
EDA USTAOGU

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PERSONAL HISTORY

Date of Birth: 07/07/1978
Place of Birth: Kayseri, Turkey
Nationality: Turkish
Marital Status: Single

POSTGRADUATE EDUCATION

- 1. Institution/Department:** European Scientific Institution (ESI)
From-to: March 2021-June 2022
Position: Post-doc training fellow in “Social Sciences and Humanities in a Post-crisis Period 2021/2022”
- 2. Institution/Department:** Koc University, Istanbul, Turkey/College of Social Sciences and Humanities
From-to: May 2020-December 2020
Position: Worked as part of the UrbanOccupationsOETR-ERC Funded Project as a post-doc research fellow
- 3. Institution/Department:** Gebze Technical University, Kocaeli, Turkey/Department of Geomatics Engineering
From-to: January 2017-September 2020
Position: Worked as a post-doc researcher (PI) in the TUBITAK-2232 project named ‘Modeling Urban and Regional Land Use Dynamics with the Example of Case Studies in Turkey’
- 4. Institution/Department:** European Commission Joint Research Centre, Ispra (VA), Italy/Sustainability Assessment Unit
From-to: March 2012-September 2014
Position: Scientific officer at INTESA-Integrated Sustainability Assessment: Scenarios, Platform and Indicators, Action no.22009.

GRADUATE EDUCATION

- 1. University/Department:** University College Dublin (UCD)/School of Geography, Planning, and Environmental Policy
Start-Graduation Date: November 2007-December 2012
Degree: PhD in Public Policy and Planning (holder of the PLUREL PhD research fellowship)
Courses Taken: Research Paper, Urban and Regional Economics, Transport and the Environment, Transportation Planning, Applied Research Methods.
- 2. University/Department:** Middle East Technical University (METU)/Economics
Start-Graduation Date: September 2004 –2006 (from then, on leave)
Degree/GPA: PhD in Economics (not completed)/GPA: 3.86/4.00

Courses Taken: Economics of Technology Policy, Urban Property Development and Planning, Monetary Theory, Theory of Public Goods, Financial Theory and Corporate Policy, Application of Advanced Statistical Techniques, Micro econometrics.

3. University/Department: METU/Economics

Start-Graduation Date: September 2000-September 2003

Degree/GPA: Master of Science in Economics/GPA: 3.65/4.00

Courses Taken: Microeconomic Theory I, Macroeconomic Theory I, Econometric Methods I, Turkish Economy, Microeconomic Theory II, Macroeconomic Theory II, Econometric Methods II, Thesis Seminar.

UNDERGRADUATE EDUCATION

University/Department: METU/City and Regional Planning

Starting-Graduation Date: September 1996-June 2000

Degree/GPA: Bachelor of City Planning/GPA: 3.27/4.00

THESIS & PROJECTS

PhD Thesis

A Scenario-Based Impact Evaluation of Rapid Rail Infrastructure Investments on Urban Form and Development in the Greater Dublin Area

PhD Thesis Summary

The main aim of the study is to examine new Metro North infrastructure provision and its impacts on future land development processes in the Greater Dublin Area (GDA). The Dublin Area has experienced significant population and employment growth starting from the early 1990s. The limited integration of transportation and land-use planning activities has contributed to uncontrolled urban growth, and coming to the early 2000s, sprawl type development has occurred in the peri-urban areas surrounding the existing urban border of the Dublin Region. It is widely accepted that sprawl type development is generally associated with high social, economic and environmental costs. Under this situation, the GDA requires further examination considering future land development processes and new infrastructure provisions within the context of sustainable urban development. This constructs a base for the present study which focuses on economic evaluation of alternative forms of urban development in relationship with the issue of sustainability in new transport provisions within the GDA. The literature on sustainability of transport systems and urban development suggests that there are strong linkages between urban spatial structure and efficient transportation systems. Based on this sustainability considerations, the impact-assessment of newly proposed Metro North project within the GDA is carried out by developing methods of economic appraisal i.e. Cost-Benefit Analysis (CBA) is the selected methodology, and is evaluated based on alternative land development scenarios. Various scenarios are generated by the MOLAND Model applications including: A baseline scenario incorporating a continuation dispersed pattern of urban development and an alternative scenario with rapid rail-oriented corridor development, both presenting the conditions of economic growth. An alternative scenario is also developed for the recessionary development case considering the prolonged recession in the GDA. For the CBA assessment of *with rail* and baseline scenarios of economic growth and recession, the impacts and indicators specified are: capital costs, public service provision costs, accident costs, vehicle operation costs, system operating cost and revenues, travel time and costs of carbon dioxide emissions and local air pollution. The results obtained from the CBA model show that in the *medium-term* baseline *business-as-usual* scenario with no significant development in rapid rail infrastructures is less costly than the *with rail* scenario resulting in more compact developments

along the Metro North catchment area. Nevertheless, it is also concluded that higher benefits of the Metro North investment integrated with a more compact land development policy could be achievable in the *longer-term*. Another issue is that the scenarios of recessionary development may have different implications in terms of costs and benefits associated with the resultant urban form of such scenarios. Further research is completed in the form of sensitivity analysis to establish if such benefits can still be achieved. The results and findings of the scenario-based CBA model of this study may provide implications for the best future policies and their implementation. Therefore, this study is important in constructing a framework for the future transport policy and planning decisions concerning the GDA.

