

Short CV



Name

Maria (Maro) Giannopoulou

Affiliation

Department of Civil Engineering, Section of Transportation Engineering, Laboratory of Transportation Engineering and Urban and Spatial Planning, Democritus University of Thrace (DUTH), Xanthi, Greece

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Education

Dipl. Architect, National Technical University of Athens (NTUA), PhD in Urban and Spatial Planning, Department of Civil Engineering, Democritus University of Thrace (DUTH)

Academic Career, Research Areas and Professional Experience

Professor of DUTH in the Department of Civil Engineering, Director of the Laboratory of Transportation Engineering and Spatial and Urban Planning. She is responsible for the academic, educational and research activities of the Laboratory in the scientific fields of spatial and urban planning.

Teaching of the following undergraduate courses (within the 5-year diploma program):

- Urban Planning, 4th semester, compulsory course
- Spatial Planning, 8th semester, compulsory for direction Transportation Engineering
- Urban Sustainable Development and Sustainable Mobility, 9th semester, compulsory for direction Transportation Engineering
- Geographical Information Systems (GIS), 5th semester, elective course

Teaching of the postgraduate course "Tools and Applications of Informatics" of the Postgraduate Program "Hydraulics Engineering and the Environment" of the Department of Civil Engineering, Duth (1912-1918).

She has supervised two PhD students (one of them had an IKY-Siemens Fellowship of Excellence), a significant number of diploma theses, as well as participated in various roles in doctoral committees. She is also supervising post-doctoral researchers. She has taught in seminars, in a number of which she was also responsible for their organization and scientific context.

She is a member of several professional and scientific organizations, editorial boards, committees, and a reviewer for a number of scientific journals, scientific conferences, research proposals and scholarships.

Her research focuses on the development of urban and spatial analysis' methods and techniques. She has participated as principal investigator and consultant in 19 competitive research projects, both in small and large scale, which have been elaborated with the use of modern tools such as Geographic Information Systems (GIS) and Spatial Data Analysis.

Moreover, her research interests include Specific topics in Spatial and Urban Planning, Urban Sustainable Development and Sustainable Mobility, Urban Regeneration and Urban Heritage, Bioclimatic Planning, Space Syntax Theory, Allocation of Special Uses, Multicriteria Analysis Methods and Project Evaluation.

She has participated as principal investigator and consultant in the development and implementation of urban and regional planning studies and collaborated in the conduction of architectural studies and participation as an expert in relevant EU programs. The "Specialized preliminary study for the preservation-rehabilitation and development of the traditional settlement of the city of Xanthi" and the "Pilot Development Plan for the Cultural Economic Park of Xanthi" have been awarded with first prizes.

Publications

She has authored more than 150 scientific publications, including papers in international, peer-reviewed journals, international conference proceedings and book chapters.

Key publications (from the last 5 Years)

Peer-reviewed scientific journals

- M. Giannopoulou, A. Roukouni, A. and K. Lykostratis (2019), "Exploring the benefits of urban green roofs: a GIS approach applied to a Greek city", **CESWP (Centre for Excellence Jean Monnet for European Studies Working Papers)** vol. XI, issue 1, 55-72. Paper selected after presentation at the 2nd SCIENVIR (Scientific Convergence and Interdisciplinary in EU Environmental Research) International Conference, Iași, Romania, 7-9 June 2018.
- K. Lykostratis, M. Giannopoulou, A. Roukouni (2019), "Measuring Urban Configuration: A GWR Approach", **Smart Innovation, Systems and Technologies**, Springer, vol. 100, 479-488, doi:10.1007/978-3-319-92099-3_54, after selection of the papers presented at the 3rd International Symposium "NEW METROPOLITAN PERSPECTIVES - Local Knowledge and innovation dynamics towards territory attractiveness through the implementation of Horizon/E2020", ISTH2020, Reggio Calabria Italy, 22-25 May 2018. The paper has won the

