

## MOBILITY AND SPATIAL PLANNING IN THE LISBON METROPOLITAN AREA

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**ABSTRACT** – People’s daily mobility and commuting patterns are differentiated by sociodemographic features. It relates to place as structure (spatial organization) and to public policy (spatial planning). Between urban structure and people’s traveling behaviours, spatial public policy should be called to reduce social inequality and to promote more just territories. This concerns the process of planning as well as its outcomes. Accessibility and conflict are important questions to be approached in both. The paper examines the importance of social issues in the design of the Lisbon Metropolitan Area’s (LMA) policies on mobility and spatial planning. It continues to be a peripheral matter, despite some change at the discursive level. We begin by discussing how spatial justice and social inequalities can be central to mobility and spatial planning. Secondly, the general European and national policy background is presented. Finally, some fundamental trends of LMA mobility statistics are outlined followed by a critical reading of municipal and supramunicipal mobility related policies.

**Keywords:** Mobility; inequality; spatial planning; Lisbon Metropolitan Area.

**RESUMO** – MOBILIDADE E ORDENAMENTO DO TERRITÓRIO NA ÁREA METROPOLITANA DE LISBOA. A mobilidade e os movimentos pendulares são temáticas diferenciadas a partir das características sociodemográficas, na medida em que relaciona o espaço, quer enquanto estrutura (organização social), quer como um conjunto de políticas públicas espaciais (ordenamento do território). Desta forma, entre a estrutura urbana e o comportamento de mobilidade das pessoas, as políticas públicas espaciais são chamadas a intervir de forma a reduzir desequilíbrios sociais e a promover a justiça territorial, ou seja estamos a falar do exercício de planeamento territorial. A acessibilidade e os conflitos são questões importantes a serem abordados em ambos. O artigo analisa a importância das questões sociais nas políticas de planeamento e ordenamento do território e mobilidade, com enfoque na Área Metropolitana de Lisboa (AML) e demonstra que o tema prevalece como uma

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questão periférica, apesar de alguma mudança no campo discursivo. Começamos por discutir como a justiça espacial e as desigualdades sociais são fundamentais para a mobilidade e o ordenamento do território. De seguida revemos o plano de fundo da política europeia e nacional em geral. Finalmente apresentamos algumas tendências acerca da mobilidade na AML, com base em análises estatísticas e na leitura crítica das políticas municipais e supra-municipais da mobilidade na AML.

**Palavras-chave:** Mobilidade; desigualdade; planeamento e ordenamento do território; Área Metropolitana de Lisboa.

**RÉSUMÉ** – MOBILITÉ ET PLANIFICATION SPATIALE DANS L'AIRE MÉTROPOLITAINE DE LISBONNE. Les déplacements pendulaires des populations urbaines dépendent de leurs caractères sociodémographiques par rapport à l'espace, c'est à dire tant de leur organisation sociale que de la planification territoriale. L'aménagement spatial doit intervenir pour réduire les déséquilibres sociaux et pour accroître la justice territoriale, en améliorant l'accessibilité et en réduisant les conflits. Ces problèmes sont analysés dans le cadre de l'Aire Métropolitaine de Lisbonne (AML) et on constate que ce thème n'apparaît en réalité que comme secondaire, même si c'est le plus souvent mentionné. On montre l'influence que les inégalités sociales ont sur la planification territoriale, on évoque les caractères d'ensemble des politiques européennes et nationales et, finalement, les tendances que la mobilité présente dans le cadre de l'AML, d'après les données statistiques et la lecture critique d'autres publications.

**Mots clés:** Mobilité; inégalité; la planification et l'aménagement du territoire; Aire Métropolitaine de Lisbonne.

## I. MOBILITY AND PUBLIC POLICY: PLANNING MORE JUSTICE?

The (re)production of inequality and the distribution of social and economic resources has been extensively studied in social sciences. However, the relationship between space and geographical mobility has not been sufficiently explored (Kaufmann, Bergman, & Joye, 2004; Ohnmacht, Maksim, & Bergman, 2009; Manderscheid, 2009). Furthermore, the social dimension is still a weak element in transport policies, which focus on economic and environmental concerns (Martens, 2006; Preston, 2009).

Mobility is an important arena for the wider discussion on spatial justice or social justice in space (Harvey, 1973; Soja, 1989; Marcuse, 2009; Fainstein, 2009) and the right to the city (Lefebvre, 1968; 1974; Mitchell, 2003; UNHABITAT, 2010). The ability of a person to move and to move other individuals, goods or information has become an important force of stratification (Manderscheid, 2009; Asher, 2010). This is the essence of many studies about the production of mobilities (Urry, 2000; Cresswell, 2006; Sheller & Urry, 2006; Carmo, 2009) and its relation to social inequality (Kaufmann *et al.*, 2004; Cass, Shove, & Urry, 2005; Teles, 2005; Camarero & Oliva, 2008; Carmo & Santos, 2011). Unequal accessibility to urban space is frequently an outcome of a fragile, if even existing, articulation between mobility and spatial planning (Padeiro, 2012; Santos, 2014).