Research Projects

- Industrialisation and Urban Growth from the mid-nineteenth century Ottoman Empire to Contemporary Turkey in a Comparative Perspective, 1850-2000, European Research Council (ERC) - Starting Grant, Nr. 679097, started in October 2016 and concluded in September 2022; worked as a post-doc researcher with Dr. M. Erdem Kabadayı (PI)
- TUBITAK-2232-Modeling Urban and Regional Land Use Dynamics with the Example of Case Studies in Turkey.
The research is aimed at developing a methodology in terms of review of the literature and data requirements, and conducting socio-economic and spatial data development where necessary for the integration and testing of these data with the dynamic land use models, which will provide a base for the sustainability impact assessment of land development linked with transport infrastructure investments.
- INTESA-Integrated Sustainability Assessment: Scenarios, Platform and Indicators, Action no.22009, European Commission Joint Research Centre, Institute for Environment and Sustainability, Sustainability Assessment Unit H08
- VOLANTE (Visions of Land Use Transitions in Europe) Project <http://www.volante-project.eu/>
VOLANTE provides an interdisciplinary scientific basis to inform land use and natural resource management policies and decision-making. It is achieving this by advancing knowledge in land system science and using this knowledge to develop a ROADMAP FOR FUTURE LAND RESOURCE MANAGEMENT IN EUROPE.
- Urban Environment Project (UEP)
The aim of this multi-disciplinary, inter-institutional research project is to better understand the link between development, land-use change and associated economic and environmental impact within urban regions. The project is based at UCD's Urban Institute Ireland and includes academic partners in TCD and NUI Maynooth as well as a specialist GIS company, ERA-Maptech. The partners also work with the local authorities and regional authorities in the Greater Dublin Region.
- PLUREL-Peri-Urban Land Use Relationships-Strategies and Sustainability Assessment Tools for Urban-Rural Linkages, Integrated Project, Contract No. 036921
<https://cordis.europa.eu/project/id/36921>
PLUREL is an integrated project funded within the 6th Research Framework Programme of the European Union. Thirty-six partners from 14 European countries and China participated in the project. It has been coordinated by the University of Copenhagen. The PLUREL project aimed to achieve a deeper understanding of the changing relationships between urban and rural land use with an emphasis on the most dynamic portion, that of peri-urban areas. It has developed methods and tools to assess the environmental, social and economic impacts of land use changes. Potential strategies and good practice examples have been identified in order to promote the sustainable development of land use systems in rural-urban regions, especially the peri-urban.

Research Interests

Economic Appraisal of Transportation Infrastructure, Sustainability Impact Assessment of Public Policy and Planning, Urban Economics, Land Use and Environmental Science

Collaborators

Internal: Dr. M. Erdem Kabadayı^{*}, Dr. Arif Çağdaş Aydınoglu^{**}, Ms. Rabia Bovkır^{**}, Mr. Suleyman Sisman^{**}

External: Carlo Lavallo⁺, Filipe Batista e Silva⁺, Dr. Chris Jacobs-Crisioni⁺, Dr. Carolina Perpina Castillo⁺, Dr. Brendan Williams⁺⁺, Dr. Enda Murphy⁺⁺, Dr. Harutyun Shahumyan⁺⁺, Dr. Sheila Convery⁺⁺, Dr. Laura Petrov⁺⁺⁺, Hedwig van Delden⁺⁺⁺, Dr. Marcus Collier⁺⁺⁺⁺

^{*} Koc University, College of Social Sciences and Humanities, Istanbul, Turkey

^{**} Department of Geomatics Engineering, Gebze Technical University, Gebze-Kocaeli, Turkey

⁺ European Commission DG-Joint Research Centre Ispra, IES-Sustainability Assessment Unit, Italy

⁺⁺ School of Geography, Planning and Environmental Policy, UCD, Ireland

⁺⁺⁺ European Commission DG-Joint Research Centre Brussels, Strategy and Work Programme Coordination, Belgium

⁺⁺⁺⁺ RIKS, Netherlands

⁺⁺⁺⁺ School of Natural Sciences, Trinity College Dublin

Publications

Journal Articles:

Ustaoglu, E. (2023, under review) ‘A spatial econometric analysis of the regional variations of residential energy consumption in Europe’. *Energy Efficiency*.

