The Republic of Korea’s Campaign to Bring Road Crashes to Zero: Making Roads Near Populated Areas More Pedestrian Friendly, 2015–18

Introduction

The Republic of Korea has long had a notoriously high number of pedestrian fatalities from road crashes. In the second half of the twentieth century, road policies were geared toward ensuring that vehicles could travel fast and efficiently across the country. The government paid little attention to pedestrian safety, and speed limits were high, even in residential areas.

Over time, citizens increasingly saw road crashes as structural failures that could be prevented with better policies. In response to citizen demand, the government began to shift the transport management paradigm from vehicle centered to people centered. (For example, in 2011 it designated low speed zones near care centers for people with disabilities.) In 2013, the National Assembly endorsed the Resolution on Bringing Road Crashes to Zero, an ambitious plan to radically improve the safety of Korean roads. Although the National Assembly recognized that road crashes could not be completely eliminated, the resolution called for a series of new policies to bring the number of crashes as close to zero as possible. Among those policies were the revision of traffic safety laws, the allocation of funding for traffic safety projects, and the establishment of an Institute for traffic safety.

To support the effort, the Korea Transport Institute (KOTI)—a government research center affiliated with the Ministry of Land, Infrastructure, and Transport—held a public call for ideas to help reduce the number of road crashes. The winning idea in 2014 was to reduce speed limits in village zones, sections of national highways that are close to residential areas. (For the definitions of national highways and other types of roads in Korea, see box 1.)

Development Challenge

Although the safety of Korean roads has improved since the mid-1990s, the country’s pedestrian road crash fatality rate (the number of deaths per 100,000 people per year) in 2014 was 3.8. That rate was the second highest among the 34 member countries of the Organisation for Economic Co-operation and Development (OECD) and more than triple the OECD average of 1.2. The situation was particularly bad for the elderly: Korea’s road crash fatality rate was 4.8 times higher than the OECD average for people over age 65 (KoROAD 2016).

Intervention

The winning proposal was submitted by Soolil Lee, a transport expert at a research center affiliated with a major insurance company. Lee’s proposal had two components: (a) speed limit reduction to shorten braking distance, and (b) installation of road signs to notify drivers before they enter a residential area. The village zone proposal targeted sections of high-speed roads in proximity to population centers that ranged from small villages to large towns.
In November 2014, KOTI presented Lee’s proposal to the Ministry of Land, Infrastructure, and Transport’s Road Policy Deliberation Committee, a high-level decision-making committee. The ministry’s director general of roads approved the idea, and after a few months of preparation, the ministry contracted KOTI to start a pilot program.

KOTI proposed a pilot village zone called a “Protection Section for Villagers” with a speed limit of 60 to 70 kilometers per hour. Although Lee’s idea called only for road signs and speed limit reduction around the village zone, KOTI proposed additional road markings, speed bumps, and unmanned speed cameras that were linked to an automated ticketing system. Such additions corresponded with elements of preestablished protection areas for the mobility impaired (Figure 1; KOTI 2015).

**FIGURE 1. MAJOR ROAD SAFETY DEVICES INSTALLED IN VILLAGE ZONES**

Source: KOTI 2019.

Note: A multisign is a road sign that includes multiple pieces of traffic information, such as speed limit and zoning. m = meters.
Addressing Delivery Challenges
Coordination and Engagement

Village zone installation required close coordination between various parts of the government. The Ministry of Land, Infrastructure, and Transport was in charge of installing road markings and road signs, whereas the police were in charge of adjusting speed limits. Any legislative action to permanently enact the new policy required support from the National Assembly. Local government support was essential for effective road safety device installation.

KOTI started by approaching high-level personnel at the National Police Agency and the Ministry of Land, Infrastructure, and Transport. High-level officials in central offices focused more on the potential benefits of the policy and were less intimidated by administrative and practical difficulties. Endorsements from central offices helped mitigate concerns of personnel in local offices.

KOTI opted not to dedicate time to lobbying the National Assembly, because most of the major elements of the village zone plan could be implemented without legislation and KOTI wanted to get the initiative moving quickly. KOTI won local cooperation by assuring key local decision makers that the village zones would not impose any financial burden because the transport ministry would pay for the installation and maintenance costs.

Opposition or Lack of Consensus

Although local residents who would benefit from pedestrian-friendly roads generally welcomed the village zones, frequent users of national highways, such as truck drivers, preferred uniform and high-speed-limit national highways and were reluctant to accept lower speed limits. Without legislative backing, road users could file petitions against the pilot zones and pressure the police department and the transport ministry to drop the project.

The most powerful deterrence against that kind of backlash was to increase road safety awareness and build public support. KOTI and the transport ministry promoted the village zones to the public through press releases and videos. In addition, several regions held events to promote the launch of village zones in their area. After the first village zones were implemented, KOTI used the statistics of reduced road crashes in the pilot areas to build further public support.

Project Finance

Although the village zone project was a low-cost initiative, a search for new funding through the formal budgetary procedure could have delayed implementation for a year or more. Instead, KOTI and the transport ministry bypassed the deliberation process with the Ministry of Economy and Finance and the National Assembly, and they installed village zones using the transport ministry’s existing road safety budget. Although the budget for safety projects was small, the cost of the village zones did not strain it. Strong support from the ministry’s director general of roads helped secure the budget, but this decision limited village zone installation to national highways because those were the only suitable type of road under the ministry’s jurisdiction.

Lessons Learned

Involving Top Officials and Making Practical Adaptations Helped Build Early Momentum

KOTI approached high-level personnel at the Ministry of Land, Infrastructure, and Transport and the National Police Agency, as well as important officials at the local level, to share the proposed idea and to build support for the initiative. During this process, KOTI received feedback about the idea and made practical changes that helped it win cooperation at all levels.

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1 The cost of each of the 14 road sections installed in the pilot ranged from W100 million to W310 million (KOTI 2015).
Citizen Support Incentivized Local Decision Makers

Despite concerns that citizens would complain about the reduced speed limit in village zones, local residents generally welcomed it because it could potentially reduce road crashes and keep residents safe. As a result, local politicians, government officials, and police officers largely supported the village zones in their area, since the initiative provided an opportunity for them to showcase their commitment to community safety.

A Successful Pilot Provided Impetus to Scale Up

Across the pilot village zones, the total number of crashes decreased by 37 percent, fatalities decreased by 29 percent, and injuries decreased by 43 percent in the first six months after installation, compared with the three-year average in the same months of previous years (KOTI 2018b). Seeing the success of the pilot program, more regions sought to install village zones to improve pedestrian safety. Twenty road sections in 8 regions were added in the second year, and another 30 sections were installed in 10 regions by 2018. Local residents generally welcomed the installation of village zones, and some local governments decided to install zones at their own expense. In 2018, for example, the Gapyeong government installed two village zones at the request of local residents, using its own budget. As of 2018, there were 64 village zones in 23 regions across Korea (KOTI 2018b).


The village zone initiative stemmed from a public call for ideas, building on a long history of the public as the advocate for pedestrian rights in Korea. The Korean government was largely oblivious to pedestrian rights until the mid-1990s, when civil society began to push for laws to reduce speed limits in school zones and for other measures to increase pedestrian safety (KOTI 2018a). The village zone is another example of this tradition of citizens advocating for road safety policies.

References


