



# PhD in URBAN PLANNING, DESIGN, AND POLICY - 40th cycle

**PNRR 630 Research Field: BEYOND TRADITIONAL TRANSPORT PLANNING PITFALLS:  
RIGIDITY, OVERDESIGN AND LACK OF LAND USE-CENTERED VISION**

<b>Monthly net income of PhDscholarship (max 36 months)</b>
<b>€ 1300.0</b>
In case of a change of the welfare rates during the three-year period, the amount could be modified.

<b>Context of the research activity</b>	
<b>Motivation and objectives of the research in this field</b>	<p>The ineffectiveness of traditional transport policy design, centered on "predict and provide" approaches, rigid forecasts and lack of a complex vision on land use practices, has long been recognized. Literature has already pointed out large "planning failures", with specific regard to transport megaprojects. However, the pervasiveness of an oversimplified planning approach mixed with rigid normative frameworks, is high also in smaller-scale projects. The research is aimed at studying the effect of the "planning and design environment" (regulations, actors, methods, interactions among disciplines) on the quality and effectiveness of the transport projects and/or plans.</p> <p>The research hypothesis is that too rigid, too abstract or too simplified demand forecast approaches, together with similarly flawed design regulations, produce outcomes (infrastructure or plans) that are not functional, overdesigned, excessive or even counterproductive. To the contrary, a planning and design practice that are flexible, adaptive and "lean" can better respond to mobility needs and transport and spatial issues and even become a driver for innovation.</p>
<b>Methods and techniques that will be developed and used to carry out the research</b>	<p>The research will start from a wide literature review on transport planning theories, on methods such as transport micro and macro modelling, and on case studies. The aim of the literature is to focus on the critical aspects of the traditional transport planning, based on a mix of "predict</p>



	<p>traditional transport planning, based on a mix of "predict and provide" approaches and rigid implementation norms. The literature on megaprojects failures must be analyzed aiming at overcoming its limits and assumptions. The empirical part of the research will collect data from relevant case studies, focusing on: a. ex-ante vs. ex-post performances (costs, traffic, land-use changes, etc.)b. normative context and design/planning "traditions". Significance of external constraints (e.g. absence of precast industry, conflict in space allocation, etc.)c. roles of the actors. A broad selection of cases is appreciated. It is aimed at providing evidence of the evolution of design practices in road design, network design, transport and mobility planning; situations of overdesign and overplanning, with related causes; cataloguing the design and planning failures. The discussion part, to be better defined by the candidate and possibly integrated by further theoretical reasoning, is aimed at generalizing the empirical findings and formulate interpretative hypotheses. The focus can be either at the small/metropolitan scale (e.g. the effect of road circulation plans and projects) or at a larger territorial scale (e.g. the effect of road or rail design methods on the effectiveness of investment), or both. The context chosen (e.g. Europe or Anglo-Saxon countries or Global South) shall be discussed and justified.</p>
<p><b>Educational objectives</b></p>	<p>The program aims at providing analytical and interpretative tools as well as research/planning/design methodologies, able to generate further advancement in transport and mobility planning, infrastructure design, spatial and land use planning. A specific objective relates to the ability to develop a critical attitude towards transportation determinist approaches, for dealing with the uncertainty concerning mobility practices and what technology in the future will enable to do, as well as by the need for flexibility in the design of systems and infrastructures.</p>
<p><b>Job opportunities</b></p>	<p>According to its international orientation, the PhD course</p>



	intends to train highly qualified researchers and professionals in spatial planning, design and management of urban projects and policy, urban studies and urban governance. Italian and international academic institutions, public bodies and research centres, and public and private development agencies could employ PhD holders with such a profile.
<b>Composition of the research group</b>	16 Full Professors 9 Associated Professors 1 Assistant Professors 54 PhD Students
<b>Name of the research directors</b>	Paolo Beria

<b>Contacts</b>	
<b>Research supervisor:</b>	Prof. Paolo Beria paolo.beria@polimi.it
<b>PhD coordinator:</b>	Prof. Luca Gaeta e-mail: luca.gaeta@polimi.it phone +39/02/2399.5426
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Further information is available in the PhD Handbook a.y. 2023/2024 at: <a href="https://www.dastu.polimi.it/dottorato-urbanplanning/">https://www.dastu.polimi.it/dottorato-urbanplanning/</a>	

<b>Additional support - Financial aid per PhD student per year (gross amount)</b>	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

<b>Scholarship Increase for a period abroad</b>	
Amount monthly	650.0 €
By number of months	6

<b>National Operational Program for Research and Innovation</b>	
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<b>Company where the candidate will attend the stage (name and brief description)</b>	MIC-HUB
<b>By number of months at the company</b>	6
<b>Institution or company where the candidate will spend the period abroad (name and brief description)</b>	Marron Institute of Urban Management - New York
<b>By number of months abroad</b>	6

**Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information**

**Funds for educational activities (purchase of books and material, funding for participation in courses, summer schools, workshops and conferences):**

The total amount of the financial aid/research budget ("DOTE") per PhD candidate is **5.300,25 euro**, which will be assigned in 3 annual instalment of:

1st year: max 1.766,75 euro

2nd year: max 1.766,75 euro

3rd year: max 1.766,75 euro

**Computer availability:**

In the PhD room workstations are available for shared use connected to a printer. All PhD candidates can use their own laptops with a wireless connection. Workstations and other equipments are available in the various laboratories linked with the doctoral program.

**Teaching assistantship:**

There are various forms of financial aid for teaching assistantship. PhD candidates are encouraged to take part in these activities within the limits allowed by the regulations.