Soja (2010) uses an example of urban mobility to show the connection between public policy and the production of unfair spaces or inequalities in space. He analyses a judicial process which opposed a group of associations of public transport users against the Los Angeles Metropolitan Transit Authority (LAMTA). The final decision asserted that decades of discrimination against the “transit-dependent urban poor” had to be compensated: LAMTA was forced to prioritize investment in the quality of bus services and to ensure equal access to all forms of mass transport, instead of continuing the higher investment in road infrastructure.

Similarly, Camarero and Oliva (2008) observed how in the Spanish region of Pamplona-Iruñea there are citizens of “different velocities” according to class, family situation and mobility strategies. This was considered to be the combined result of the dynamics of urban sprawl and the increase of inequality in contemporary cities.

In general, studies on the social dimensions of mobility and transport tend to show concerns with the social usefulness of academic research (Bergmann & Sager, 2008; Ohnmacht *et al.*, 2009) and to focus on the relation between social exclusion and transport (Garrett & Taylor, 1999; Church, Frost, & Sullivan, 2000; Hine & Grieco, 2003; Preston, 2009).

These discussions highlight a key debate on the role of public policies. Justice can be promoted not only in their content and results but also in the process in itself, namely through the participation of organized civil society, the population in general, specialists, etc. The demand for participation in planning grew when planning began to be recognized as a political and non-neutral activity (Miller, 1979; Hague & Jenkins, 2005).

Nonetheless, Fainstein (2009) and Cardoso and Breda-Vazquez (2007) alert to the possible over valorization of the communicative approach; the emphasis in procedural aspects of justice may fail to recognize or even help hide structural inequalities and power hierarchies. An open and public process does not necessarily promote the redistribution of resources or the rebalance of access to urban space. Much has to be discussed about how open and diverse the debate is, how does it reach populations that are excluded from other arenas of participation and how does it protect itself from NYMBism phenomena or electoral logics (Santos, 2012). Conflict appears unavoidable in planning: the conflict of interests in the planning process and the management of conflicting practices in space.

In sum, two fundamental questions are developed: is unequal access to space acknowledged in the reports and plans of mobility related policies? If so, what role is foreseen (or possible) for mobility and spatial planning in the design and implementation of more just policies? To answer these questions we must understand the background conditions and limitations that influence mobility and spatial planning in the Lisbon Metropolitan Area (LMA).

## II. MOBILITY AND SPATIAL PLANNING: THE EUROPEAN AND NATIONAL BACKGROUND

In the 90's, mobility issues acquired grown importance at the European level. Several guiding documents were published upholding the paradigm of sustainable urban mobility where mobility and spatial planning articulation is central (Costa, 2007).

At the European level, in what concerns urban mobility, the green paper (CE, 2007) stated three fundamental principles regarding inequality in mobility: (i) accessibility to certain services is a right; (ii) some conditions of a socially vulnerable individual or group result in reduced mobility; (iii) certain territories are marginalized regarding the availability or accessibility to services and the mobility conditions they provide to their inhabitants. In 2008, in the green paper on territorial cohesion (CE, 2008) transport policy was mentioned first in the group of policies that influence cohesion through its impacts on the implantation and distribution of activities and in its role on the improvement of connections to less developed regions and within these.

However, the subsequent transport white book (CE, 2011) suggests a more liberal orientation on public transport; the European mobility network should have a unique market freer from State intervention. It gives emphasis to 'polluter pays' and 'user pays' principles anticipating that transport users will pay for a higher proportion of the costs than today.

The publication of several documents, the participation in ministerial working groups, urban networks and projects at the European level have placed national and local governments in tune with European policy. There is a convergent trend of national systems and cultures of spatial planning in Europe although it is a tendency that happens mainly at the discursive level and with unequal incidence between countries and within them (Ferrão, 2011).

In Portugal, mobility policy-making is a particularly conflicting arena. There is at the same time a void and confusion in the definition of the responsibilities of each key actor, namely in what concerns separating public service from private businesses or establishing complementary territorial scales of action. In-between the central government, the road and public transport companies and the municipalities the multi-municipal intervention level has yet to mobilize. This is particularly negative in a metropolitan area such as Lisbon.

In mobility, as in other policy-making domains, over the last 30 years there was: (i) the persistence of outdated legal diploma, (ii) the multiplication of strategic guiding documents that strongly overlap, (iii) the absence of monitoring and evaluation mechanisms. There was a stronger investment in road development and the public transport network was maintained in the classic center-periphery model, although regional policy was aiming at sustainable and multipolar development for the Lisbon Metropolitan Area<sup>1</sup>. Consequently, the urban expansion of the last two decades has been based on a highly car dependent mobility.

