I. Background

Lately, Japan is confronted with issues of relocation of convenient facilities to the suburbs and discontinuance of public transportation in local cities. Increased automobile use accompanying these is exacerbating environmental problems. Moreover, a health problem has emerged by which too much dependence on automobile use increases the risk of developing the symptoms of lifestyle-related diseases such as obesity, diabetes, and cancer. To resolve these difficulties, it is considered necessary to encourage the utilization rate of sustainable transportation including environmentally friendly automobiles.

II. Objectives

We propose new policies for implementing the reconciliation of promotion of sustainable transportation and healthy city, using people’s willingness for health promotion related to food and exercise in this study.

III. Break-through points

This study analyzes the relation between health and sustainable transportation with additional information related to the food environment, such as food facilities and eating habits for the first time. This study furthermore performs proposals large cities with a matured public transportation system, as well as local cities that are highly dependent on automobiles a new viewpoint to encourage behavior contributing to improvement in health conditions and solutions to environmental problems by introducing the viewpoint of environmental protection and the IoT technologies.

IV. Methods

Analytical methods

1. quantification method II analysis
2. covariance structure model analysis

V. research outline

Research object

1. Research Method WEB Questionnaire
2. Implementation Period 2016.2.15th ~ 2.21th
3. Number of surveys distributed 500 samples
4. Number of surveys collected 469 samples

Main research subject

1. Body Mass Index (BMI) & Self-healthy awareness (HRQOL)
2. personal attribute
3. social capital
4. dwelling environment
5. Daily routine food environment

VI. Results

Regarding the relation of health conditions with the food environment and regional environment, factors that might contribute to improvement in health conditions include the development of

1. public transportation and parks,
2. increased density of food retail facilities, and population density,
3. food retail facilities within a 10 minute from the place of residence,
4. good eating habits and the non-automobile dependent lifestyle, and
5. satisfaction of walking environments.

VII. Conclusion

The following measures are proposed in this study with the findings described above for healthy city and sustainable combined transportation.