



**CIB-W101 & The University of Tokyo Global COE
Co-hosted Workshop
– Urban Infrastructure and Land Use Control –**

Saturday, June 13, 2009, 13:00 - 18:00
The University of Tokyo
at 141 Room, Kogakubu Building No.14 in Hongo Campus
Hongo 7-3-1, Bunkyo-ku ward, Tokyo, Japan, 113-8656

Keynote Speech

Possible Future Transport and Land Use Strategies for Sustainable Urban Development in European Cities

Michael Wegener

Spiekermann & Wegener (S&W) Urban and Regional Research
Dortmund, Germany
E-mail: mw@spiekermann-wegener.de
<http://www.spiekermann-wegener.de/en>

Abstract

The concept of sustainable development has led to a paradigm shift in urban planning in European cities. In recent years air pollution, traffic noise and loss of open space and more recently energy scarcity and climate change have become leading issues of urban planning. This paper looks into the achievements and challenges of transport and land use planning in European cities today. It starts with an overview on current policies at the European level to promote a better integration of transport and land use planning in European cities, summarises the results of studies on integrated transport and land-use strategies and presents examples of successful best practice in this field in European cities. To demonstrate the magnitude of the challenge, it presents results of the EU project STEPs (Scenarios for the Transport System and Energy Supply and their Potential Effects), which examined the impact of different scenarios of fuel price increases, resulting market responses and different combinations of transport and land use policies on regional economic development, travel patterns and the environment in metropolitan areas using several European and urban/regional simulation models.

Professor Dr.-Ing. Michael Wegener

A partner in Spiekermann & Wegener Urban and Regional Research (S&W), Former Executive Director of the Institute of Spatial Planning of the University of Dortmund (IRPUD). In 1888-89 he was a Professor at the Department of Civil Engineering of the University of Tokyo.

Evaluation of Public Services and Land Use Control using a Computable Urban Economic (CUE) Model -Application of VMcue to the Tokyo Metropolitan Area-

Kiyoshi Yamasaki

Senior Research Fellow, Value Management Institute, Ltd.
Mita 3-4-10, Minato-ku, Tokyo Japan 108-0014
E-mail: kiyoshi_yamasaki@vmi.co.jp

Takayuki Ueda: Professor, School of Engineering, The University of Tokyo
Morito Tsutsumi : Associate Professor, Department of Policy and Planning
Sciences, University of Tsukuba

Shinichi Muto : Associate Professor, Department of Civil and Environmental
Planning, Yamanashi University

Abstract

The present study employs a Computable Urban Economic (CUE) model as a tool for policy analysis. The CUE model was developed in the tradition of the Transport-Land Use Interaction (TLUI) model. The CUE model has several benefits in comparison to the older TLUI models. First, the CUE model is based entirely on the urban economic theory of Alonso(1964). A microeconomic foundation in urban economics enables consistent evaluation of policies with standard cost-benefit analysis methodologies. The location choice behaviors of residents and business sectors were described using a logit model following Anas(1984); the demand-supply in land markets were assumed to determine land price distribution in an urban economy. The transport demand for each type of transport service as derived from utility maximizing or profit utility maximizing behaviors and the Wardrop equilibrium of the transport network in tradition was simulated. The present paper aims to demonstrate the impact of public services and land use policies in the Tokyo Metropolitan Area by applying a CUE model to examine whether the polices generated through discussions between policy makers can improve the quality of urban life in Tokyo.

Study on Assessment Model of Future Urban Visions in the Depopulating Period

Nozomu Kiuchi

National Institute of Land & Infrastructure Management (NILIM)
1 Tachihara, Tsukuba City, Ibaraki, Japan, 305-0802
E-mail: kiuchi-n92ta@nilim.go.jp
Yoshimitsu Ishii (Building Research Institute (BRI))
Hitoshi Nishino (NILIM)
Tomohiko Sakata (NILIM)

Abstract

In Japan, from around 2006, our population is decreasing for the first time since the WWII. While population of Tokyo and other megalopolitan cities seems to be comparatively stable for some decades, the population of other middle and small size cities is already in the decreasing stage, and some stand on the edge of radical decline. In fact, it is in these cities that spread of various urban land uses, because of motorization and lack of effective control, has reached to an extreme.

However, taking in account of the future drastic depopulation, increase of elderly citizens and environmental and financial constraint, restructuring of urban structure according to “Choice and Concentration” of planning measures and public investment seems to be inevitable to create a sustainable city. It is under these circumstances that the main target of our recent national planning policy to provincial cities is set as “conversion to an intensive urban structure”.

The efforts to clarify a future concrete vision of “intensive urban structure” for individual cities still needs to be done, and “Choice and Concentration” necessitates objective, rational and persuasive explanation of grounds especially to those who had not been chosen. Consequently, assessment of city planning policies, presenting multiple optional visions and measures concerning future urban structure, comparing and appraising options from various viewpoints of sustainability, and finally choosing one by a civil consent.