Concerning Portuguese planning, Cardoso and Breda-Vázquez (2007) stated that it is still understood as a technical instrument of a neutral State aspiring to objectivity and refusing normative thinking. Viegas (2003) also alerted to the absence of explicit normative and political orientations in the planning process in Portugal: according to the author the result is that the plan reproduces mainly the vision of non-elected urban planners. To this matter, Ferrão (2011) points out that much is yet to be known about the social conditions underpinning the design and implementation of spatial planning policy.

In Portugal, the legislation in the area of transport, environment and spatial planning<sup>ii</sup> connects these three domains, contemplates intermunicipal transport planning and mentions that attention should be paid to social and territorial equality.

However, progress had been made in the production of planning guide lines for better mobility, namely on the articulation of transport with spatial planning and the inclusion of social concerns. In 2009, three municipalities of the Lisbon Metropolitan Area's (LMA) edited a manual of sustainable mobility planning (AAAA, 2009), which resulted from participation in a European project. Also in 2009 a policy report on gender, environment and space (Gaspar & Queirós, 2009; Queirós & Costa, 2012) was published by the initiative of the Commission for Gender Citizenship and Equality. It dedicated a chapter to gender inequality in transport with some data for Portugal, namely regarding the use of car and public transport and the time expended in mobility. In 2010, the Portuguese national environment agency also published a manual on sustainable mobility (APA, 2010) and in 2011 the Director General for Spatial Planning and Urban Development (DGTODU) edited a volume dedicated to accessibility, mobility and urban logistics where the right to mobility is denoted (DGOTDU, 2011).

In the same year, the national institute for transport produced a guide for the elaboration of mobility and transport plans (IMTT, 2011). This document refers to vulnerable groups in mobility: the elderly, children and people with reduced mobility. It also declared a group of questions that a plan has to address which included the following: *Are there areas or neighborhoods where problems of social and spatial exclusion persist due to an inadequate offer of transport infrastructure or services?* (IMTT, 2011, p. 29).

These guiding documents discuss the problems of urban sprawl and its costs (financial and on the citizens quality of life) relating to mobility issues and underlining the great need to decrease car use. They reflect a profound knowledge of European orientations and policy-making and of other international experiences. They all suggest the promotion of urban densification and of land mix use and the importance of public information on mobility management. These are conditions expected to also uphold a better planning and an increased use of public transport. Unfortunately, these questions seem to be overlooked in the National Strategic Transport Plan (NSTP).

Recent financial problems in Portugal have critically redefined the agenda in the NSPT (MEE, 2011). The plan reports mainly the financial problems of the public transport companies. It is determined that only when the market does not function should the State ensure public service. In all, the state's fundamental mission is not to provide a public transport service but to focus on offering support to the poorest. Reference is made to a social monthly pass (*passe social+*) which creates special discounts for low income people, although the number of eligible individuals declined compared to former policies. In addition, it doesn't recognize the role of the already formally established transport metropolitan authorities, since its regulating law from 2009 (Lei n° 1/2009, de 5 de Janeiro). There is a vague mention of the need for decentralization followed by a reference to the importance of municipalities. More recently, the political context has changed with the change of government and – although discourse seems to be changing – much remains to be determined in what concerns effective policy change.

### III. LMA'S MOBILITY AND SPATIAL PLANNING: NUMBERS AND DISCOURSES

#### 1. Mobility trends in the Lisbon Metropolitan Area (LMA)

In the LMA the percentage of people that use a car to go to work or school has tripled in the last two decades. In 2011, the proportion of car use in the metropolitan area was 54% while the national percentage was 60%. In all 18 municipalities of the LMA the use of car has been rising (table I). In 1991, all showed fewer than 30% of the population using a car, while in 2001 all were above this value and many had already more than half of its movements made by car.

Table I – Population working or studying outside the municipality and car use (%) – 1991, 2001, 2011.

*Quadro I – População que trabalha ou estuda fora do concelho e o uso do automóvel (%) – 1991, 2001, 2011.*

Municipality	People working or studying outside the municipality (%)			Car use going to work/school (%)		
	1991	2001	2011 <sup>iii</sup>	1991	2001	2011
Cascais	35.29	42.90	38.76	27.93	53.74	66.03
Lisboa	8.39	13.46	14.00	22.76	39.86	47.69
Loures	45.89	55.86	49.03	22.80	44.73	53.50
Mafra	20.57	32.80	39.05	24.62	56.86	71.61
Oeiras	54.65	58.96	50.14	29.93	52.55	63.10
Sintra	42.39	50.59	44.12	20.83	46.02	54.27
Vila Franca de Xira	34.22	48.38	45.67	17.79	46.11	54.38
Amadora	56.02	64.11	54.81	20.71	39.13	46.38
Odivelas	52.91	62.96	55.64	20.83	40.85	50.02
Alcochete	35.63	50.41	49.39	15.06	51.18	61.84
Almada	38.41	47.78	41.09	19.90	40.77	49.40
Barreiro	39.91	52.65	46.04	10.31	33.30	42.17
Moita	45.29	59.21	51.67	11.00	37.27	47.62
Montijo	20.50	34.10	41.53	19.47	48.58	61.69
Palmela	35.98	41.71	41.70	17.38	51.63	64.36
Seixal	46.11	55.98	49.95	20.35	42.78	50.56
Sesimbra	22.53	39.57	43.46	20.17	52.52	61.64
Setúbal	11.75	24.46	25.99	21.66	49.84	59.50