Ustaoglu, E., Ortega Lopez, G., Gutierrez-Alcoba, A. (2023, under review) ‘Building composite indicators for the territorial quality of life assessment in European regions. Combining data reduction and alternative weighting techniques’. *Environment, Development and Sustainability*.

Ustaoglu, E. (2023, under review) Using night-time lights and statistical data to measure regional inequality in Turkey. *Remote Sensing Applications: Society and Environment*.

Sisman, S., **Ustaoglu, E.,** Aydınoglu, A. C. (2023, under review) Spatio-temporal evolution of urban and agricultural land cover/use in Turkey using the space-time cube model. *Environment, Development and Sustainability*.

Ustaoglu, E., Williams, B. (2023) ‘Institutional settings and effects on agricultural land conversion: A global and spatial analysis of European regions’. *Land*, 12(1): 47.

Ustaoglu, E. (2022) ‘An assessment of land use/cover suitable for urban green space development: An example of an integration of GIS with the Multi-Criteria Analysis (MCA) approach’. *European Scientific Journal*, 18(35): 1.

Bovkır, R., **Ustaoglu, E.,** Aydınoglu, A. C. (2022) ‘Assessment of urban quality of life index at local scale with different weighting approaches’. *Social Indicators Research*, Doi: <https://doi.org/10.1007/s11205-022-03036-y>

Ustaoglu, E., Jacobs-Crisioni, C. (2022) ‘What drives residential land expansion and densification? An analysis of growing and shrinking regions. *Land*, 11: 1679.

Ustaoglu, E., Kabadayı, M. E., Gerrits, P. J. (2021) ‘The estimation of non-irrigated crop area and production using the regression analysis approach: A case study of Bursa Region (Turkey) in the mid-nineteenth century’ *Plos ONE* 16(4): e0251091.

- Ustaoglu, E.,** Kabadayı, M. E. (2021) ‘Reconstruction of residential land cover and spatial analysis of population in Bursa Region in the mid-nineteenth century’. *Land* 10:1077.
- Ustaoglu, E.,** Sisman, S., Aydınoglu, A. C. (2021) ‘Determining agricultural suitable land in peri-urban geography using GIS and Multi Criteria Decision Analysis (MCDA) techniques.’ *Ecological Modelling* 455: 109610.
- Ustaoglu, E.,** Bovkır, R., Aydınoglu, A. C. (2020) ‘The estimation and spatial distribution of GDP with the integration of NPS-VIIRS nighttime light and MODIS EVI data: A case study of Turkey.’ *Environment, Development, and Sustainability* 23(7): 10309-10343.
- Ustaoglu, E.,** Aydınoglu, A. C. (2020) ‘Suitability evaluation of urban construction land in Pendik district of Istanbul, Turkey’. *Land Use Policy* 90: 104783.
- Ustaoglu, E.,** Aydınoglu, A. C. (2020) ‘Site suitability analysis for green space development of Pendik district (Turkey)’. *Urban Forestry & Urban Greening* 47: 126542.
- Ustaoglu, E.,** Aydınoglu, A.C. (2019) ‘Land suitability assessment of green infrastructure development: A case study of Pendik district (Turkey).’ *Tema. Journal of Land Use, Mobility and Environment* 12(2): 165-178.
- Ustaoglu, E.,** Aydınoglu, A. C. (2019) Regional variations of land-use development and land-use/cover change dynamics: A case study of Turkey. *Remote Sensing* 11: 885. <https://doi.org/10.3390/rs11070885>.
- Ustaoglu, E.,** Collier, M. (2018) ‘Farmland abandonment in Europe: An overview of drivers, consequences and assessment of the sustainability implications’. *Environmental Reviews* 26(4): 396-416. <http://doi.org/10.1139/er-2018-0001>.
- Ustaoglu, E.,** Williams, B., Petrov, L., Shahumyan, H., Van Delden, H. (2018) ‘Developing and assessing alternative land-use scenarios from the MOLAND Model: A scenario-based impact analysis approach for the evaluation of rail infrastructure provisions and urban development in the Greater Dublin Region’. *Sustainability* 10(1): 61. Doi: 10.3390/su10010061
- Ustaoglu, E.,** Batista e Silva, F., Lavalle, C. (2018) ‘Quantifying and modelling industrial and commercial land-use demand in France’. *Environment, Development, and Sustainability*. <https://doi.org/10.1007/s10668-018-0199-7>
- Ustaoglu, E.,** Lavalle, C. (2017) ‘Examining lag effects between industrial land development and regional economic changes: The Netherlands experience’. *Plos ONE* 12(9): e0183285. <https://doi.org/10.1371/journal.pone.0183285>
- Ustaoglu, E.,** Williams, B. (2017) ‘Determinants of urban expansion and agricultural land conversion in 25 EU countries’. *Environmental Management* 60(4): 717-746.
- Ustaoglu, E.,** Williams, B., Petrov, O. L. (2017) ‘Scenario analysis of alternative land development patterns for the Leipzig-Halle Region: Implications for transport-land-use sustainability’. *Urban Planning* 2(1): 108-129.
- Ustaoglu, E.,** Perpina Castillo, C., Jacobs-Crisioni, C., Lavalle, C. (2016) ‘Economic evaluation on the agricultural land for its integration in the LUISA modelling platform’. *Land Use Policy* 56: 125-146.

