COMPREHENSIVE AND INTEGRATED TRANSPORTATION SYSTEM VISION AND PLANNING FOR ALL CITIZENS: A CASE STUDY OF MOBILITY IMPROVEMENT IN SUBURBAN CITY

TRANSED 2010 June 2-4 Hong Kong By T.Daito, M.Sawada, A.Mihoshi

SUMMARY

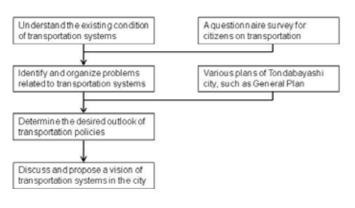
Population aging and declining birth rate pose significant challenges to transportation policy practices. While rapid motorization has influenced the physical and social structures of urban regions, scholars and practitioners suggest that it has led to growing issues such as increases in traffic congestions and accidents, as well as declines in the quality of public transportation services.

This study will focus on a city undergoing such trends, Tondabayashi City, Japan, which is a suburban city of Osaka. To establish transportation service systems capable of supporting lives of all citizens, this study attempts to identify policy measures needed to address such issues as ensuring mobility of senior citizens and addressing the areas underserved by public transportation services. A committee of citizens, governmental agencies, transportation service providers and transportation planning consultants was formed to study the current condition of the city and discuss potential remedies to address issues depicted in the analysis. Through a questionnaire survey, the committee identified policy measures to ensure mobility of all citizens and hence to realize revitalization of the lives in the city.

The committee developed a vision of transportation systems in the city, based on the understanding of future vision of the city, transportation systems necessary to support the vision, as well as a roadmap to implement the proposals.

PROCESS OF STUDY

In an attempt to reflect a realistic figure of the existing condition and the desirable outlook of the transportation systems, the research team organized a committee to involve stakeholders of the transportation systems in the study area. The committee consisted of members of the following backgrounds: representatives of community groups; representatives of senior citizens' advocacy groups; selected residents from a wider region; transportation service providers, related divisions of local governments and; transportation planning professionals.



Location



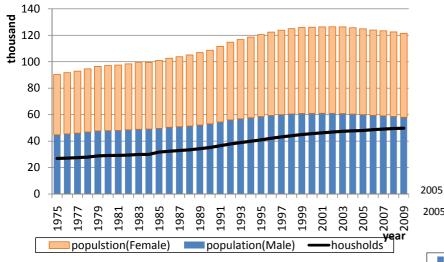


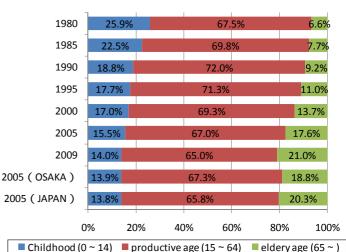
Outline of Tondabayashi city

area	39.66 thousand square kilometers					
housholds	49,946 housholds					
population	120,558 populations					
topografy	rich in nature.					
	There are open fields in the basin of the Ishikawa					
	River which flows through the center of the city.					
	A mountainous district in the south linked to the					
	Kongo mountains.					
	Tondabayashi is a city colored with old history and					
land use	culture, and it is still growing. Jinaimachi, which is in the center of the city					
	The rich historical and cultural heritage is scattered all over the city.					
	The layout of city makes it easy for visitors to take a historical stroll.					
	Apr-10					

CITIZENS CONSCIOUSNESS OF TRANSPORTATION POLICIES AND CHALLENGES OF TONDABAYASHI







Changes in Population

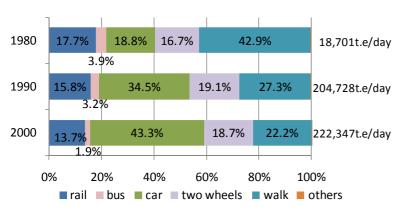
Population Characteristics

94%

car of family shared

CURRENT CONDITIONS OF TRANSPORTATION SYSTEM

(questionnaire survey of citizens)



38% 35% 27% (N=108)40 ~ 54 41% 35% 24% (N=115)55 ~ 64 32% 32% 36% (N=116)65 ~ 74 37% 8% 55% (N=108)75 ~ 16%4% 80% (N=70)0% 20% 40% 60% 80% 100%

car of personal used

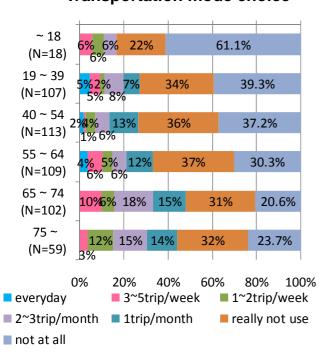
no car

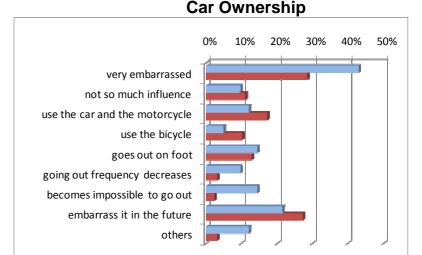
Feel: physically-disabled

~ 19

(N=18) 19 ~ 39

Transportation mode choice





Bus usage frequency

If bus will not in service?