Source: INE Census 1991, 2001, 2011

The great increase was from 1991 to 2001, also in what concerns mobility between municipalities (table I). In all, Lisbon continues to be the main centre and, in the south margin of the Tagus River, Setúbal performs as a subregional capital in some functions. However, while Setúbal has been losing the ability to retain its workers and/or students, Oeiras and Palmela have grown and became simultaneously the origin and destination of daily movements. Moreover, municipalities that integrated the first generation of suburbs (Amadora, Odivelas, Loures, Cascais, Sintra, Almada, Seixal, Barreiro) start to present, from 2001 to 2011, a better ability to maintain its population within the municipality. At the same time, Montijo, Sesimbra and Mafra, municipalities that traditionally show a more rural character, increase the percentage of the population leaving the municipality to work or study, which mainly relates to the recent growth of population.

Several factors influence the variation of behaviors between municipalities in what concerns car use (table I). The proximity to Lisbon, a better transport network and lower income seems to explain a lower use of the car in the case of Odivelas (50%), Amadora (46%), Moita (48%) or Barreiro (42%). Income is an important variable and the dominant socio-economic profiles in the municipalities have a say in the matter. The municipalities that show high levels of car use – Cascais (66%), Oeiras (63%) and Mafra (72%), Sesimbra or Alcochete (both 62%) – are different in what concerns social and professional profiles of the employed population (higher in the first two) or the level of accessibility and public transport offer (lower in the others). In 2003, the National Statistical Institute (INE) published a study which had some data on the social dimensions of mobility. The use of private transport above the average has been clearly associated with elite professional groups and higher qualifications as well as with gender: men use cars the most; and collective transport is fundamentally used by women and students (INE, 2003). More recently these trends have been confirmed by a survey applied to a representative sample of Lisbon Metropolitan Area. The survey designed and applied by initiative of *Localways* research project reaches the same conclusions eleven years later: although income is fundamental, it is still mostly men that drive and women and young people that use public transport (P. L. Santos, 2015: 123-129). The elderly also use public transportation but mostly walk (*idem*).

Unfortunately, no similar study or variables are available for the 2011 census. There has been an improvement in the average time spent in pendular movements, from 32 to 26 minutes in the last decade (INE, Census 2001 and 2011). However it is not equal for all. Travel time can double comparing car use to public transport: the average time in the LMA for car users is 20.4 minutes while for public transport users it is 42.5 minutes. The smallest difference is in Mafra, from 12.1 (car) to 35.9 minutes (public transport), but in Barreiro, while car users spend in average 33.2 minutes in their home-work/school travels, public transport users take up to 55.9 minutes (INE, 2011). It seems the preference for car use, if possible, is not particularly irrational.

## 2. LMA municipal and supramunicipal policies

In the following section, we analyse how local and regional policies of mobility and spatial planning address questions of social inequality concerning mobility. Not all municipalities have specific studies on mobility and, in a total of 18, only three developed their own extensive surveys reporting on sociodemographic features of mobility (Lisbon, Oeiras and Cascais). Local authorities make use of their technical teams and frequently of private consulting or non-profit research centers. Through a critical reading and qualitative content analysis of the main documents (table II) we explored how inequality in mobility is conceived by urban planning in the Lisbon Metropolitan Area. The content analysis was focused on identifying if and how inequality in people's mobilities was perceived. If inequality was mentioned, we searched for the most referenced spatial or social variables and which measures, if any, were designed to oppose this inequality. The content analysis was computer assisted though no quantitative outputs were produced since it was mainly the discourse, symbols and values used that were under focus.



Table II – Documents in analysis.  
 Quadro II – Documentos analisados.