Ustaoglu, E., Williams, B., Murphy, E. (2016) 'Evaluating of rail infrastructure projects: Incorporating urban form scenarios into cost-benefit analysis of the Dublin City Metro North Project'. *Case Studies on Transport Policy* 4(2): 104-121.

Pelletier, N., **Ustaoglu, E., Benoit, C., Norris, G., Rosenbaum, E., Vasta, A., Sala, S.** (2016) 'Social sustainability in trade and development policy' *The International Journal of Life Cycle Assessment*. doi:10.1007/s11367-016-1059-z.

Ustaoglu, E., Türel, A., Güzel, A. (2013) 'Evaluating the functional utility characteristics of office buildings: A case study of the office market in Ankara, Turkey'. *Journal of Real Estate Literature* 21(1): 79-103.

Williams, B., Shahumyan, H., Convery, S., Petrov, L., **Ustaoglu, E.** (2012) 'Evidence of contemporary challenges for rural and agricultural areas experiencing rapid development pressures in the Dublin Region'. *Cahiers thématiques*, N°11, 141-149.

Book/Book Chapters:

Aydinoglu, A. C., Sisman, S., Alturk, G., **Ustaoglu, E.** (2023, under review) Examining impact of landslide hazards in the peri-urban areas of Güneysu District of Rize, Turkey by global and local modelling techniques. In: Sahana, M. Ed. *Remote Sensing and GIS in Peri-Urban Research*. Elsevier.

Ustaoglu, E., Aydinoglu, A. C. (2022) 'The external costs of road transport: A case study of Turkey'. In: Ordonez de Pablos, P. Ed. *Handbook of Research on Building Greener Economics and Adopting Digital Tools in the Era of Climate Change*. IGI Global. DOI: 10.4018/978-1-6684-4610-2.ch013

Ustaoglu, E., Williams, B. (2019) Cost-benefit evaluation tools on the impacts of transport infrastructure projects on urban form and development. In: Bobek, V. Ed. *Smart Urban Development*. IntechOpen. DOI: 10.5772/intechopen.86447

Ustaoglu, E., Aydinoglu, A. C. (2019) Theory, data, and methods: A review of models of land-use change. In: Abusaada, H., Vellguth, C., Elshater, A. Eds. *Digital Research Methods and Architectural Tools in Urban Planning and Design*. IGI Global. DOI: 10.4018/978-1-5225-9238-9.ch009

Williams, B., Convery, S., **Ustaoglu, E.** (2019) Transport infrastructure and spatial structure. In: Williams, B. Ed. *Urban Spatial Economics: Making Places and Spaces*. UK: McGraw-Hill Education Ltd. ISBN: 9781307513806

Shahumyan, H., Williams, B., Knaap, G., **Ustaoglu, E., Moeckel, R.** (2018) Coupling distinct models to inform integrated urban development policy decisions. Conference paper: *Social Simulations Conference*. Dublin, Ireland, 25-29 September, 2017.

Pelletier, N., **Ustaoglu, E., Benoit, C., Norris, G.** (2014) *Social Sustainability in Trade and Development Policy: A Life Cycle Approach to Understanding and Managing Social Risk Attributable to Production and Consumption in the EU-27*. Publications Office of the European Union, Luxembourg, ISBN: 978-92-79-35408-3 (pdf)

Batista e Silva, F., Lavalle, C., Jacobs-Crisioni, C., Barranco, R., Zulian, G., Maes, J., Baranzelli, C., Perpina, C., Vandecasteele, I., **Ustaoglu, E., Barbosa, A., Mubarekah, S.** (2014) *Direct and Indirect Land Use Impacts of the EU Cohesion Policy. Assessment with the Land Use Modelling*

Platform. Publications Office of the European Union, Luxembourg, ISBN: 978-92-79-35148-8 (pdf)

Ustaoglu, E., Williams, B. and Petrov, L. (2012) ‘Developing a CBA methodology for the scenario-based land-use impact assessment of proposed rail investments in the Leipzig Region’. In: Campagna, M., De Montis, A., Isola, F., Lai, S., Pira, C., Zoppi, C. Eds. *Planning Support Tools: Policy Analysis, Implementation and Evaluation*, Milano: FrancoAngeli.

