

Social experiment on traffic safety on school routes

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1. Introduction

Traffic accidents involving children walking between their home and their school continue to occur, so traffic safety countermeasures for school routes are a pressing challenge.

The Ministry of Education, Culture, Sports, Science and Technology, Ministry of Land, Infrastructure, Transport and Tourism, and the National Police Agency prepared Emergency Joint Inspection Procedures for School Routes in May 2012 and have asked local government to implement this manual. In May 2013, the 2 ministries and 1 agency jointly announced a notification concerning future initiatives in response to the results of the emergency joint inspections, and in December, issued the notification, Promotion of Continuous and Effective Initiatives to Ensure Traffic Safety on School Routes, and are aggressively promoting its application.

The NILIM was already conducting research on traffic safety measures for residential roads, and as part of this research, from November to December 2013, in cooperation with Tsukuba City, which was studying specific traffic safety measures for school routes, it carried out a social experiment on public roads concerning traffic safety measures for school routes.

This report introduces an outline of this social experiment.

2. Outline of the social experiment

The social experiment was done by installing speed reduction structures etc. on school routes and verifying their effectiveness with the cooperation of the Tsukuba Central Police Station and Ninomiya Elementary School.

The route included a narrow section with width of about 4.0m and without walking space for children and a straight road section with 6.0m – 7.0m width where vehicles travel at relatively high speed. On this route, traffic from outside the district is particularly heavy in the mornings and evenings, and ensuring safety of children when commuting to and from school is a challenge.

3. Traffic safety measures tested

During the social experiment, the route was divided into 3 sections according to road conditions to study the traffic safety measures.



In the first section, a narrow road shared by automobiles and pedestrians, the roadside strips were widened and colored in order to ensure space where pedestrians can walk safely.

In the second section, which is a straight wide road, vehicles travel at high speed and pedestrians feel endangered, so humps and chicanes were installed to encourage drivers to reduce their speed. In light of the views expressed by some that this part was used as a short-cut of an arterial road, a bottleneck was installed at its entrance as a through traffic countermeasure.

To clarify the effectiveness of these measures, the speed of vehicles and locations they traveled were observed by video cameras. And to understand how safe and secure the users feel, a questionnaire survey of drivers, children commuting to school, and local residents was carried out.

4. Conclusions

The results will be announced as necessary, but the results of the questionnaire survey of the elementary school children show that about 80% of them answered that they felt safer than before the countermeasures were taken.

The NILIM will apply the results of the social experiment to research on traffic safety countermeasures for residential roads throughout Japan, and Tsukuba City will use them to implement

traffic safety countermeasure projects on school routes
serving Ninomiya Elementary School.

[Sources]

NILIM web page: <http://www.nilim.go.jp/lab/gdg/index.htm>