<b>Title</b>	<b>Entity</b>	<b>Year</b>	<b>Scale</b>
<i>PNPOT Relatório</i>	<i>Direcção-Geral de Ordenamento do Território de Desenvolvimento Urbano</i>	2007	National
<i>PNPOT Programa de acção</i>			
<i>Plano Estratégico de Transportes (RCM nº 45/2011, de 10 de Novembro)</i>	<i>Governo de Portugal, ministério da Economia e do Emprego</i>	2011	National
<i>PROT AML Diagnóstico Sistema urbano e equipamentos</i>	<i>Comissão de Coordenação da Região de Lisboa e Vale do Tejo</i>	2010	Regional
<i>PROT AML Diagnóstico Transportes</i>			
<i>Mobilidade e Transportes na AML 2000</i>	<i>Direcção Geral de Transportes Terrestres (DGT) – Lisboa</i>	2000	Regional
<i>Lisboa: o desafio da mobilidade</i>	<i>Câmara Municipal (CM) de Lisboa</i>	2005	
<i>Lisboa: Regulamento do PDM</i>	<i>CM Lisboa</i>	2012	
<i>Almada: Apresentação do plano de mobilidade de Almada (ficheiro ppt)</i>	<i>CM Almada</i>	2002	
<i>Almada: Relatório PDM</i>	<i>CM Almada</i>	2008	
<i>Amadora: REOT</i>	<i>CM Amadora</i>	2007	
<i>Cascais: Diagnóstico Caracterização Urbana</i>	<i>CM Cascais</i>	2010	
<i>Cascais: Estudo de Trânsito de Âmbito Concelhio</i>	<i>CM Cascais</i>	2010	
<i>Loures: Diagnóstico de Mobilidade (PDM) (adenda)</i>	<i>CM Loures</i>	2008	
<i>Loures: Programa Base PDM</i>	<i>CM Loures</i>	2006	
<i>Mafra: Plano Estratégico de Mobilidade</i>	<i>CM Mafra</i>	2008	
<i>Mafra: Visão Estratégica</i>	<i>CM Mafra</i>	2008	
<i>Moita: Relatório PDM</i>	<i>CM Moita</i>	2007	Municipal
<i>Montijo: Diagnóstico de Mobilidade (PDM)</i>	<i>CM Montijo</i>	2011	
<i>Odivelas: Diagnóstico de Mobilidade e Transportes (PDM)</i>	<i>CM Odivelas</i>	2009	
<i>Odivelas: Diagnóstico Estrutura Urbana PDM</i>	<i>CM Odivelas</i>	2009	
<i>Odivelas: REOT</i>	<i>CM Odivelas</i>	2003	
<i>Oeiras: Estudo de mobilidade</i>	<i>CM Oeiras</i>	2008	
<i>Oeiras: Relatório Agenda21</i>	<i>CM Oeiras</i>	2008	
<i>Palmela: REOT</i>	<i>CM Palmela</i>	2003	
<i>Sesimbra: Relatório PDM</i>	<i>CM Sesimbra</i>	2006	
<i>Sintra: Relatório PDM</i>	<i>CM Sintra</i>	1998	
<i>Vila Franca de Xira: Diagnóstico de Mobilidade (PDM)</i>	<i>CM Vila Franca de Xira</i>	2004	
<i>Vila Franca de Xira: Programa Base PDM</i>	<i>CM Vila Franca de Xira</i>	2009	

In all the documents environmental sustainability is mentioned in relation to mobility. This is not true for social inequality. There is a lack of information on social differentiation, although all documents were produced after the publishing of the INE (2003) report. Most of the municipalities even used other information of this report but did not refer to the differences identified concerning age, economic resources or gender.



Mobility and spatial planning are related in all documents through the role of infrastructure and transport in the structure and hierarchy of urban space. They all establish parallels between the development of the road network and transport services and the extension of employment and residential areas, describing how the municipalities have grown in the last decades. Also, in all is outlined the problem of urban sprawl in the LMA.

Inequality is a poorly referenced subject. Different notions such as social equity, inequality or social differentiation are used. Although they have distinct and debatable meanings, we identified them as an ensemble due to the scarcity of references. Thus this analysis is generally identifying every time social or spatial variables are mentioned to refer to unequal access to space or mobility. This general reference is differently presented throughout the documents. The first and more frequent reference is a general consideration of the principle itself in spatial planning, rarely detailing what it means or how it is materialized. In the national spatial planning policy report (DGOTDU, 2007) the notion of social and territorial equity, being a central principle, relates mainly to the notion of territorial cohesion of the European Commission report (2009). At the regional level, in the transport study that precedes the regional spatial plan, the document refers to equity as a priority and to mobility as a right (PROTAML, Diagnóstico Transportes, CCDRLVT, 2010). Yet the regional plan is currently suspended. The only other document at the supramunicipal level is the pioneer experience of the Intermunicipal Transport Plan (PMTI) of Barreiro, Moita, Palmela, Seixal and Sesimbra, motivated by the planning of a third Tagus River crossing (AAAA, 2013).