Project Reports:

Ustaoglu, E. and Aydinoglu, A. C. (2020) *A Guideline for Methodology Development for the Land-Use Modelling Applications Using the METRONOMICA Model: A Case Study of the Pendik District, Istanbul*. TUBITAK 2232 International Fellowship for Outstanding Researchers Programme, Project No.118C002.

Ustaoglu, E. and Williams, B. (2011) *Applications of the Cost-Benefit Analysis for the for the Impact evaluation of Rapid Rail Investments and Urban Development in Plurel Regions*. PLUREL-Peri-Urban Land Use Relationships-Strategies and Sustainability Assessment Tools for Urban-Rural Linkages, Integrated Project, Contract No. 036921, Module No.2-Land-Use Relationships in Rural-Urban Regions M2.4.8 Second Delivery.

Ustaoglu, E. and Williams, B. (2010) *Economic Evaluation of the Land-Use-Transport Relationship in the European Region: Costs and Benefits related to Evaluation of Rapid Rail Investments on Urban Form and Development*. PLUREL-Peri-Urban Land Use Relationships-Strategies and Sustainability Assessment Tools for Urban-Rural Linkages, Integrated Project, Contract No. 036921, Module No.2-Land-Use Relationships in Rural-Urban Regions M2.4.8 First Delivery.

Papers in Preparation:

Ustaoglu, E.; Williams, B. (2023) ‘The interrelationships of Territorial Quality of Life with residential expansion and densification: A case study of the regions in EU member countries’.

Conferences and Project Meetings

Ustaoglu, E. (2022) *Factors determining agricultural land conversion in the EU*. [Oral Presentation], 10th International Academic Conference on Economics, Business, Technology and Social Sciences, European Institute for Research & Development, Batumi, Georgia, 11-12 June, 2022 (Online Event).

Ustaoglu, E., Ortega Lopez, G. (2021) *Building Composite Indicators for the Territorial Quality of Life Assessment in European Regions: Combining Data Reduction and Alternative Weighting Techniques* [Oral Presentation], 9th Mediterranean Interdisciplinary Forum on Social Sciences and Humanities, MIFS, University of Almeria, Spain, 26 October, 2021 (Online Event).

Ustaoglu, E., Aydinoglu, A. C. (2019) *Land Suitability Assessment of Green Infrastructure Development: A Case Study of Pendik District (Turkey)* [Oral Presentation], INPUT aCADemy 2019 International Conference on Innovation in Urban and Regional Planning: Planning, Nature and Ecosystem Services, Cagliari, Sardinia-Italy, 24-26 June, 2019.

Shahumyan, H., Williams, B., Knaap, G., **Ustaoglu, E.,** Moeckel, R. (2017) *Coupling Distinct Models to Inform Integrated Urban Development Policy Decisions* [Oral Presentation with H. Shahumyan], Social Simulation Conference, Dublin, Ireland, 25-29 September, 2017.