The National Institute for Land and Infrastructure Management by a research project “Study on Assessment Model of Future Urban and Regional Visions in the Depopulating Period” is attempting to develop such system. The research is composed of 5 subjects; 1. Development of application methods of assessment input and output data, 2. Systemized organizing of optional planning measures, 3. Development of prediction methods of future urban structure, 4. Development of evaluation methods of future urban structure, and 5. Development of integrated assessment tool. Despite many approaches to assessment of city planning especially in Europe and America, most Japanese cases are limited to demand forecasting, and we have special theme of depopulation. This report will introduce these backgrounds of this research project, and indicate issues under the Japanese context.

Easing Traffic Load through Increasing Total Floor Area -Special Incentive Zoning applied in Ginza District, Central Tokyo -

Tatsuo Akashi

The University of Tokyo, Machizukuri Professional School
Kogakubu Building No.14 in Hongo Campus
Hongo 7-3-1, Bunkyo-ku ward, Tokyo, Japan, 113-8656
E-Mail: akashi-t2fw@nilim.go.jp

Abstract

Traffic generation patterns such as peak time differ by floor use categories. Considering this fact, it is rational to reduce peak time traffic load on specific infrastructures by operating floor area quantity through zoning regulation, and further more, there is a possibility to reduce peak traffic load even with total floor area increase by special incentive zoning which operates floor area supplies by use categories. A new type incentive zoning of this kind called “Effective land use zone of urban renovation type” was actually introduced in Ginza district in central Tokyo in 1998. Unique characteristic of this zoning is applying different floor area ratio (FAR) by office use and commercial use, and giving FAR bonus to commercial use in order to be encouraging renovation of attractiveness as top-brand downtown, if the office floor occupation is less than one third of the building. Does it really effective to ease terrible congestion in morning peak hour of commuter railways? This paper makes it clear the rationality of this special incentive zoning that applied to the specific area of Ginza district in central Tokyo, where has traditionally fashionable downtown characteristics as well as concentrates many lines of commuter railways.

URBAN SUSTAINABILITY IN DECLINING ERA: CHALLENGES AND RESPONSE

Kazi Saiful Islam

Lecturer, Urban and Rural Planning Discipline
Khulna University, Khulna-9208, Bangladesh
Email:saiful_ku@yahoo.com

Abstract:

World population is now passing through the transitional point. Some countries are losing population while others are gaining. The developing countries will be the last to pass through this tipping point. Decline of urban population is becoming more and more common phenomenon nowadays. Planning and managing cities are becoming easier said than done. This paper briefly discusses different aspects of urban declination. This paper has also addressed the global and local challenges and issues of urban declination and subsequently their response pattern at the same scale.

A Test of Local Financial Approach To Cooperative Land Use and Public Services Management

Naohiko Iida

Chief Research Engineer,
Department of Housing and Urban Planning,
Building Research Institute, Japan
E-Mail:iida@kenken.go.jp

Abstract

This paper shows land use controls has a strong relationship between and infrastructure management properly servicing and acting in concert of the kind of land use, from the view of both the financial aspect and the intention of the local communities. So a case study is illustrated, on switching their urban polices from "Suspended UCA" to new options, from such viewpoints. First of all, what kind of solutions are actually used for seventy-six (76) local communities whose area is designated as Urbanization Control Areas (UCA) where private urbanization-oriented investment is severely controlled because of poor urban infrastructures, to make a decision whether applying for Urbanization Promotion Areas (UPA) in association with supply of urban infrastructures, or accepting UCA as before, in Saitama, northern to Tokyo Metropolitan Area. Secondary, these cases show such presumptive viewpoints relate to a consensus-building of the communities, for both in vision of future land use patterns and forms, and in scope of financial resources for operating public services supportive to these land use forms. And referring these viewpoints, each communities choose whether UPA or UCA, taking into such circumstantial conditions as their urbanization potentials based on geographical locations and required urban infrastructure networks, from the beyond the municipal jurisdictions' scope, in expectation of coming depopulation, strained financial, and environmental-friendly ages. Finally, a local financial approach is illustrated to cooperate between land use controls and public service supply, taking account of local governmental finances which depend on both actual land use patterns and public service operations, toward sustainable up-grading public welfare.

CIB-W101 -Spatial Planning and Infrastructure Development

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Meetings & Conference

CIB-W101 & The University of Tokyo GCOE co-hosted Workshop (June.2009,Tokyo)

Dublin Meeting settinon at COBRA2008 (Sep.2008)

London Meeting in conjunction with COBRA06 (Sep.2006)

Meeting in conjunction with SB05 Tokyo (Sep.2005)

Tokyo Conference on Urban Regeneration (Sep.2002)

Next Meeting Session

World Congress (May 10th - 13th,2010, The Lowry, Salford Quays, UK)

1. Theme

After Urban Regeneration Achievements, Sub Effects and Lessons for the Future

2. Purpose

Urban Regeneration has been a major issue in last two or three decade in lots of cities in the world, and it still has more importance in current and future cities because sustainable development has become inevitable. Many projects and strategies were already implemented and done, so that there must be a lot of instructive lessons. This session is to clarify and discuss on the results of the past Urban Regeneration for the future.

3. Date & Place 10-13 May, 2010 at Salford Quays, UK

4. More information

Please see the website below and click CIB Working Commission, W101
<http://www.cib2010.com/>

CIB W101 Website <http://ua.t.u-tokyo.ac.jp/okabelab/yasami/CIB/index.htm>



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