- “Edoardo Mollica Award” for early career researchers (Konstantinos Lykostratis).
- K. Lykostratis, M. Giannopoulou (2019), “Land Value Hot-Spots Defined by Urban Configuration”, **Smart Innovation, Systems and Technologies**, Springer, vol. 100, 590-598, doi:10.1007/978-3-319-92099-3_66, after selection of the papers presented at the 3rd International Symposium “NEW METROPOLITAN PERSPECTIVES - Local Knowledge and innovation dynamics towards territory attractiveness through the implementation of Horizon/E2020”, ISTH2020, Reggio Calabria Italy, 22-25 May 2018.
 - K. Lykostratis, M. Giannopoulou, A. Roukouni (2018), “L'incidenza dell' insediamento urbanistico sul mercato fondiario: Un approccio GWR”, in the online Journal **LaborEst** thematic area: Mobilita, Accessibilita, Infrastruttura, n. 16/2018, 67-74 doi: 10.19254/LaborEst 16.11.
 - Monokrousou, M. Giannopoulou (2017), “Decodifica e previsione dei movimenti pedonali negli spazi pubblici attraverso l'analisi spaziale sintattica”, in the online Journal **LaborEst** thematic area: Mobilita, Accessibilita, Infrastruttura n. 15/2017, 45-49, doi: 10.19254/LaborEst 15.07.
 - Roukouni, A. Vavatsikos, M. Giannopoulou, F. Medda (2017), “A Combined MCDA-Monte Carlo Simulation Approach for the Evaluation of Investment Decisions on Public Transit”, **International Journal of Decision Support Systems, Special Issue: «Management and Decision Making in Transport»**, vol. 2, issue 4, p.p. 236-247, after selection of the papers presented at 1st Transport Conference & 15th Special Conference of the Hellenic Operational Research Society, Alexandroupoli, 15 - 16 October 2015.
 - Vavatsikos, E-S Karagiorgou-Papavasilli, M. Giannopoulou (2017), “Residential Property Market Prices Estimation Using Spatial Analysis Models”, **International Journal of Decision Support Systems, Special Issue: Management and Decision Making in Transport**, vol. 2, issue 4, p.p. 248-259, Print ISSN: 2050-6988 Online ISSN: 2050-6996 after selection of the papers presented at 1st Transport Conference & 15th Special Conference of the Hellenic Operational Research Society, Alexandroupoli, 15-16 October 2015.
 - K. Monokrousou, M. Giannopoulou (2016), “Developing a methodological approach for interpreting and predicting pedestrian movement in public space for sustainable urban planning”, **WIT Transactions on Ecology and the Environment (The Sustainable City XI)**, vol. 204, Brebbia, C. (ed.), WIT Press, 239-248, ISSN 1743-3541 (on-line), doi:10.2495/SC160201 after selection of the papers presented at the 11th International Conference on Urban Regeneration and Sustainability, Alicante, Spain, 12 - 14 July.
 - M. Giannopoulou, V. Vavatsikos, K. Lykostratis (2016), “A Process for Defining Relations between Urban Integration and Residential Market Prices”, **Procedia - Social and Behavioral Sciences**, Elsevier, vol., 153-159, doi: 10.1016 /j.sbspro. 2016.05.338, after presentation at the 2nd International Symposium “NEW METROPOLITAN PERSPECTIVES - Strategic planning, spatial planning, economic programs and decision support tools, through the implementation of Horizon/Europe2020”, ISTH2020, Reggio Calabria Italy, 18-20 May 2016.
 - K. Monokrousou, M. Giannopoulou (2016), “Interpreting and Predicting Pedestrian

Movement in Public Space through Space Syntax Analysis”, **Procedia - Social and Behavioral Sciences**, Elsevier, vol., 509 - 514, doi: 10.1016/j.sbspro.2016.05.338, after presentation at the 2nd International Symposium “NEW METROPOLITAN PERSPECTIVES - Strategic planning, spatial planning, economic programs and decision support tools, through the implementation of Horizon/Europe2020”, ISTH2020, Reggio Calabria Italy, 18-20 May.

