

Survey on Measures for Supporting / Promoting Activities for Winter Road Measures by Local Residents etc.

(Study period: FY2019-)

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1. Introduction

In recent years, there have been changes in the state of snowfall, with numerous cases of very strong, intensive and continuous snowfall being recorded, yet the business environment for snow removal has been increasingly handicapped by issues like depopulation, a declining birthrate and aging, and a shortage of labor and potential successors. In response to such circumstances, NILIM has been studying ways to promote resident participation in winter road measures, with the aim of establishing a system that would enable active cooperation of local residents and private-sector organizations in road snow removal. This paper reports a case study about road snow removal activities by local residents in heavy snowfall areas, measures for supporting them, etc.

2. Outline of the survey

With respect to winter road management by local residents and volunteer groups, we collected and organized a total of 55 cases (Table 1) of snow removal activities and supporting systems in 44 municipalities and 17 prefectures from past surveys, including "Examples of self-help and mutual help activities in winter road management" (MLIT, Road Bureau) and "Survey on snow removal system support for securing / training snow removal workers" (MLIT, National Spatial Planning and Regional Policy Bureau). There are many cases where the government lends small snow removal machines and tools to resident associations and neighborhood associations who mainly engage in activities so that they can remove snow.

3. Hearing survey

We conducted a hearing survey (Table 2) of persons involved in snow removal activities, sampling six communities from the surveyed cases in the preceding section, considering local characteristics and content of activities. In all the cases, residents successfully conducted snow removal activities but faced issues in continuing their activities, such as aging participants and a shortage of successors. Since circumstances of communities are various, such as difference in the state of snowfall or snow removal conditions even in the same city, or mixture of former systems before the

municipal merger, it is also necessary to take measures appropriate for communities. We will continue to study ways to solve these issues and support and promote activities.

Table 1 Snow removal activities by residents, etc. (Preliminary survey)

Entity of activity	Resident / Neighborhood association (25), other resident organizations (community development council, community promotion association, snow removal council (6), etc.), elementary / junior high school PTA (6), student volunteer organization (9), NPO (5), municipal office (18), social welfare council (13), others (business, voluntary association (13), etc.)
Content of activity	Snow removal from community roads (33), snow disposal (13), snow removal seminar (15), snow melting (2), snow melting facility development (3), symposium / education activities (11), human resource development (9), snow removal experience tour (7), etc.
Support from administration	Lending of small snow removal equipment (8), large snow removal equipment (1), snow removal trucks (5), lending / maintenance of snow removal tools (8), coordination of snow removal volunteers (8), subsidies for snow removal service fees (3), subsidies for equipment investment (3), payment of remuneration, actual costs, etc. for snow removal activities (7), supply of snowplow fuel (2), subsidies for qualification acquisition (1)

* Figures in parentheses represent the number of cases.
Total number cases / multiple count

Table 2 Snow removal activities by residents, etc. (Hearing survey)

Survey area	Sapporo (Hokkaido), Aomori (Aomori Pref.), Hirosaki (Aomori Pref.), Takizawa (Iwate Pref.), Nagai (Yamagata Pref.), Kanazawa (Ishikawa Pref.)
Survey period	Nov. and Dec. 2019
Hearing Target organizations, etc.	City hall (road snow removal department, civic activity department / bureau, social welfare department), social welfare council, local resident organizations (resident association, neighborhood association, community development council, local community council, traffic safety association, voluntary resident organization), student volunteer organization, university's executive office, snow removal contractor (city contractor)
Issues, etc.	- Aging of activity participants - Shortage of participants against increasing demand for snow removal volunteers - Need for flexible response to the diversity of local characteristics - Solution to the feelings of inequality between communities and between residents - Need for understanding and common recognition amongst local residents