

CURRICULUM VITAE

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Masanobu Kii

Contact

E-mail: kii@eng.kagawa-u.ac.jp

Contact address: Faculty of Engineering, Kagawa University
2217-20 Hayashi-cho, Takamatsu, Kagawa 761-0396 JAPAN
Phone: +81-87-864-2140

Summary

- Doctor of engineering with concentration on urban/transport planning
- Excellent analytical skill in transport-energy modeling, statistics and computer simulations
- Many successful presentations in academic conferences
- Strong research interest in transport policy assessment for sustainable energy and environment
- Adequate practical experience and educational background to work on a wide range of subjects with inter-disciplinary perspective

Education

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| Apr. 1997 | Doctor of engineering |
| - Sep. 2000 | Department of civil engineering in Graduate school of science and engineering, Tokyo Institute of Technology |
| Apr. 1995 | Master of engineering |
| - Mar. 1997 | Department of mechanical and environmental informatics in Graduate school of information science and engineering, Tokyo institute of technology |
| Apr. 1991 | Bachelor of art in civil engineering |
| - Mar. 1995 | Department of civil engineering, Tokyo institute of technology |

Employment history

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| Dec. 2009 | Associate Professor |
| -present | Faculty of Engineering, Kagawa University |
| Apr. 2008 | Researcher |
| - Nov. 2009 | Research Institute of Innovative Technology for the Earth |
| Jan. 2004 | Researcher |
| - Mar. 2008 | Japan Automobile Research Institute |
| Oct. 2000 | Researcher |
| - Dec. 2003 | Institute for Transport Policy Studies |

Experience

- Associate Professor, Faculty of Engineering, Kagawa University, December 2009 - present
[Working on, 1: Urban and Transport policy analysis, 2: Study on global urbanization mechanism, 3: Transport energy and environment, 4: Education for transport and urban studies]
- Researcher, Research Institute of Innovative Technology for the Earth, April 2008 – November 2009
[Working on, 1: Sustainable urban transport system analysis, 2: Global land use modeling for climate change mitigation and adaptation policy analysis, 3: Cost benefit analysis on fuel efficient automobile technology]
- Researcher, Japan Automobile Research Institute, January 2004 – March 2008
[Worked on, 1: CO2 emission estimation in transport sector, 2: survey on policies and methodologies for long term energy security and climate change, 3: assessment of automobile fuel economy regulation and technology diffusion (reported to Japanese Government), 4: effect of speed limiting device for heavy duty trucks on GHG emission, 5: fuel quality management system in developing countries]
- Researcher, Institute for transport policy studies, October 2000 – December 2003
[Worked on, 1: research on railway user behavior for improving public transport service and reviving urban activities, 2: international project for urban transport and environment including several developing countries and 3: report to president of the institute]
- Member of research project for urban environmental policy issues in developing countries, funded by Japan Society for Promotion of Science (JSPS-RFTF97I00603), 1999-2001.
[Worked on analytical section of synergy effect of transport, location choice and land use under the high pressure of population concentration in Metro Manila, Philippines]
- Visiting scholar, University of Delaware, department of civil and environmental engineering, May-November, 1998
[Research work for planning and design of road intersection based on traffic engineering analysis]

Research interests

Transport policy analysis for GHG emission reduction; Impact of vehicle and fuel technology on energy security and climate change; Management of urbanization and motorization; Sustainable transport system;

Award

Outstanding paper award to “Macro-To-Micro Urban Simulation Model for the QOL Evaluation”, the 8th international conference on computers in urban planning and urban management