- M. Giannopoulou, A. Vavatsikos, K. Lykostratis, A. Roukouni (2016), “Using GIS to analyse parking attributes in urban areas”, **Plurimondi: An International Forum for Research and Debate on Human Settlements**, vol. 8, n. 17, 29-35, after selection of the papers presented at 19th European Colloquium in Theoretical and Quantitative Geography (ECTQG 2015), Bari, Italy, 3 – 7 September, 2015, Technical University of Bari, Department of Civil and Environmental Engineering (DICATECh) (online peer- reviewed international journal) ISSN 2420-921X (online) 1129-4469 (print).
- Vavatsikos, E.-S. Karagiortou-Papavasilli, M. Giannopoulou (2015), “Using spatial interpolation models to predict residential property market prices”, **Plurimondi: An International Forum for Research and Debate on Human Settlements**, vol. 8, n.16, 53-59, after selection of the papers presented at 19th European Colloquium in Theoretical and Quantitative Geography (ECTQG 2015), Bari, Italy, 3–7 September, Technical University of Bari, Department of Civil and Environmental Engineering (DICATECh), ISSN 2420-921X (online) 1129-4469 (print).
- K. Monokrousou, M. Giannopoulou (2015), “Exploring Methods and Strategies for Sustainable Urban Development”, **International Journal of Humanities and Social Sciences**, World Academy of Science, Engineering and Technology, Vol. 9, No 8, 2907-2910, after selection of the papers presented at the 17th International Conference on Sustainable Architectural, Environmental and Ecological Engineering Design for Society (ICSAAEEDS 2015), Venice, Italy, 13-14 August, ISNI:0000000091950263.
- M. Giannopoulou, A. Vavatsikos, K. Lykostratis, A. Roukouni (2014), “Using GIS to record and analyse historical urban areas”, **TeMA, Journal of Land Use, Mobility and Environment**, Special Issue with a selection of papers presented at the 8th International Conference INPUT 2014 – Innovation in Urban and Regional Planning titled “Smart City: Planning for Energy, Transportation and Sustainability of Urban Systems”, Naples, Italy, 4-6 June, 2014, 487-497, Print ISSN 1970-9889, e- ISSN 1970-9870.
- Vavatsikos, M. Giannopoulou (2014), “Transportation infrastructure impacts evaluation. The Case of Egnatia motorway in Greece”, **TeMA, Journal of Land Use, Mobility and Environment**, Special Issue with a selection of papers presented at the 8th International Conference INPUT 2014 – Innovation in Urban and Regional Planning titled “Smart City: Planning for Energy, Transportation and Sustainability of Urban Systems”, Naples, Italy, 4-6 June, 965-975, Print ISSN 1970-9889, e- ISSN 1970-9870.

Book chapters in edited books

- Published articles of M. Giannopoulou, with co-author the Emeritus Professor P. Loukakis have been included in his book titled “**Spatial and Regional evolution, Greece 1952-2012:**

experiences from action", University Press Thessaly, Volos, 2017, ISBN 9789609439442.

- Lykostratis, K., & Giannopoulou, M. (2018), "From Global to Local: GWR as an Exploratory Tool for Spatial Phenomena". Book chapter in **Conventional and Fuzzy Regression: Theory and Applications**, V. Xrysanthou, & M. Spiliotis (eds.), Nova Science Publishers, New York, 119-162.
- A. Roukouni, F. Medda, M. Giannopoulou, A. Vavatsikos (2015), "A Multi – Attribute Comparative Evaluation of Value Capture Financing Mechanisms: A Case Study", Book chapter in **Evaluation in Integrated Land-Use Management: Towards an Area Oriented and Place – Based Evaluation for Infrastructure and Spatial Projects**, Woltjer, J., Hull, A., Ruth, M. and Alexander, E. (eds.), Ashgate, 75-95.