Still, some documents identified specific variables for conditioning mobility: age, life cycle; the existence of children in the family; and the specific needs of disabled people. In documents of Lisbon, Oeiras, Cascais, Odivelas and Loures the social dimensions of mobility are more present. In these municipalities the relation between mobility and spatial planning is more thoroughly examined in the specific local contexts of each municipality. In Lisbon, Cascais and Oeiras the approach is quite similar. Besides having common urban features, in these municipalities the team responsible for the plan was the same (TIS.pt). The documents cross-examine social and demographic features of the population with levels and modes of travel concluding that age, the presence of children and economic resources tend to produce different mobility patterns: people with more economic resources tend to use the car the most as well as people with children. Ageing is the problem most mentioned, particularly in Lisbon. Children are also identified as a group that should have special attention related to school transport. Also, in a more normative tone, the Lisbon and Oeiras studies start with notes on the right to mobility (CML, 2005, p. 6; CMO, 2008, p. C-4). However, an absence must be disclosed: no consideration is made regarding gender. And if some references are made to equity, cohesion, justice or the right to mobility, much rarer are concrete proposals.

One of the factors that most distinguishes the municipal mobility strategies could be the team which designs it. In Oeiras, Cascais and Lisbon *TIS.pt* was the consultant company responsible (which is directed by José Manuel Viegas, currently Secretary-General for the OECD International Transport Forum). As in Mafra and Vila Franca de Xira, the focus on public space design considering reduced mobility groups (the elderly, people

with disabilities, people with children) is produced by *m.pt*, founded by Paula Teles (the national coordinator of the city network that promotes “mobility for all”).

The municipalities use their technical teams but also make resource of external consulting<sup>iv</sup>. A different kind of actor involved is the research center, such as, *e-geo* and the environment engineering department (*FCT*) from Universidade Nova de Lisboa (Amadora and Odivelas environment and spatial planning reports – REOT). Some individualities are present in these different arenas: private consulting, public universities research, third sector as well as political roles. This probably reinforces the blurred lines in the separation of actors, their nature and corresponding responsibilities (public/private; political/ academic/ consulting, etc.). Nonetheless, it has also been the vehicle for exchange between academic production and policy making and through different scales of thinking and intervention (European, national, regional, local).

#### IV. MORE JUSTICE IN PLANNING? DISCOURSE FACES ACTION

Surely mobility and spatial planning policy is not limited to the content and discourse of these documents. In Portugal, recent profound changes are still hard to measure. However, if some change in discourse is denoted, central government policies concerning public subvention to transport service and pricing clearly worsen mobility conditions. Fares are higher (table III) and there is a discount reduction for the elderly, students or the low income population (Portaria n° 272/2011, de 23 de Setembro, Diário da República, 1ª série – n° 184 and Portaria n° 36/2012, de 8 de fevereiro, Diário da República, 1ª série – n° 28). In three years the established prices for the subventioned intermodal monthly passes increased up to more than 10 euros, according to the information available on the Transport Metropolitan Authority website (table III). Variation rates in the prices of monthly passes from 2011 and 2014 are all above 20% when for the same period the employees’ national average salary increased 0.48% (PORDATA, 2016<sup>v</sup>).

Table III – Intermodal subventioned monthly passes. Prices (€) in January 2011 and in January 2014.

*Quadro III – Tarifas mensais dos passes Intermodais. Preço (€) em Janeiro de 2011 e Janeiro de 2013.*

Monthly passes	Jan/ 2011	Jan/ 2014
<i>Navegante urbano</i>	29.35	35.65
<i>Navegante rede</i>	32.60	42.00
<i>L1</i>	40.10	49.30
<i>L12</i>	48.30	59.45
<i>L123</i>	55.00	67.65
<i>12</i>	29.35	36.15
<i>23</i>	29.35	36.15
<i>123</i>	39.40	48.45
<i>L123- MA (Montijo e Alcochete)</i>	71.40	87.85
<i>L123- SX (Seixal)</i>	70.65	86.85

Source: AMTL, *Atualização tarifária 2011 e 2013* in <http://www.sg.min-economia.pt/>

However, there are signs that the public service has been reducing its offer. Even if the demand for transport unfortunately decreases due to the rise of unemployment, the public transport offer decrease seems to be worse. We underline the cases of *Carris* and *Metropolitano de Lisboa*, the bus and subway public companies which operate in the Lisbon municipality and its outskirts where the public offer decreased before the decrease of passengers. (figs. 1 to 4).

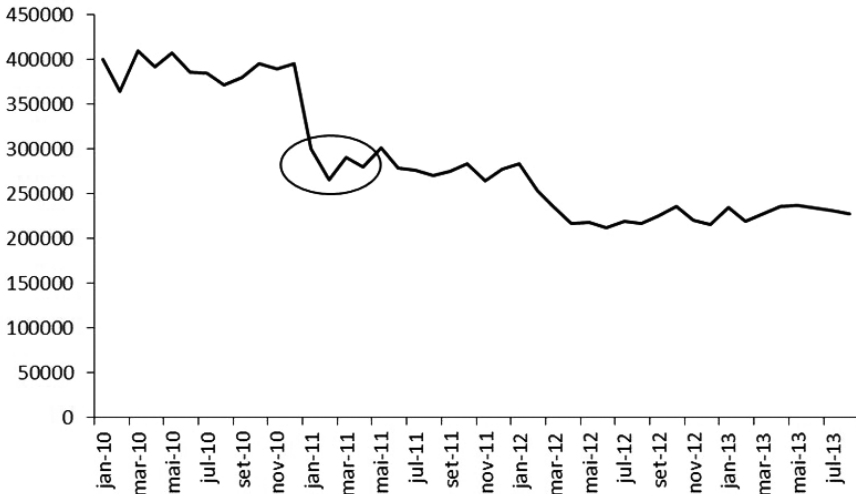


Fig. 1 – Lisbon subway offer: Places/km offered (N.º), June 2010 to July 2013.