Publications

1. Zhenyu Gao, Masanobu Kii, Atsuko Nonomura, Kazuki Nakamura: Urban expansion using remote-sensing data and a monocentric urban model, *Computers, Environment and Urban Systems*, In Press, Corrected Proof, Available online 31 May 2017, <https://doi.org/10.1016/j.compenvurbsys.2017.05.002>
2. Masanobu Kii, Hitomi Nakanishi, Kazuki Nakamura, Kenji Doi: Transportation and Spatial Development: An overview and a future direction, *Transport Policy*, Vol.49, pp.148-158, 2016.
3. Zhenyu GAO, Masanobu KII, Atsuko NONOMURA, Kazuki NAKAMURA: An Analysis on Urban Expansion Using Remote Sensing Data—Case of Harbin, China—, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management) Vol. 72, No. 5, I_495-I_503, 2016.
4. Kazuki NAKAMURA, Masanobu KII: Perceived Evaluation For Quality Of Street Based On The Hierarchy Of Pedestrian Needs, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management) Vol. 72, No. 5, I_861-I_870, 2016 (in Japanese).
5. Masanobu KII, Yuki NAGANO, Kazuki NAKAMURA, Hiroyasu SHIMIZU: Efficiency Improvement Potential of Airline Network In Africa, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management) Vol. 72, No. 5, I_821-I_832, 2016 (in Japanese).
6. Masanobu KII, Kazuki NAKAMURA: Modeling Global Urban Expansion And Future Projection, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management), Vol. 72, No. 1,25-33, 2016 (in Japanese).
7. Masanobu KII, Kazuki NAKAMURA: Scaling Rules Of Visit Frequency Using Gps Trajectory Data Of Car Travel, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management), Vol. 71, No. 5, I_433-I_442, 2015 (in Japanese).
8. Kazuki NAKAMURA, Yoshitsugu HAYASHI, Vichiensan VARAMETH, Masanobu KII: Evaluation for Low-carbon Land-use Transport Development with QOL Indicators in Asian Developing Megacities: a Case Study of Bangkok, *Journal of the Eastern Asia Society for Transport Studies*, Vol. 11, pp.1047-1063, 2015.
9. Masanobu KII, Jun-ichi TERAOKA, Kazuki NAKAMURA: Analysis of Efficient Public Transport Network Using Smart Card Data and Simulation Approach in Takamatsu, Japan, *Journal of the Eastern Asia Society for Transport Studies*, Vol. 11, pp.1109- 1121, 2015.
10. Masanobu Kii, Keiji Sakamoto, Yoichi Hangai, Kenji Doi, The Effects of Critical Peak Pricing for Electricity Demand Management on Home-Based Trip Generation, *IATSS research*, Vol. 37, Issue 2, pp. 89-97, 2014.
11. Masanobu Kii, Keigo Akimoto, Kenji Doi, Measuring the Impact of Urban Policies on Transportation Energy Saving Using a Land Use-Transport Model, *IATSS research*, Vol. 37, Issue 2, pp. 98-109, 2014.
12. Kenji DOI, Masanobu KII, Toshinori MATSUI: Reexamining The Process And The Impacts Of The Entire Abolition Of Urbanization Control Areas In Kagawa Prefecture And Current Challenges In Institutional Design For Land Use Control After The Abolition, *Journal of Japan Society of Civil Engineers*, Ser. D3 (Infrastructure Planning and Management)
13. Vol. 70, No. 5, I_443-I_452, 2014 (in Japanese).
14. Masanobu Kii, Keigo Akimoto, Kenji Doi, A Land-Use Transport Model to Assess the Impact of Urban Policies on Carbon Dioxide Reduction and Sustainability, *Journal of the Eastern Asia Society for Transport Studies*, Vol. 10, pp.1112-1128, 2013
15. Masanobu Kii, Keigo Akimoto, Ayami Hayashi, Risk of hunger under climate change, social disparity, and

