

Massimiliano Gastaldi, PhD

University of Padova

Department of Civil, Environmental and Architectural Engineering

Current position

Since Dec. 2008, Assistant Professor; scientific area ICAR/05 – Transportation Engineering, University of Padova.

Qualifications

- 2005, PhD in Transportation Engineering at the University of Trieste.
- Since 2004, subject expert in Transportation Engineering (scientific area ICAR/05) at Department of Civil, Environmental and Architectural Engineering (Department of Structural and Transportation Engineering) - University of Padova.
- 2000, graduated in Civil Engineering (Transport) at the University of Padova.

Research activity

- methods and models for simulating choice behaviours of transport system users;
- information systems for analysis and representation of transport systems;
- road traffic monitoring systems;
- analysis and simulation of the interaction between traffic streams at road intersections;
- Analysis and simulation of traffic circulation under uninterrupted flow conditions;
- analysis of choice behaviour of goods transport service users;
- sustainability of action plans on the transport/land-use system;
- analysis of transport networks capacity;
- integrated frameworks for traffic analysis combining macroscopic, mesoscopic and microscopic simulation models;
- traffic engineering study using integrated driving-traffic simulation systems;
- analysis of driving behaviour using a driving simulator;
- analysis of road network vulnerability;
- analysis of transport system connectivity/accessibility.

Main research projects (participation)

- 2013: “Performance indicators for evaluating transport/land-use system accessibility”. Funded by Ministry of Education, University and Research (MIUR) - Quota ex 60%.
- 2012, “Analysis of vehicular emissions at road intersections in relation to the type of traffic control”. Funded by University of Padova.
- 2012, “Comparative analysis of traffic calming measures using driving simulator experiments”. Funded by Ministry of Education, University and Research (MIUR) - Quota ex 60%.
- 2011, “A methodology for calibrating road link travel time functions using driving simulator experiments”. Funded by Ministry of Education, University and Research (MIUR) - Quota ex 60%.

- 2010 – 2012, “Road safety and drivers' behaviours: experiments with a driving simulator in various environments”. Funded by University of Padova.
- 2009, “sustainable mobility: a "fuzzy" approach for evaluating sustainability of action plans on the transportation/land-use system”. Funded by University of Padova.
- 2008, “Methodologies for evaluating the sustainability level of a transport service”. Funded by Ministry of Education and Research (MIUR) - Quota ex 60%.
- 2006 – 2008, “road traffic monitoring systems”. Funded by Ministry of Education and Research (MIUR) - Quota ex 60%.
- 2006 – 2008, “Advanced Maritime Operation & Railways Evolution: a competitive scenario for Italy in the Mediterranean”. Funded by Ministry of Education and Research (MIUR) – (PRIN 2006).
- 2005, "Analysis and simulation of speed-flow relationship under uninterrupted and interrupted flow conditions ". Funded by Ministry of Education and Research (MIUR) - Quota ex 60%.
- 2004, “Analysis and simulation of speed-flow relationship on extra-urban roads”. Funded by Ministry of Education and Research (MIUR) - Quota ex 60%.
- 2002 – 2004, " Logistics and transportation for local production systems: methods and models applied to the manufacturing situation in the north-eastern Po Valley". Funded by Ministry of Education and Research (MIUR) (PRIN 2002).
- 2002 – 2003, “Fuzzy models for transport mode choice” project for young researchers - University of Padova.

Research grants, contracts

- 2012: research contract between Province of Venice and Department of Civil, Environmental and Architectural Engineering: “Updating of the Province of Venice Transportation Information System – Public Transport Database”.
- 2010-2012: research contract between Veneto Region and Department of Structural and Transportation Engineering “ALPINE MOBILITY CHECK – STEP 2 – Programme Alpine Space 2007-2013”.
- 2010: research contract between Province of Venice and Department of Structural and Transportation Engineering: “Updating of the Province of Venice Transportation Information System”.
- 2009, research contract between Veneto Region and Department of Structural and Transportation Engineering: “TRIM - Transport Infrastructure Monitoring project” Interreg IV Programme Italy – Austria 2007-2013”.
- 2007, research contract “Design of Revealed Preference and Stated Preference surveys and simulation of transport choices by sequential hierarchical models. Department of Structural and Transportation Engineering- University of Padova.
- 2005, research contract “Simulation of travel demand using sequential hierarchical models”. Department of Structural and Transportation Engineering- University of Padova.
- 2001, research contract “Study of modal choice models for goods transport at regional level”. Department of Structural and Transportation Engineering- University of Padova.
- 2001, research contract “Census of information sources on the goods mobility in the Veneto region and characterization of the goods transport supply side at regional level“. Department of Structural and Transportation Engineering- University of Padova.

- 2000-2001, winner of the scholarship “Analysis of transportation supply and demand characteristics in the Veneto Region - Mobility Observatory”. Department of Structural and Transportation Engineering- University of Padova.

Teaching activity

Lectures in the following courses:

- 2012-2014, Transportation Engineering Laboratory.
- 2011, Elements of Transport Engineering and Economics.
- 2009-2011, transport systems.
- 2003-2011, traffic theory and engineering.

Memberships, referee for congresses and journals

- 2012, member of the organizing committee and scientific committee SIDT2012 congress – Padova.
- Since 2010, member of World Conference on Transport Research.
- 2009, member of the organizing committee of Euro Working Group on Transportation Meeting 2009 - Padova.
- Since 2009, member of the Graduate School in Civil and Environmental Engineering - University of Trieste.
- 2008, member of the organizing committee SIDTgiovani2008 congress - Padova.
- Since 2006, member of Euro Working Group on Transportation.
- Since 2004, member of the Italian Society of Transportation Scholars (SIDT).
- referee for 4th International Conference Road Safety and Simulation (RSS2013)
- referee for 16th Online World Conference on Soft Computing in Industrial Applications (WSC16).
- referee for International Journal of ATS - Advances in Transportation Studies.
- referee for European Transport - International Journal of Transport Economics, Engineering and Law.
- referee for SIDTgiovani2008 congress - Padova.