

Promotion and Support of Traffic Safety Measures in Community Road Countermeasure Areas (Research Period: FY2016 – 2018)

FY2016 – 2018)

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1. Current State of the Countermeasures for Traffic Safety on Community Roads

To secure traffic safety on community roads, including school routes, countermeasures with a focus on the control of the running speed of cars and of the entry of through traffic are taken. Since FY2015, the districts that attempt to promote the countermeasures intensively have been registered as countermeasure areas, and the technical support, such as the provision of results of analysis of big data and advice on countermeasures, has been given by the national government. In addition, in order to support the introduction of countermeasures with high effectiveness, such as through the creation of convex sections, the Ministry of Land, Infrastructure, Transport and Tourism released the technical standard on the creation of convex, narrowed sections and bend sections (hereinafter referred to as “standard”) in March 2016.

In such a situation, the number of countermeasure areas across the country increased to approximately 240 as of the end of 2016, and the considerations on the countermeasures are advanced in many districts.

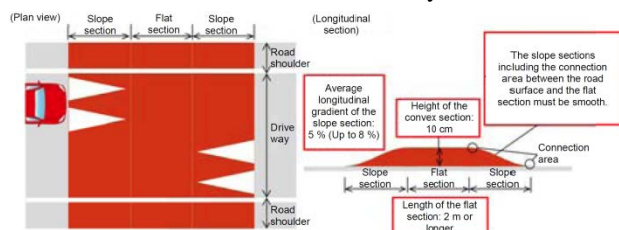


Figure 1 Standard shape of the convex specified in the technical standard

2. Promotion and Support of the Implementation of Countermeasures on Site

NILIM performs follow-up by summarizing its technical findings in the establishment of the standard and investigating the status of the utilization of the standard after it was released as research in 2016. In addition, it also performs case study investigations on the planning of countermeasures, as well as investigations on the consensus formation status in taking countermeasures in each countermeasure area to consider the method for providing technical information useful for the promotion and support of countermeasures.

On the stage of considering countermeasures, the result of the analysis of the ETC2.0 probe information is effective in the visualization of traffic because it can help to determine the extended speed distribution easily.

In 2017, since the countermeasures are considered to be increasingly implemented across the country, NILIM

will perform a case study and consensus formation status investigations concerning the implementation of the countermeasure and evaluation stages to lead to the consideration of promotion and support measures.

3. Consideration of new countermeasures

In addition to the creation of convex sections, the countermeasures that are expected to be introduced in the future for the safety of pedestrians and bicycles are also considered. For example, there is a method of creating a traffic island in the center of roads so that pedestrians and bicycles can stand there and cross the road easily, in order to reduce accidents that occur when they are crossing a road without a traffic signal. In addition, there is also a method of installing bollards (soft rising bollards) that move up and down in conjunction with traffic regulations to secure pedestrian space. NILIM advanced the investigation of the requirements for applying such countermeasures in 2016 and will summarize the required performance in the future.



(Investigation on the situation where pedestrians and bicycles pass each other on a traffic island)



(Investigation on the sense of pedestrians while they are in the traffic island)



(Installation example of soft rising bollards in Niigata city)

Photo 1 Traffic island (two-stage crossing) and rising bollards

For details, visit:

1) The website of the Ministry of Land, Infrastructure, Transport and Tourism (standard)

<http://www.mlit.go.jp/road/road/traffic/sesaku/pdf/device.pdf>