- agroproductivity scenarios, *Environmental Modeling and Assessment*, Volume 18, Issue 3 (2013), Page 299-317.
16. Ayami Hayashi, Keigo Akimoto, Toshimasa Tomoda, Masanobu Kii, Global evaluation of the effects of agriculture and water management adaptations on the water-stressed population, *Mitigation and Adaptation of Strategies for Global Change*, Vol.18, pp.591-618, 2013.
 17. Masanobu KII, Shintaro SONE, Hitoi ONO, Yoichi HANGAI, Kenji DOI: Effect Of Electricity Critical Peak Pricing On Home Based Trip Generation, *Journal of Japan Society of Civil Engineers, Ser. D3 (Infrastructure Planning and Management)*, Vol. 69, No. 5, I_247-I_252, 2013 (in Japanese).
 18. Shitaro SONE, Masanobu KII, Kenji DOI: Socio-Economic Impacts Of High-Speed Rail In Shikoku Region, *Journal of Japan Society of Civil Engineers, Ser. D3 (Infrastructure Planning and Management)* Vol. 69, No. 5, I_639-I_648, 2013 (in Japanese).
 19. Tsunaki YAMADA, Masanobu KII, Kenji DOI, Emiko ITAMI: Estimation Of Shopping Refugees Considering Spatial Supply-Demand Balance Of Retail Service, *Journal of Japan Society of Civil Engineers, Ser. D3 (Infrastructure Planning and Management)* Vol. 69, No. 5, I_91-I_99, 2013 (in Japanese).
 20. Roger Mackett, Anthony D May, Masanobu Kii and Pan Haixiao (eds.), *Sustainable transport for Chinese cities*, Emerald Group Publishing, 2013.
 21. Masanobu Kii, Keigo Akimoto, Kenji Doi, Random-growth urban model with geographical fitness, *Physica A*, 391, pp.5960-5970, 2012.(doi.10.1016/j.physa.2012.07.033)
 22. Masanobu Kii, Keigo Akimoto, Ayami Hayashi, Risk of hunger under climate change, social disparity, and agroproductivity scenarios, *Environmental Modeling and Assessment*, 2012. (doi. 10.1007/s10666-012-9348-9)
 23. Kenji Doi and Masanobu Kii, Looking at sustainable urban mobility through a cross-assessment model within the framework of land-use and transport integration, *IATSS research*, Vol.35, pp.62-70, 2012.
 24. Ayami Hayashi, Keigo Akimoto, Toshimasa Tomoda, Masanobu Kii, Global evaluation of the effects of agriculture and water management adaptations on the water-stressed population, *Mitigation and Adaptation of Strategies for Global Change*, 2012. DOI 10.1007/s11027-012-9377-3
 25. Masanobu KII, Kenji DOI: A Study On Strategic Cross-Assessment Method For Urban Transport Policies Targeting At Shikoku Region, Japan, *Journal of Japan Society of Civil Engineers, Ser. D3 (Infrastructure Planning and Management)*
 26. Vol. 68, No. 5, I_75-I_85, 2012 (in Japanese).
 27. Hiroaki Miyoshi and Masanobu Kii (eds.), *Technological Innovation and Public Policy: The Automotive Industry*, Palgrave Macmillan, 2011.
 28. Keigo Akimoto, Fuminori Sano, Takashi Homma, Junichiro Oda, Miyuki Nagashima and Masanobu Kii: Estimates of GHG emission reduction potential by country, sector, and cost, *Energy Policy*, 38, pp. 3384-3393, 2010.
 29. Masanobu Kii, Hiroaki Miyoshi, and Masayuki Sano, "Automotive Technology Policy in Japan", in Hiroaki Miyoshi and Yoshifumi Nakata eds., *Have Japanese Firms Changed? The Lost Decade*, Palgrave Macmillan, pp.273-291, 2010.
 30. Kenji Doi, Masanobu Kii and Hitomi Nakanishi, An integrated evaluation method of accessibility, quality of life, and social interaction, *Environment and Planning B: Planning and Design*, Vol.35, No.6, pp.1098-1116,

2008.

31. Kenji Doi, Masanobu Kii and Hitomi Nakanishi, An integrated evaluation method of accessibility, quality of life, and social interaction, *Environment and Planning B: Planning and Design*, advance online publication, doi:10.1068/b3315t, 2007.
32. Shinya Kikuchi, Nopadon Kronprasert and Masanobu Kii, Lengths of Turn Lanes on Intersection Approaches: Three-Branch Fork Lanes-- Left-Turn, Through, and Right-Turn Lanes, *Transportation Research Record*, 2023, pp.92-101, 2007.
33. Masanobu Kii, Atsushi Kameoka, Kenzo Hosoi and Kiyoyuki Minato: Impact assessment of fuel-efficient technologies for passenger vehicle, *Energy and Resources*, vol.28, No.3, pp.27-33, 2007. (in Japanese)
34. Masanobu KII and Kenji DOI : Multiagent land-use and transport model for the policy evaluation of a compact city, *Environment and Planning B: Planning and Design* v. 32, No. 4, pp.485-504, 2005.
35. Masanobu KII, Keiko HIROTA, Kiyoyuki MINATO: A Macro Analysis of CO2 emission reduction by truck transport efficiency promotion, *INFRASTRUCTURE PLANNING REVIEW* (in Japanese)
36. Shinya Kikuchi, Masanobu Kii, and Partha Chakroborty: Lengths of Double (Dual)-Left-Turn Lanes, *Transportation Research Record*, No. 1881, pp72-77, 2004.
37. Masanobu KII and Kenji DOI, Macro-to-Micro Urban Simulation Model for the Assessment of Quality of Life, *International Journal of Urban Sciences*, Vol. 7, No. 1, pp. 32-46, 2004
38. Masanobu KII and Shingya HANAOKA: Comparison of efficiency between private and public transport considering urban structure, *IATSS Research*, vol. 27, No. 2, pp. 6-15, 2003
39. Masanobu KII: Study on optimal station plaza planning considering demand transfer among multiple stations, *INFRASTRUCTURE PLANNING REVIEW*, Vol. 20, pp. 745-750, 2003 (in Japanese)
40. Masanobu Kii and Kenji Doi, "Forecasting the interaction system between urban expansion and motorization." In T. Ohmachi and E. R. Roman, ed., *Metro Manila: In search of a sustainable future*, University of the Philippines Press, 2002
41. Masanobu KII, Kenji DOI, Kwangmun KIM and Ma. Sheilah A. Gaabucayan; High-Resolution Urban Land-Use Projection System For Estimating Car Trip Generation In Suburban Area, *The 9th World Conference on Transport Research, Selected Proceedings 2002*.
42. Kenji DOI, Masanobu KII, Kwangmun KIM, Sheilah A. GAABUCAYAN; A model analysis on controllability of synergetic system between suburbanization and motorization in the Metro Manila, *Journal of infrastructure planning and management*, No. 674, 2001 (in Japanese)
43. Kenji DOI, Masanobu KII, Hussein S. LIDASAN; Issues of commuter transport in developing countries – A case study in Metro Manila, Philippines-, *IATSS review*, vol. 25, no. 3, 2000 (in Japanese)