Fig. 1 – Oferta do Metro de Lisboa : oferta (Nº) sítios/km, junho 2010 a julho 2013.

Source: extracted from [www.ine.pt](http://www.ine.pt) 2014

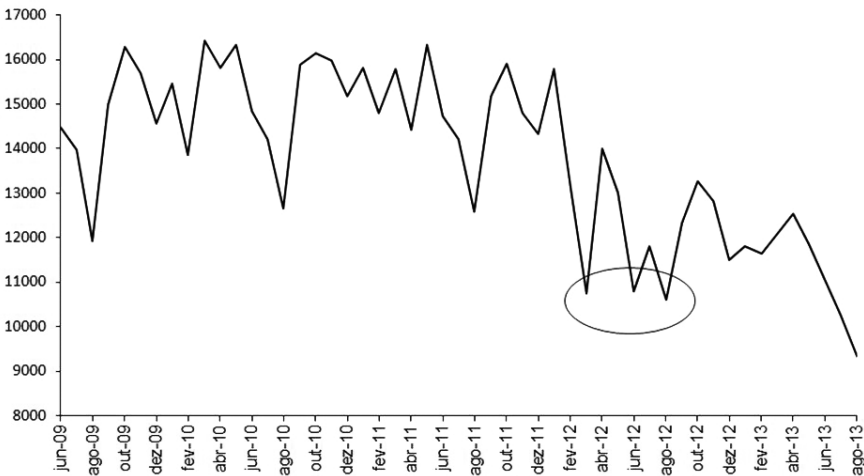


Fig. 2 – Passengers in Lisbon subway (N.º), June 2009 to August 2013.

Fig. 2 – Número de passageiros do Metro de Lisboa, junho 2009 a agosto 2013.

Source: extracted from [www.ine.pt](http://www.ine.pt) 2014

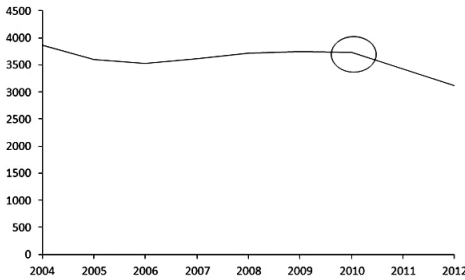


Fig. 3 – Carris bus offer: places/km (millions).

Fig. 3 – Oferta do autocarro Carris: sítios/km (milhões).

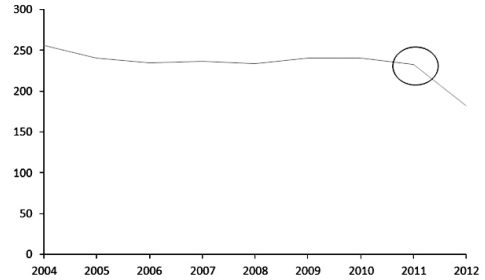


Fig. 4 – Passengers in Carris buses (millions).

Fig. 4 – Passageiros dos autocarros da Carris (milhões).

Source: <http://www.carris.pt/pt/indicadores-de-atividade/>

Conversely, some services have been qualified. Using the internet there are now several options to better plan our travels with the estimation of time, length and costs. In the last decade some buses and trains have been equipped with more visual and sound information about the travel, its stops and estimated waiting time. Nonetheless, this does not benefit all social groups equally: age, income or qualification tend to influence the access to these innovations. Also, the material ticket system has been undergoing simplification with the *Lisboa Viva* card functioning in the majority of the metropolitan operators, though the organizing system behind it has yet to be tackled. In the *Autoridade Metropolitana de Transportes de Lisboa* (AMTL) website there is the list, reviewed in august 2013, of the 1,241 titles that can be bought in the LMA transport network. These are from 16 different operators and 551 of them are monthly passes. Many of them are not subventioned, not applying the discounts referred to above.

## V. CONCLUDING REMARKS

The expression and reproduction of social inequalities in people's mobility is inseparable from the urban structure and the private and public agents that produce it. Some tendencies concerning age, gender, physical disabilities and socio-economic resources were clearly identified in international and national studies and also in some local surveys. Nonetheless, in the majority of the documents social concerns on mobility are peripheral and concrete measures to promote spatial justice have not been identified.

