Research Trends and Results

Movement of people and infrastructure of information and Working on the application of transportation planning

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1, Introduction

In transportation planning, the results of statistical surveys, such as the movement of people information about the road traffic census surveys and PHS are utilized.

On the other hand, based on the experience of the Great East Japan Earthquake, the importance of creating systems that can be handled flexibly in some freshness information "movement of people" has been recognized.

In this paper, we construct a platform (platform) that can collect and analyze information on the movement of people that can be retrieved by the ICT (Information and Communication Technology) and an overview of the efforts and plans to apply to traffic.

2. Current state of the use of information collection and movement of people

The aforementioned statistical survey has been conducted by a large amount of investigators that has been prepared in advance, and its findings which the data representing a particular day of the year or 10 years, cannot take advantage of such a disaster and the situation where the movement of non-routine travelers and the preparation time that cannot be predicted.

On the other hand, with the development of ICT in recent years, with each media such as Smartphone, Car navigation systems and Transportation Smart card system, information on a variety of high freshness movement of people has been collected over a wide range and large number 24 hours a day, 365 days a year to each operator.

Being based on the above social trend, it is expected that the development of combinatorial analysis utilizing particular features of the movement of people through a variety of media.

However, now we remain analysis using of single mode movement information (i.e. the trace of the vehicles), therefore we cannot be grasped that there is no mechanism to coordinate the movement of people information that has been collected in each company, a series of traffic behavior (point of moving all the time).

3. Development of human movement information platform

With the above situation, in this study, we are working on making the platform (including operational and institutional mechanisms) that can collect and analyze the low cost of human movement information collected by a variety of media that can be obtained by ICT

Thus, it is possible that the research to complement the current statistical survey, which conduct timely and efficiently at low cost. And it is also expected to contribute the efficiency and sophistication of official and private services that the transportation planning and disaster prevention planning, etc. that respond to the characteristics of the human attentive.

Now, through the experiment to collect and analyze information on the movement of people in the area model, we make an great effort to develop and design the systems the platform (prototype) to the practical use.
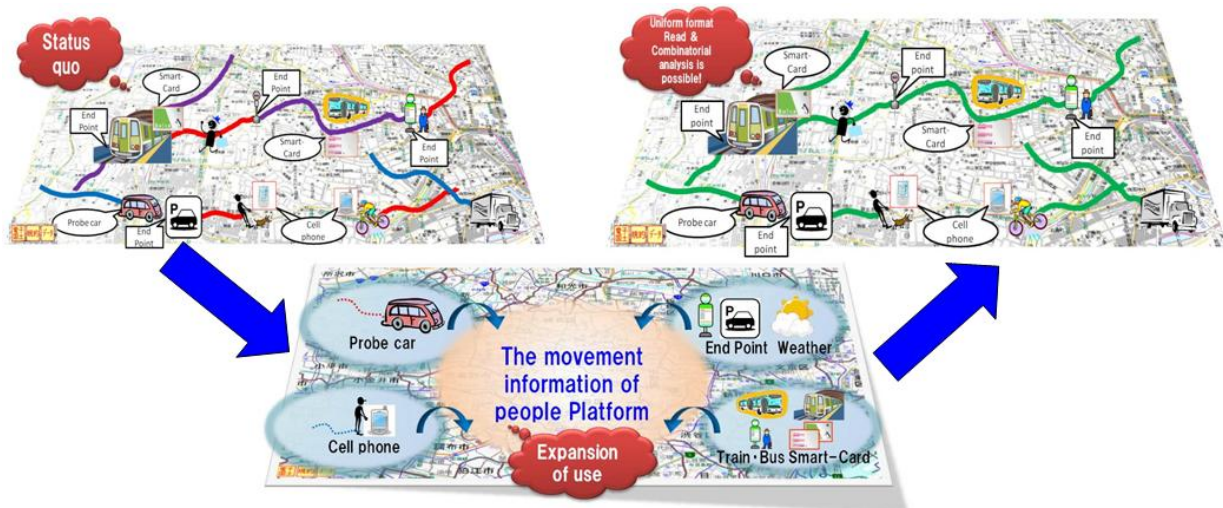

Fig. The image of the platform: the movement information of people