Proceedings of peer-reviewed International Conferences

- G. N. Botzoris, A. T. Galanis, M. Giannopoulou, E.D. Varlami (2019), "Sustainable Transportation Planning and Traffic Noise in Urban Environment: Case Survey in a Typical Mid-Sized Greek City", **4th International Conference "ENERGY in TRANSPORTATION 2019"**, 28 September 2019, Athens, Greece.
- A. Karagkouni, M. Giannopoulou, D. Dimitriou (2018), Passenger's needs and prospects to access tourist regional airport, the case of Kavala Airport in Greece, **COST Action Workshop on Air Transport & Regional Development (TU 1408)**, European Cooperation Science and Technology, 6-7 November, Athens, Greece.
- A. Karagkouni, P. Charisi, M. Giannopoulou (2017), "Urban resilience as a Key factor for shaping modern smart cities, **International Conference "Smart Cities & Mobility as a Service"**, 7-8 December, University of Patras, Department of Civil Engineering, Patras.
- K. Monokrousou, M. Giannopoulou, V. Stefanis (2017), "Operational urban planning tool for enhancing accessibility to public transport stations", **8th International Congress on Transportation Research (ICTR)**, 28 – 29 September, Thessaloniki, Greece.
- A.P. Vavatsikos, A.V. Smaragdas, M. Giannopoulou (2017), "A Combined Use of GIS Promethee and Monte Carlo Simulation Methods for Major Transportation Infrastructure Impacts Evaluation", **6th International Symposium and 28th National Conference on Operational Research: OR in the digital era – ICT challenges**, Thessaloniki, 8 - 10 June.
- M. Giannopoulou, K. Lykostratis and A. Roukouni (2016), "A GIS – based analysis to estimate the benefits of green roofs" **12th International Urban Planning and Environmental Association Symposium (UPE 12)**, Lisbon, Portugal, 31 May – 3 June.
- M. Giannopoulou, A. Vavatsikos, K. Lykostratis, A. Roukouni (2015), "GIS as a tool for urban parking analysis", **1st Transport Conference & 15th Special Conference of the Hellenic Operational Research Society**, Department of Economics DUTH, Alexandroupoli, 15 - 16 October.
- Roukouni, A. Vavatsikos, M. Giannopoulou, F. Medda (2015), "Selecting effective financing tools to support urban investment on public transit: Combination of MCDA and

Monte Carlo Simulation", Extended abstract, **55th ERSA Congress, World Renaissance: Changing Roles for people and places**, Lisbon, Portugal, 25 - 28 August.

- K. Monokrousou, M. Giannopoulou (2015), "Sustainable Urban Development: Methods and Strategies" Proceedings of the **3rd International Conference: New Urban Languages. Tales and Images of Spatial Justice**, TU Delft, Faculty of Architecture Department of Urbanism, the Netherlands, June 24-26, R. Rocco and D. Villa (eds) October 2016 313-319, ISBN: 978-94-6186-717-9.
- Roukouni, F. Medda, M. Giannopoulou, A. Vavatsikos (2015), "A Multi – Attribute Comparative Evaluation of Value Capture Financing Mechanisms: A Case Study", **8th International Workshop on Planning and Evaluation, "Evaluation in Integrated Land-Use Management"**, Association of European Schools of Planning (AESOP) Thematic Group "Evaluation in Planning", Groningen, the Netherlands, 12 – 15 March.
- Roukouni, F. Medda, M. Giannopoulou, A. Vavatsikos (2014), "Is Tax Increment Financing the most effective tool to support urban investment? The case of London Northern Line Extension", **Proceedings of the Regional Studies Association (RSA) Winter Conference: Sustainable Recovery? Rebalancing, Growth, and the Space Economy**, London, UK, 27-28 November.
- Roukouni, S. Basbas, M. Giannopoulou (2014), "Spatial impact of transportation infrastructure: interpretation of stated preferences using Multivariable Analysis", **Proceedings of the 10th International Congress of the Hellenic Geographic Society**, Thessaloniki, Greece, 22 – 24 October 2014. M. Giannopoulou, K. Lykostratis, A. Roukouni (2014), "Integration of GIS and Multivariable Analysis in Urban Planning", **Proceedings of the International Workshop on Civil Engineering and Architecture (IWCEA)**, KOC University Istanbul, Turkey, 8-9 August 2014, Scientific Cooperations Publications, 43-47, ISBN: 978-605-86637-3-2.

Her publications have received a large number of citations in international scientific journals, proceedings of international scientific conferences, MSc theses, diploma theses, edited books and book chapters, research project reports, book catalogues etc.