■ Not feel: physically-disabled

CITIZENS CONSCIOUSNESS OF TRANSPORTATION POLICIES AND CHALLENGES OF TONDABAYASHI

Current Conditions of Transportation Systems in Tondabayashi City and Recognized Issues

- 1.An Increase in Automobile Usage
- 2. Declining Usage of Public Transportation Services
- 3. Population Change: Declining Birth Rate and Population Aging
- 4. Neighborhoods with Diverse Characteristics in the City
- 5. High Public Interest on Public

Transportation-Related Challenges of Tondabayashi City

- 1. Ensuring Smooth Mobility of All Citizens
- 2. Sustaining Public Transportation Services and Promoting Usage
- 3. Reduce Automobile Usage
- **4. Executing Measures Designed for Communities with Diverse Characteristics**
- 5. Cooperation and Coordination with Citizens

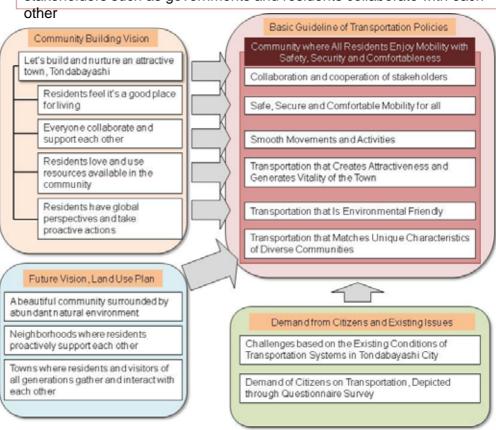
DISCUSSION: CONSTRUCTING A VISION TOWARD SMOOTH MOBILITY OF ALL CITIZENS

1. A Future Vision of Tondabayashi 2. Transportation Policies of Tondabayashi City

Tondabayashi City's basic principle of the community building effort is summarized in the Fourth Tondabayashi City General Plan, which reads, "let's build and nurture an attractive town, Tondabayashi." Given that, it states the city's future outlook should be a town where mindful people, who have been raised in the city, surrounded by the scenery filled with the nature of Kongo and Katsuragi mountains and clear water of Ishi river, support each other and continue leading healthy and vigorous lives, inheriting the history and tradition of the community as the center of Minami-Kawachi region.

3. Basic Principles of Transportation Policies

- 1). Establishing basic guidelines of an integrated transportation policy, based on the philosophy of community building in Tondabayashi
- 2). Setting concrete goals for transportation policies to facilitate safe, secure, comfortable and convenient mobility in an sustainable manner
- 3). Determining a road-map to implement transportation policies where stakeholders such as governments and residents collaborate with each



Basic Principle of How Transportation Policy Should Appear

Transportation Policy, Systems and Measures

Transportation Policy Structure

Basic Guideline of Transportation Policies						.			
Collaboration of stakeholders	Safe, secure and comfortable mobility for all citizens	Smooth mobility, assisting activities	Create vitality and promote attractiveness of the community	Environmental friendliness	Systems catered to unique characteristics of each community	Transportation Policy Categories	Transportation Policy Alternatives		
						Extending public transportation service network	Improve regional accessibility, connecting with railway networks		
							Extending fixed bus network that support collaboration and interaction among communities		
							Reforming the community bus services		
							Implementing diverse public transportation services catered to communities with diverse characteristics		
							Improve connectivity at transit hubs		
							Improving travel assisting services for disabled and senior citizens		
						Communication measures to discourage driving and promote public transportation	Improving information provision on using public transportation services		
							Implementing high-standard bus stops and coaches		
							Implementing IC-card systems and extending information provision services		
							Enforcing barrier-free standards at transit hubs and areas surrounding those facilities		
						controling automobile & promoting public transportation	Reducing driving and promoting public transportation usage through communication measures		
							Improving pedestrian and bike environment		
						Collaboration with citizens	Proactively disclose and provide information regarding transportation policy		
							Collaborate with citizens in instituing regional transportation policies		
							Conduct educational programs on transportation, collaborating with the local community, corporations and schools		
: Expected consequences of the transportation measure									

To The Future

: Unexpected but resulting consequences of the transportation measure

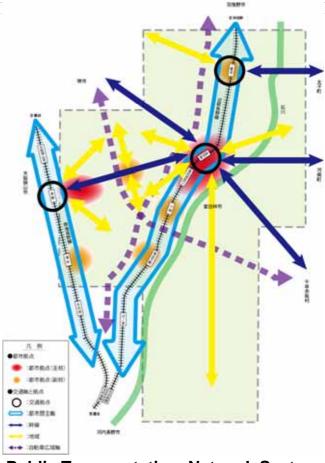
This study project was able to establish an integrated transportation vision with citizens as its protagonists. Its one-year discussion of the committee, where citizens, transportation service providers, governments and transportation planning professionals participated, established a framework of citizens involvement in building their own community. It is fair to state that the framework of this committee, in which a wide promotion of the activities from the planning stage of this activity was conducted, was well established and accepted as a transportation policy practice.

The accomplishment of this project should continue by implementing the measures of the transportation system vision proposed in this study.

DAITO, Takehiko / Managing Director Transportation System Studies Laboratory Co., Ltd. E-mail:daito@tss-lab.com

SAWADA, Masanori /Assistant Manager, Tondabayashi City E-mail:douro@city.tondabayashi.osaka.jp

MIHOSHI, Akihiro / Professor, Kinki university E-mail:mihoshi@civileng.kindai.ac.jp, phone:+81-6730-5880, fax:+81-6730-1320



Public Transportation Network System of Tondabayashi