- Rosenbaum, E., Pelletier, N., **Ustaoglu, E.**, Benoit, C., Norris, G., Sala, S. (2014) *Social Sustainability in Trade and Development Policy* [Other], 4th International Seminar in Social Life Cycle Assessment (LCA), Montpellier, France, 19-21 November, 2014.
- Ustaoglu, E.**, Williams, B. and Petrov, L. (2012) *Developing a CBA Methodology for the Scenario-Based Land-Use Impact Assessment of Proposed Rail Investments in the Leipzig Region*. [Oral Presentation], INPUT 2012 Seventh International Conference: Informatics and Urban and Regional Planning, Cagliari, Sardinia-Italy, 10-12 May, 2012.
- Ustaoglu, E.** and Williams, B. (2010) *Transport Infrastructure as a Key Determinant in Regional Growth Trends in PLUREL Case Study Regions*. [Oral Presentation], PLUREL International Conference: Managing the Urban Rural Interface, Copenhagen, Denmark, 19-22 October, 2010. (<https://www.yumpu.com/en/document/read/10356043/managing-the-urban-rural-interface-plurel>)
- Ustaoglu, E.** and Williams, B. (2010) *Economic Evaluation of the Impacts of Metro North Investment and Consequential Forms of Urban Development within the Greater Dublin Area*. [Oral Presentation], 14th International Planning History Society Conference: Urban Transformation: Controversies, Contrasts and Challenges, Istanbul, Turkey, 12-15 July, 2010.
- Ustaoglu, E.** (2010) *Scenario-Based Impact Evaluation of Rapid Rail Infrastructure Investments on Urban Form and Development in Greater Dublin Area*. [Poster Presentation], Year 2010: The Young European Arena of Research at the Transportation Research Arena-TRA Europe 2010 Conference, Brussels, Belgium, 7-10 June 2010.
- Ustaoglu, E.** and Williams, B. (2010) *Towards Scenario-Based Impact Evaluation of Transport Infrastructure Investment on Urban Form and Development in the Greater Dublin Area*. [Oral Presentation], Regional Studies Association Annual International Conference 2010: Regional Responses and Global Shifts: Actors, Institutions and Organisations, Pecs, Hungary, 25th May 2010.
- Williams, B., Petrov, L. and **Ustaoglu, E.** (2009) *Managing the Urban Environment: Evaluation of the Land Use Impacts of Major Metro Projects, Case Study of Metro North Dublin*. [Oral Presentation], JRC-UCD Land Use Modelling Seminar: Applying MOLAND as a Decision-Tool For Sustainable Development, Brussels, Belgium, 25th May, 2009.
- Ustaoglu, E.** (2009) *Economic Evaluation of the Impacts of New Rapid Rail Investments within the Greater Dublin Area*. [Oral Presentation], ESS RESECON-European Summer School in Resource and Environmental Economics: Economics, Transport and Environment, Fourth Summer School organised and hosted by EAERE, FEEM and VIU in Venice, Italy, 5-11 July, 2009.
- Ustaoglu, E.** (2009) URBAN-NET Stakeholder Workshop 4. [Other], *URBAN-NET: Transnational Research on Urban Sustainable Development*, Stockholm-Sweden, 17-18 November, 2009.
- Ustaoglu, E.** and Williams, B. (2009) PLUREL-Sixth General Project Meeting. [Oral Presentation], *PLUREL-Peri-Urban Land Use Relationship*, Montpellier-France, 11-OCT-09 - 15-OCT-09.
- Ustaoglu, E.** and Williams, B. (2009) PLUREL-Fifth General Project Meeting. [Oral Presentation], *PLUREL-Peri-Urban Land Use Relationship*, Koper-Slovenia, 30-MAR-09 - 02-APR-09.
- Ustaoglu, E.** (2008) PLUREL-Fourth General Project Meeting. [Other], *PLUREL-Peri-Urban Land Use Relationship*, Haag, Netherlands, 29-SEP-08 - 02-OCT-08.
- Ustaoglu, E.** (2008) PLUREL-Third General Project Meeting. [Other], *PLUREL*, Warsaw, Poland, 16-APR-08 - 18-APR-08.

Ustaoglu, E. and Williams, B. (2008) PLUREL-M2 Group Meeting. [Oral Presentation], *PLUREL*, Vienna, Austria, 04-FEB-08 - 05-FEB-08.

Papers related to PhD Courses

- The Impacts of Rapid Rail Systems on Land Use: An Evaluation of the Impacts of Dublin's Metro North (2008)
- Urban Spatial Structure: Analysed within Theoretical and Empirical Framework (2008)
- Regional Business Cycles and the Natural Rate of Unemployment (2006)
- Factor Analysis for the Variables that are related to the Financial Structure of the Largest 500 Companies in the US (2005)
- Exchange Rate Regimes: Analysed Within the Framework of East-Asian Countries' Experiences (2005)
- Deregulation and Privatization: Reasons and Impacts on Commodity Provision (2005)
- Technology Policy Proposal for Turkish Air Force (with Levent Orsel) (2004)

Team Projects in the Department of City and Regional Planning, METU

- Istanbul-Avcilar Re-Development Plan Considering the Effects of the Marmara Earthquake (1999-2000)
- Bursa Metropolitan Region Planning Project (1998-1999)
- Planning Project for Silifke and Environs (1997-1998)

SPECIAL STUDIES AND TRAINING

- Informatics Training: ARCGIS Desktop II- Tools and Functionality (9-11 July, 2014)
- General Training: Effective and Scientific Writing (22-23 May, 2014)
- Workshop on 'Integration of Spatial Decision Support Systems and Evidence Based Modeling in National/Regional Policy Applications and Regulatory Systems'. University College Dublin, Ireland. 9-12 July 2013.
- Training on 'Impact Assessment'. EC Joint Research Centre. 9-10 December 2013.
- Informatics Training: GeoDMS EuClueScanner (EUCS) Land Use Model. 25-27 February, 2013.
- Informatics Training: ARCGIS Desktop I-Getting Started with GIS (11,12 February, 2013)
- Annual Modelling Workshop, EC Joint Research Centre-Ispra, 20-21 November, 2012.
- The 2nd Multitude-Nearctis Summer School on the "Assessment of ITS solutions" organised by the EC Joint Research Centre IET Sustainable Transport Unit, 6-8 June, 2012.
- Informatics Training: Information Communication Technologies in Spatial Planning', organised by University of Cagliari Italy and University College Dublin Ireland, 24 July-8 August 2011.
- Participation in ESS RESECON-European Summer School in Resource and Environmental Economics: Economics, Transport and Environment, Fourth Summer School organised and hosted by EAERE, FEEM and VIU in Venice, Italy, 5-11 July, 2009.
- Participation in UCD-UII Summer School in Spatial Simulation for the Social Sciences organised and hosted by UCD-UII in Dublin, Ireland, 15-18 June 2009.

