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Status of Road Traffic Noise and Vehicle Noise Regulations

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The Countermeasures targeting pollution sources, traffic flow, road structures, roadside areas and others have been taken to reduce road traffic noise. Under Article 18 of the Noise Regulation Act, prefectures and cities are required to conduct monitoring on the status of road traffic noise as the statutory entrusted function, because of the essentiality of the prefectures of monitoring noise exposure methodically over time to conduct road traffic noise countermeasures systematically and comprehensively. Furthermore, Ministry of the Environment compiles the monitoring results, and grasp and publishes the environmental quality standard attainment status.

Based on the latest fiscal year 2024, the status of attainment of environmental quality standard was assessed for 9,677.9 thousand units of houses etc. in areas facing 69,669km of roads. As a result, approximately 9,207.9 thousand units achieved the standard during both the daytime (6:00-22:00) and nighttime (22:00-6:00) and the attainment rate was 95.6%. With regard to change over the years, while the unit number subjected to assess varies from year to year, the gradual improvement can be seen (Fig.1).

In addition, Ministry of the Environment has implemented policy for motor vehicle noise reduction as one of the measures targeting pollution sources. Therefore, it has set the maximum permissible limits for vehicle noise levels, and the regulation has been progressively strengthened. In 2022, “Future Policy for Motor Vehicle Noise Reduction (Fourth Report)” was reported, which showed not only target maximum permissible limits in the next acceleration noise regulation and their application time but also issues to be addressed in the future. To address the issues in the fourth report, Ministry of the Environment carried out data collection of real driving vehicles on the public road in several locations in Japan and its analysis, and thus grasped the changes over the years in the status of confirmation of noise regulations for real driving vehicles and the needed time to be replaced for new vehicles (Fig.2). Furthermore, regarding tire noise regulation, we grasped the progress of replacement with R117-02 conforming tires by collecting data in regard to production provided by tire manufacturers and in regard to market of car-users, over the period from 2023 to 2025, to observe the progress.

This section introduces the latest status of road traffic noise and the progress of considerations to the issues in the fourth report regarding policy for motor vehicle noise reduction.

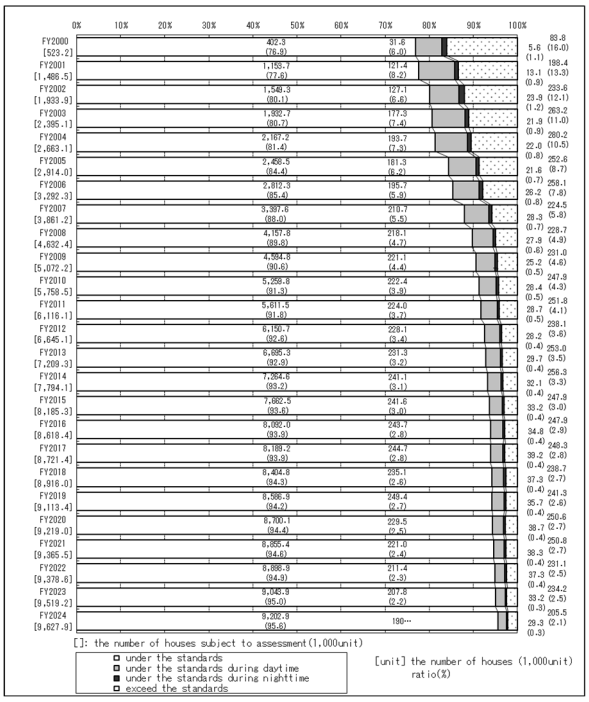

Fig.1 The status of Road Traffic Noise

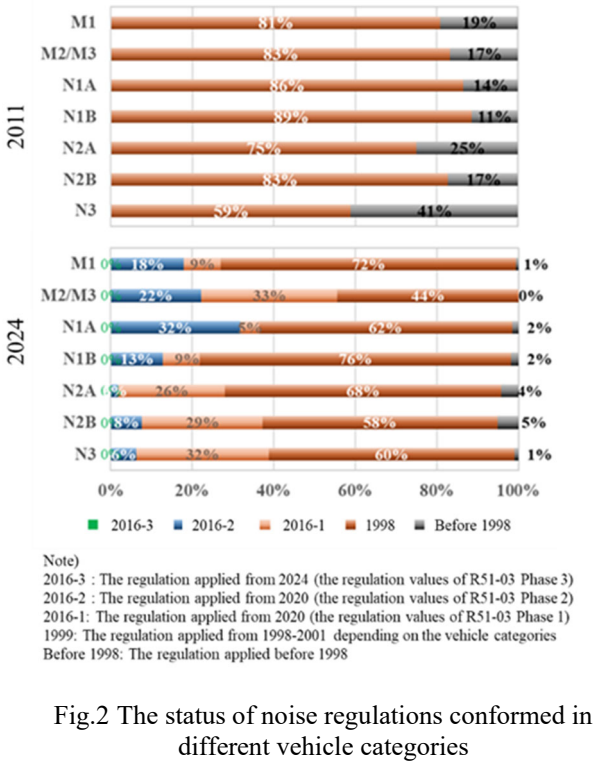

Fig.2 The status of noise regulations conformed in different vehicle categories