Conference presentation

1. Masanobu Kii, Taichi Nakamura: Capturing urban centers using night time lights, *Applied Urban Modeling*, Cambridge, UK, 22 June 2017.
2. Masanobu Kii, Kazuki Nakamura, Keigo Akimoto: Projections of global urbanization under the SRES and SSP scenarios, *the 14th World Conference on Transport Research*, 2016.
3. Masanobu Kii, Kazuki Nakamura: Global urban land use modeling to test its sensitivity of urban expansion to housing and transportation technology improvement, *the 14th International conference on Computers in*

Urban Planning and Urban Management (CD-ROM), 2015.

4. Masanobu Kii and Kenji Doi, Study on economic assessment for national land use structure considering disaster risk by earthquake, the 13th World Conference on Transport Research, 2013.
5. Masanobu Kii, Masahide Ishizuka, Water Quality Control Concept in Seto Inland Sea, Proceedings for EMECS 10 - MEDCOAST 2013 Joint Conference, 2013.
6. Masanobu Kii and Kenji Doi, A strategic cross-assessment model for vision-led and consensus-led decision making towards sustainable urban transport, the 12th World Conference on Transport Research, 2010.
7. Masanobu Kii and Hiroaki Miyoshi, Projections and sensitivity analysis for the spread use of electric vehicles, International Conference on Social Sciences, 2010.
8. Hiroaki Miyoshi and Masanobu Kii, Economic Features of Intelligent Transport Systems and Associated Public Policies, International Conference on Social Sciences, 2010.
9. Masanobu Kii and Hiroaki Miyoshi, Economic features of safety-related intelligent transport systems and their diffusion dynamics in urban spaces, 17th ITS World Congress, Busan, Korea, October, 2010.
10. Masanobu KII and Kenji DOI: Modeling framework on urban compactness, quality of life, and productivity, WCTR-SIG1 meeting in UC Berkeley, 2007.
11. Masanobu Kii, Kiyoyuki Minato, and Kenzo Hosoi, Impact analysis of automotive fuel economy standards on a consumer's economic benefit in Japan, Transport Research Board 86th annual meeting, 2007.
12. Shinya Kikuchi, Nopadon Kronprasert, and Masanobu Kii, The Lengths of Turn Lanes on Intersection Approaches: the Case of Three-Branch Fork Lanes (Left-Turn, Through, and Right-Turn Lanes), Transport Research Board 86th annual meeting, 2007.
13. Masanobu KII, Keiko HIROTA, Kiyoyuki MINATO, A study on modal shift potential considering public transport operation, the 9th International conference on Computers in Urban Planning and Urban Management 2005.
14. Masanobu KII and Masayuki Harada: Urban And Transport Policy Scenarios In Aged Society, Journal for the 5th conference on Eastern Asia Society for Transport Studies, pp.1549, 2003
15. Masanobu KII, Kenji DOI and Kwangmun KIM; High-resolution Urban Land-Use Projection System for Estimating Car Trip Generation in Suburban Area, World Conference on Transportation Research, 2001.
16. Kenji DOI, Kwangmun KIM, Masanobu KII and Ma. Sheilah A. Gaabucayan; Integrated Equilibrium Model for the Evaluation of Transport Policies Considering Impacts of Rapid Land Use Changes, World Conference on Transportation Research, SIG1 meeting in Portland, 2000