AWARDS

- Holder of the Roberto Kertesz scholarship granted by European Scientific Institution (2021-2022)
- Holder of the TUBITAK-2232 Programme Scholarship (2018-2020)
- Holder of the PLUREL PhD Research Scholarship (2007-2010)
- Finalist of the Year 2010: The Young European Arena of Research Competition
- Holder of the fully-funded scholarship from the European Commission Marie Curie Actions Program ESS RESECON: Economics, Transport and Environment, Fourth Summer School organised and hosted by EAERE, FEEM and VIU in Venice, Italy, 5-11 July, 2009.

- Graduated with honours from the City and Regional Planning Department-METU (June 2000)
- A third degree graduation award from the City and Regional Planning Department-METU (June 2000)

EMPLOYMENT HISTORY

Recent Posts:

- Scientific Editor at Plos ONE Journal (on-going)
- Post-Doc Researcher at European Scientific Institution (ESI) (March 2021-June 2022)
- Post-Doc Researcher at College of Social Sciences and Humanities, Koc University (May 2020-December 2020)
- Post-Doc Researcher at Department of Geomatics Engineering, Gebze Technical University (January 2018-September, 2020)
- Scientific officer at European Commission-Joint Research Centre Ispra, IES-Sustainability Assessment Unit (March, 2012-September, 2014)
- Researcher at Urban Institute Ireland, University College Dublin (November 2007-September 2011)

Summary of the Project Involved at Gebze Technical University:

Modeling Urban and Regional Land Use Dynamics with the Example of Case Studies in Turkey, TUBITAK 2232 Programme, Project No. 118C002

The research is aimed at developing a methodology in terms of review of the literature and data requirements, and conducting socio-economic and spatial data development where necessary for the integration and testing of these data with the dynamic land use models, which will provide a base for the sustainability impact assessment of land development linked with transport infrastructure investments.

Summary of the Projects Involved at the JRC:

INTESA-Integrated Sustainability Assessment: Scenarios, Platform and Indicators, Action no.22009

The research undertaken as part of the INTESA action is developed through collaboration in the administrative arrangement between DG JRC, DG REGIO and DG ENV on a study for the sustainability assessment of the impact of the Cohesion Policy 2014-2020 in environment e.g. ecosystem services and urban land uses; and research related to DG ENV collaboration is based on a broad subject focusing on integrated sustainability assessment. In this respect, the Land Use Modeling Platform (LUMP) has been developed by the Institute for Environment and Sustainability of European Commission Joint Research Centre (JRC-IES) to support the policies of the European Commission by providing a land use modelling tool for the policy analysis and related impact assessments. LUMP consists of a high-resolution land use/cover model EU-ClueScanner (EUCS100) which simulates future land development scenarios given the policy alternatives. Given this framework, the research activities are based on developing statistical analysis and tools to assess the sustainability relationship between environmental constraints and social welfare given the existing and alternative EU policy objectives. The primary focus is to contribute to various stages of the land use modelling practice which links to the simulations of future land use scenarios given the EU policy alternatives.

Summary of the Projects Involved at Urban Institute Ireland:

1) *UEP/MOLAND/Peri-Urban Linkages Project 2009*

Integrated Project 2009: Transportation Infrastructure and Its Impacts on Urban Development

Working Paper. 01 Review of the MOLAND modelling work and scenario analysis in: 'Regional Planning Guideline review: using MOLAND as part of the strategic environmental assessment process'

2) UEP/MOLAND/Peri-Urban Linkages Project 2009

Integrated Project 2009: Transportation Infrastructure and Its Impacts on Urban Development

Working Paper. 02 Impacts of transport infrastructure on peri-urban development trends: Costs and benefits related to the evaluation of rapid rail investments on urban form and development

Abstract. This paper reviews literature and discusses impact evaluation of transport infrastructure issues in the peripheral expansion of urban areas. Key impacts and linkages of transportation provision on urban development trends are identified through the international literature. These include: direct impacts of transportation infrastructure provision, socio-economic impacts, transportation network effects, and energy and environmental impacts. The corresponding data requirements for the valuation of indicators are also discussed in order to assess the costs and benefits of rapid rail investments on urban form and development. *Keywords.* Transportation infrastructure, Peri-urban development, Urban form, Costs-Benefits, Rapid rail investment.

