policy changes aimed at making roads safer for children.

## Institutionalising Comprehensive Road Safety Education in Schools

In 1992, the national government launched the Reduce Traffic Accidents campaign in response to the high number of traffic accidents and child roadside deaths. As part of the campaign, the government recommended that kindergartens teach 40 annual hours of traffic education to each student and elementary, middle, and high schools teach 20 annual hours. Following this recommendation, many schools began voluntarily teaching road safety education. To support compliance with the national government's recommendation, the MoEST and the Road Traffic Authority, developed road safety educational materials for elementary schools in 1993.

In 1996, the MoEST attempted to strengthen road safety education programs in schools by mandating kindergartens teach 30 hours of road safety education, and that elementary, middle, and high schools teach 21 to 23 annual hours. However, the directive lacked a strong legal basis for enforcement. To address this legal gap, the national government amended the School Health Act in 1998 and the Child Welfare Act in 2000. Both amendments outlined the responsibility of school administrators to provide traffic education. The amendment to the Child Welfare Act also outlined road safety education guidelines for each age group:

- Kindergarten education focused on using sidewalks, crossing roads, and riding school buses.
- Elementary education focused on finding safe routes to school, understanding traffic rules, and using different forms of transportation.
- Middle and high school education focused on using and maintaining bicycles, understanding traffic rules, and preventing accidents.

The Child Welfare Act required school administrators to report their relevant educational plans along with a report detailing the "result of the education" to the school's superintendent each year. The law does not define guidelines for the report or penalties for not submitting, marking a weakness in the monitoring scheme (Sul et al., 2014).

#### **Problems:**

High rate of traffic fatalities.

#### Goals:

- Reduce child traffic fatalities.
- Engage students in traffic and transportation education.

#### Intervention:

- Mandatory traffic education in schools.
- Development of extracurricular traffic education facilities.

#### **Major Impacts:**

 95% reduction in child traffic fatalities between 1988 and 2014.

#### **Greatest Insights:**

 Use of both formal and informal educational approaches to convey traffic safety knowledge to children.

#### What's Next:

- Reduce traffic fatality rate among general population.
- Reduce child traffic fatality rate even further.

In 1997, the President made a pledge to further strengthen road safety education. In response, the Ministry of Education and the Road Traffic Authority developed content for the 7th National Educational Curriculum between 1998 and 2000, and curricular changes were incorporated into textbooks. MoEST prioritised updating textbooks for first and second graders, who were less likely to understand basic safety skills, then tackled older grades. In South Korea, private and public schools are subject to the national curriculum developed by MoEST and must use state textbooks.

A 2008 amendment to the Child Welfare Act required all schools to provide a minimum of 10 annual hours on road safety education every two months. Schools often teach more road safety education than is required. In 2008, all schools in South Korea reported providing between 21 and 23 annual hours of safety education to students, with a minimum of 12 hours dedicated to road safety training. Road safety education is also incorporated in textbooks for other school subjects, such as social studies, ethics, and physical education. Eight elementary school textbook subjects include road safety material. Teachers in charge of teaching road safety must attend training courses from the Road Traffic Authority. In 2012, 7,735 teachers were trained through such courses (Sul et al., 2014).

Children also learn about road safety outside the classroom. In 2002, the national government developed facilities called "traffic parks" or "road safety experience centres" for kindergarten and elementary students to test hands-on learning approaches to safety education. Traffic parks are confined areas that mimic real roadways to help train children in a safe environment. Children learn how to use crosswalks, interpret traffic signs, and safely ride in vehicles. They also learn where accidents involving pedestrians are most likely to occur in the street. In 2012, 306,273 kindergarteners and 22,133 elementary-level students attended traffic parks. Some schools take field trips to traffic parks. Many parks are designed as recreation spaces, so parents can bring their children outside of school hours (Sul et al., 2014).

