

# Politecnico di Milano

## PhD in Urban Planning, Design and Policy

**Research Title: EVIDENCE BASED POLICY MAKING WITH BIG AND OPEN DATA. OPPORTUNITIES IN THE MOBILITY DOMAIN**

<b>Scholarships and Financial support</b>	
Monthly net income of PhD scholarship (max 36 months)	€. €. <b>1.160</b> (In case of a change of the welfare rates during the three-year period, the amount could be slightly modified)
Number of scholarships	1
Beginning of PhD	1 May 2019
Deadline for application	<i>March 6 2019 at 2.00 p.m. (local time)</i>
<b>Context of the research activity</b>	
Motivations and objectives of the research in this field	<p>The research focuses on the relationship between mobility and accessibility, considering it as a promising interpretative key for analyzing and understanding ongoing socio-economic dynamics that characterize contemporary urban scenarios.</p> <p>The theoretical perspective that is embraced conceives mobility as a complex set of socio-spatial practices that are expression and achievement of individual's needs and wills while accessibility is intended as the requisite that guarantees to individuals the ability, by moving, to take part in the activities across space they consider valuable. The possibility to move and, consequently, to access to opportunities, is then intended as a fundamental component of social inclusion.</p> <p>The research aims at analyzing the possible interdependencies existing between contextual conditions of access to urban opportunities, using the available transport supply, and individual's mobility projects, establishing a theoretical and operative</p>

	<p>approach able to contribute at improving the social fairness and impact of mobility policies and limiting, therefore, the negative effect of transport-related social exclusion.</p> <p>At the core of the methodological approach proposed by the research, lies an investigation on the contribution that new technologies and diagnostic tools, such the use of big and open data, may offer to integrate the established use of small data in shaping mobility policies.</p> <p>The main research question is if and how such integration may lead to a significant overcoming of the inner limits that characterize the operative action of traditional transport planning approaches and foster processes of social inclusion.</p> <p>In this framework, the research investigates if and how open and big data can be used together with traditional 'small data', including qualitative data, for overcoming the limitations of the latter and contribute to :</p> <ul style="list-style-type: none"> <li>• Defining basic forms of accessibility in relation to fundamental activities in which each individual need to participate in order to be socially included;</li> <li>• Proposing innovative mobility solutions to improve the activity participation of the people experiencing limited opportunities and disadvantaged work-related mobility practices;</li> <li>• Addressing interventions on transport systems to selectively enhance accessibility.</li> </ul>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>Considering the fast-growing relevance that open and big data are assuming in shaping urban policy processes, the research aims at proposing an innovative approach that concerns the setting of a methodology able to integrate them with traditional data sources and qualitative data. Such integration between established sources of information and digital data (both as automated and volunteered) is intended to be helpful for policy makers in detecting manifold mobility forms, practices and experiences to be related with accessibility patterns. In this way, previously hidden trends and needs could be observed, analyzed and addressed promoting targeted transport policies and urban projects to enhance accessibility to valued opportunities.</p> <p>The research will combine different methods and techniques such as literature review, case study and quanti-qualitative analysis focusing on mobility needs, habits and constraints. Available big and open data will be integrated with traditional mobility indicators and accessibility descriptors in a process that will involve data gathering, GIS-based spatial analysis and mapping. The goal is to propose a new theoretical</p>

	<p>perspective on the implication of using new technologies in assessing and conceptualizing mobility and accessibility in contemporary urban contexts. The expected results will be presented under different possible forms (atlas of spatial inequality in accessibility, policy scenario construction for disadvantaged contexts, design proposals).</p>
Educational objectives	<p>The program aims at providing analytical and interpretative tools, as well as research/planning/design methodologies, able to produce further advancement in urban studies, spatial and land use planning, urban design, urban policies and governance.</p> <p><a href="http://www.dastu.polimi.it/index.php?id=1146">http://www.dastu.polimi.it/index.php?id=1146</a></p>
Job opportunities	<p>According to its international orientation, the UPDP course intends to train highly qualified researchers and professionals in spatial planning, design and management of urban projects and policy, urban studies and urban governance. Doctors with such profile could be employed by Italian and International academic institutions, public bodies and research centres, public and private development agencies. In the particular case of the topic offered under this call, doctors with such a degree could be also employed by national and international organisations in research, consultancy and design on smart cities and sharing society challenges.</p>
Composition of the research group	<p>The UPDP PhD research group is composed by:</p> <p>Number of Full Professors: 12          Number of Associated Professors: 11          Number of Assistant Professors: 1          Number of Ph.D. students: 18</p>
Names of the research directors	<p><i>Prof. Grazia Concilio and Paola Pucci</i>          Prof. Luca Gaeta (Coordinator of UPDP PhD program)</p>
Contacts	<p>Grazia Concilio          Email: <a href="mailto:grazia.concilio@polimi.it">grazia.concilio@polimi.it</a>          Phone: +39/02/2399.5473</p> <p>Paola Pucci          Email: <a href="mailto:paola.pucci@polimi.it">paola.pucci@polimi.it</a>          Phone: +39/02/2399.5474</p> <p>Contact in the Ph.D. Office at DASTU:          Marina Bonaventura          Email: <a href="mailto:marina.bonaventura@polimi.it">marina.bonaventura@polimi.it</a>          Phone: +39/02/2399.5165          and          Marilena Mastalli          Email: <a href="mailto:marilena.mastalli@polimi.it">marilena.mastalli@polimi.it</a>          Phone +39/02/2399. 5019</p> <p>Website: <a href="http://www.dastu.polimi.it/index.php?id=1146">http://www.dastu.polimi.it/index.php?id=1146</a></p>

<b>Additional support</b>	
<p><u>Housing:</u> financial aid per PhD student per year (gross amount)</p>	<p><u>Foreign students*</u> 1<sup>st</sup> year: 0 euros per student 2<sup>nd</sup> year 0 euros per student 3<sup>rd</sup> year: 0 euros per student (max number of financial bursaries available....., given in order of merit) <u>Out-of-town residents (more than 80 Km out of Milano)</u> 1<sup>st</sup> year: 0 euros per student 2<sup>nd</sup> year: 0 euros per student 3<sup>rd</sup> year: 0 euros per student</p>
<p><b>Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other informations</b></p>	
<p><u>Educational activities</u> (purchase of study books and material, funding for participation in courses, summer schools, workshops and conferences): financial aid per Ph.D. student per year</p>	<p>1<sup>st</sup> year: max <b>0</b> euros per student 2<sup>nd</sup> year: max <b>1.534,33</b> euros per student 3<sup>rd</sup> year: max <b>1.534,33</b> euros per student  Increase of the scholarship up to 50% for visiting periods for a maximum of six months.</p>
<p><u>Teaching assistantship:</u> availability of funding in recognition of supporting teaching activities by the Ph.D. student</p>	<p>Various forms of financial aid for activities of support to the teaching practice may be available in the research projects, the didactics, and the Laboratories carried out by the Ph.D. faculty, within the limits allowed by the regulations.</p>
<p><u>Computer availability:</u></p>	<p>1<sup>st</sup> year: 2 pc for <i>shared use</i> 2<sup>nd</sup> year: 2 pc for <i>shared use</i> 3<sup>rd</sup> year: 2 pc for <i>shared use</i> Many Ph.D. students already have their own laptop. Workstations and other equipment are available in the various laboratories linked with the program.</p>
<p><u>Desk availability:</u></p>	<p>1<sup>st</sup> year: one individual desk 2<sup>nd</sup> year: one individual desk 3<sup>rd</sup> year: one individual desk</p>