

Support to promote road traffic safety measures in residential roads

(Research period: FY 2016–2018)

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1. Background

The Road Bureau of Ministry of Land, Infrastructure, Transport and Tourism (MLIT) has been working to improve the safety of roads in residential areas since FY 2015. The MLIT has been registering target residential road areas and promoting proposals for effective road traffic safety measures by providing the outcomes of analyzing ETC 2.0 big data, including vehicle speed and sudden movements, to the registered residential road areas. National Institute for Land and Infrastructure Management (NILIM) is also supporting the promotion of road traffic safety measures for the target residential road areas and other areas in cooperation with the Road Bureau.

2. Support to promote residential road traffic safety measures

An effective way to ensure road traffic safety on residential roads is to keep the vehicle speed to 30 km/h or slower. Effective tools to realize the slow speed include road bumps and road-narrowing poles at certain spots of a road.

The NILIM conducted a social experiment from FY 2013–2015 with the city of Tsukuba to install bumps and road-narrowing poles on roads used by children to go to schools. The experiment confirmed the effects of the measures, such as the slowing down of vehicles and improved awareness among drivers.

In 2016, the Technical Standards on the Installation of bumps, Road-Narrowing Poles, and Curves were prepared based on the research outcomes of the NILIM and released. Road traffic safety measures are now being installed and used according to the standards. At the same time, the NILIM is lending portable bumps to road administrators to experience the effects of the bumps. Today, Regional Development Bureaus are also lending portable bumps to support local governments.



Photo: Loaned bumps
(scene of the social experiment)

In addition, the NILIM is responding to inquiries from local governments while providing information, such as bump driving videos and outcomes of experiments in cooperation with the Portal Site on Road Traffic Safety Measures on the Residential Roads of the Road Bureau.

The NILIM is recently responding to technical consultations concerning measures in hilly residential areas and effective locations to install bumps (e.g. intersections). The NILIM is providing knowledge through Regional Development Bureaus when technical challenges occur to measures implemented in different regions.



Photo: A scene of meeting to explore measures with local governments

3. Future plans

The number of registered target residential road areas has been increasing, and the installation of bumps and road-narrowing poles has been steadily increasing. The NILIM is gathering and analyzing the information concerning the effects of such measures and consensus building processes. The NILIM is going to organize research findings and information from actual examples so that the information becomes available to road administrators around Japan.

For more detailed information

1) NILIM Reference No. 952 Technical references concerning Technical Standards on the Installation of Bumps, Road-Narrowing Poles, and Curves

<http://www.nilim.go.jp/lab/bcg/siryou/tnn/tnn0952.htm>

2) The website of road traffic safety measures for residential roads (inside the website of the Road Safety Division)

<http://www.nilim.go.jp/lab/geg/seikatsu.htm>