3) UEP/MOLAND/Peri-Urban Linkages Project 2009

Integrated Project 2009: Transportation Infrastructure and Its Impacts on Urban Development

Working Paper. 03 Evaluation tools on the impacts of transport infrastructure projects on peri-urban development in the Greater Dublin Area

Abstract. This paper reviews literature for identifying the methods in order to evaluate the impacts of key transport infrastructure provisions on urban form and peri-urban development in the Greater Dublin Area (GDA). Among the evaluation methodologies, Cost-Benefit Analysis (CBA) is the most common one, which is utilized for transport policy impact assessments both in the national project appraisal guidelines and the scientific research. Considering its extensive usage in the appraisal work, the main focus will be on the CBA approach. *Keywords.* Transport infrastructure provision, Peri-urban development, Greater Dublin Area, Evaluation methodologies, Cost-Benefit Analysis

4) UEP/MOLAND/Peri-Urban Linkages Project 2009

Integrated Project 2009: Transportation Infrastructure and Its Impacts on Urban Development

Working Paper. 04 Economic Evaluation of the impacts of metro north investment and consequential forms of urban development within the Greater Dublin Area

Abstract. This study is aimed at evaluating the effects of transportation and land-use relationship by using the methods of economic appraisal mainly based on Cost-Benefit Analysis (CBA) approach. The new public transport provision of Dublin's Metro North is evaluated considering its impacts on future land development patterns in Greater Dublin Area (GDA). The appraisal of land-use-transport relationships will be carried out incorporating the use of economic indicators and will be evaluated on two different land development scenarios. As the analysis is performed for areas likely to experience future urban development, the study will provide a base for the future policy and planning decisions concerning the GDA. *Keywords.* Urban transportation-land use relationship; Metro North investment; Greater Dublin Area; Cost-Benefit Analysis; Scenario Analysis

Teaching Experience:

PEP40120 Transportation Planning (joint lecturer with Dr. Enda Murphy on the classes covering the transportation planning process at University College Dublin)

ECON415 Selected Topics in Microeconomics (at AGU)

ECON 356 Urban Economics (at AGU)

ECON 303 International Economics (at AGU)

ECON352 Economics of Real Estate (at AGU)

ECON102 Exploring Economics (at AGU)

INTERNSHIP

1. MASS HOUSING CORPORATION, Ankara, June 1999

Responsibilities: Computer work, preparing the project achieves and files, working in a team for the Hakkari Mass Housing Project

2. Internship in the Department of City and Regional Planning at Middle East Technical University, Ankara, August 1998

Responsibilities: Data collection and carrying out analyses for the Bursa Metropolitan Region Planning Project

3. Internship in the Department of City and Regional Planning at Middle East Technical University, Ankara, June 1997

Responsibilities: Working in a team in a specific area for mapping the topography of that area by using the computer techniques.

OTHER

4. Coordinator of the empirical survey (carried out through comprehensive questionnaires) performed for the master's thesis related to the office market in Ankara, June-October 2002

5. Worked as an invigilator in various final semester exams at UCD (2009, 2010)

COMPUTER KNOWLEDGE: MS OFFICE, MICROFIT, STATA, SPSS, ARCGIS, R

FOREIGN LANGUAGES: Turkish (mother tongue), English (at advanced level), Italian (intermediate)

ACTIVITIES

- Team leader-Bursa Metropolitan Region Planning Project
- Working in team projects-Silifke (1998), Bursa (1999), İstanbul (2000)
- Participations/Contributions:
 - ERC-METU International Conference in Economics VI, Ankara (11-14 September, 2002)
 - ERC-METU International Conference in Economics VII, Ankara (6-9 September, 2003)
 - PLUREL M2 Group Meeting, Vienna (February, 2008)
 - PLUREL Annual Meeting, Warsaw (May, 2008)
 - PLUREL Annual Meeting, the Hague (September, 2008)
 - PLUREL Annual Meeting, Koper (March, 2009)
 - PLUREL Annual Meeting, Montpellier (October, 2009)
 - UII-Urban Environment Project Meetings-various meetings, Dublin (2007-2010)
 - URBAN-NET Stakeholder Workshop, Stockholm (November, 2009)
 - Seminar: Dublin 2026 The Future Urban Environment, Centre for Urban and Regional Studies, Trinity College Dublin (TCD)/Urban Environment Project, UII-UCD (in association with the Journal of Irish Urban Studies), TCD, Dublin, 13 November, 2009.
- Member of Regional Studies Association and American Real Estate Society.
- Editorial board member at Plos ONE
- Reviewed for Sustainability, Land Use Policy, Environmental Science and Policy, International Journal of Environmental Research and Public Health, Case Studies on Transport Policy, Habitat International (<https://publons.com/wos-op/researcher/1319112/eda-ustaoglu/peer-review/>)

Social Activities: Hiking, Cycling, Photography, Skiing, and Watercolour Painting.

REFERENCES

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Tel: +90 262 605 1803. (Other references are available on request)