At the present time, there are many guiding documents at the European, national and regional level that aim to promote a more sustainable mobility establishing social equity as a priority. However, some of these documents were published after the municipal studies and plans analysed. Municipalities examine and plan mobility in different ways depending on economic and technical resources and planning cultu-

res. If financial resources and political determination seem sometimes to be missing, some regional and local actors show the know-how, which is a central resource.

LMA unequal mobility conditions promote conflicting spatial practices, in which the use of car has been clearly benefited. This is also an outcome of decades of policy-making disregarding and thus helping to reproduce unequal conditions of living and moving in the city-region. The delay and blockage at the metropolitan level of planning may have been one of the strongest factors for the continuing lack of articulation between spatial planning and mobility. If the city is left to grow according to road infrastructure development and without articulation with public transportation, it will quite predictably promote unequal access to urban space and unsustainable mobility practices.

Unfortunately, if until recently European policy-making would provide wise guide lines in the opposite direction, the current parallel between the white book and the national transport plan suggests mainly the over focus on financial matters and the disregarding of the regional level of action. This has already been materialized in political actions in the transport sector, namely in pricing and reduction of public service. However, other institutions at the national and local level have not yet succumbed to this narrowing conception. Their manuals and guiding documents can considerably contribute to capacity building providing resources for planning sustainable mobility that promotes socio-spatial inclusion. Finally, this background enables that the choice between these two conflicting visions on mobility is highly dependent on the local political will and endorses the persistent blockage of a metropolitan strategic planning.

Evidently, to aim for spatial justice in mobility involves broader questions regarding employment, work-family conciliation, environment, or urbanization models. An improved mobility planning demands strong articulation with spatial planning or employment policies, for instance. Nonetheless, transport policies can be more socially aware through the deeper knowledge of mobility inequalities and the promotion of better circulation and accessibility for vulnerable groups. Thus preventing that social exclusion is worsened by territorial marginalization. The concern with inequality in access to urban space requires multilevel intervention, beyond the transport domain, though necessarily producing effects in mobility.

Furthermore, if attention must be paid to procedural aspects we should also ensure that the process of planning effectively produces results that fight socio-spatial inequalities. To ensure spatial justice we firstly have to identify the emerging inequalities in space and to recognize the role of public policy in their (re)production.

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<sup>i</sup> See Regional Spatial Plan (PROT), RCM n.º 68/2002, Diário da República – I Série B, N. 82, 8 de Abril de 2002 DIÁRIO DA REPÚBLICA – I SÉRIE-B.

<sup>ii</sup> Portuguese fundamental laws in these matters: (I) Transport – *Lei de Bases do Sistema de Transportes Terrestres (Lei nº10/90, de 17 de Março)*, *Plano Estratégico de Transportes (RCM nº 45/2011, de 10 de Novembro)*; (II) Environment – *Lei de Bases do Ambiente (Lei nº 11/87 de 7 de Abril)*; (III) Spatial Planning- *Lei de Bases do Ordenamento do Território (Lei 48/98, de 11 de Agosto)*, *Regime Jurídico dos Instrumentos de Gestão Territorial (Decreto-Lei 380/99, de 22 de Setembro)* e o *Programa Nacional da Política de Ordenamento do Território (Resolução do Conselho de Ministros n.º 41/2006, de 27 de Abril)*. Spatial planning and environment fundamentals laws have recently been substituted by new diplomas in 2014.

<sup>iii</sup> The comparison between 2011 and 2001 values must be carefully made for the weight of students, which make mostly inner municipality displacements, has much increased. Although it seems that in general people started to move less that is not true from employed individuals. When looking only to work related movements (still 69.1% of total movements in 2011), the population in LMA that works in the municipality of residence has decreased from 53% to 49%. (INE 2001, 2011)

<sup>iv</sup> Sidónio Pardal, on the coordination of the Montijo master plan revision; *Transitec Portugal* e *Semaly Portugal* designed the Accessibility Plan in Almada; *Mercaplus* on a mobility study for Loures; *Cised Consultores, Geoidéia – Estudos de Organização do Território* and *Planarq – Planeamento e Arquitectura*, also on a mobility study for Vila Franca de Xira; which was used by *Plural* for the Vila Franca de Xira master plan revision; and then *m.pt* was responsible for Mafra and Vila Franca de Xira more recent accessibility plans; *TIS.pt* in Lisboa, Oeiras, Cascais and the regional plan transport, PROTAML; *DHV*. SA for the PMTI, the only intermunicipal plan; *way2go associados* in Sesimbra accessibilities plan; and *Parque Expo* designed Mafra strategic plan.

<sup>v</sup> <http://www.pordata.pt/Portugal/Sal%C3%A1rio+m%C3%A9dio+mensal+dos+trabalhadores+por+conta+de+outrem+remunera%C3%A7%C3%A3o+base+e+ganho-857> confirmed 28/09/2016.