The Ministry of Security and Public Administration also introduced the Walking School Bus system in 2010 as another out-of-classroom education approach. In this system, groups of 10 children walk to school along predetermined routes. Each group is accompanied by two helpers, who are usually retired teachers, police officers, or community volunteers. The Walking School Bus picks up and drops off children at fixed "stations" along the main route. Children learn about safe routes, and helpers teach children basic self-protective skills, like crossing streets and interpreting traffic signals. As of 2014, around 600 elementary schools participated in the Walking School Bus system, out of 6,001 elementary schools nationwide.

# Policy-Enabling Factors and Remaining Challenges

South Korea has drastically reduced child traffic fatalities since the early 1990s, after the national government developed education-based policies for traffic safety. Classroom-based approaches contributed to the reduction in child traffic fatalities by teaching children skills to protect themselves on the street. Non-educational policies passed during the same period also played a large role, such as school zones and increased traffic penalties. In 1995, the government introduced the school zone system nationwide, which imposed stricter traffic rules in areas around schools. Traffic fines in school zones are double the normal amount. The new school zones and higher traffic violation penalties were also influential in making roads safer for children (Sul et al., 2014).

Education-based approaches to roadside risk reduction may be most effective in tandem with changes to traffic laws. Developing policies aimed towards improving driving practices acknowledges the responsibility drivers have to reduce roadside risks for children. These policies do not put the entire risk reduction burden on children, as a policy only focusing on self-protection would.

In 2013, the government announced a new plan that aims to reduce overall traffic fatalities to less than 4,000 by the end of 2017 (OECD/ITF, 2015). The plan includes child-focused measures, such as updating traffic education portions in textbooks, expanding access to traffic safety classes, increasing enforcement of child safety belts in vehicles, and expanding the Walking School Bus system.

Despite South Korea's impressive strides in reducing the rate of child traffic fatalities, its overall pedestrian fatality rate remained the highest among OECD countries in 2014 (OECD/ITF, 2015). Such a high pedestrian fatality rate indicates the country must take further measures to ensure roadside safety for all. Experts suggest the problem comes from a high rate of alcohol consumption, a fast-paced culture, lack of sidewalks, and relatively high speed limits (Yang & Kim, 2003; OECD/ITF, 2016). Developing measures to address the root causes of traffic accidents will benefit children and reduce the rate of child traffic fatalities even further.

## Works Cited

Sul, J., Lee, J., Kang. D.S., Lee, W.Y., Shim, J.I., Myeong, M., Huh, E. & Lim, J.K. (2014). Korea's 95% Reduction in Traffic Fatalities: Policies and Achievements. Korea Transportation Institute (KOTI) Knowledge Sharing Report Issue 15. Available online https://english.koti.re.kr/component/file/ND\_fileDownload.do?q\_fileSn=4948&q\_fileId=20140423 0004948 00150840

Organisation for Economic Co-operation and Development/International Transport Forum. (OECD/ITF). (2015). Road Safety Annual Report 2015. Available online http://dx.doi.org/10.1787/irtad-2015-en

Organisation for Economic Co-operation and Development/International Transport Forum. (OECD/ITF). (2016). Halving the number of road deaths in Korea. Lessons from other Countries. ITF – Organisation for Economic Co-operation and Development (OECD). Available online http://www.itf-oecd.org/sites/default/files/docs/halving-road-deaths-korea.pdf

UNESCO Institute of Statistics. (2016). Education and Literacy statistics. UNESCO. Available online http://uis.unesco.org/country/ KR

Yang, B. & Kim, J. (2003). Road traffic accidents and policy interventions in Korea. Injury Control and Safety Promotion 2003, Vol. 10, No. 1-2, pp 89-94

Child-centred DRR and CSS Bibliography at: https://www.mendeley.com/community/C-CDRRandCSS/



Comprehensive School Safety (CSS) is a framework for advocacy and action aligning policies and plans across education and disaster management sectors at all level. It uses child-centred all-hazards risk assessment and context analysis as the evidence base for action in three overlapping areas: Safe Learning Facilities, School Disaster Management, and Risk Reduction and Resilience Education. For more information, see http://www.gadrrres.net/

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