

# **Comparative justice (or injustice) of different regimes governing a single metropolitan area: mobility policies across metropolitan Mexico City**

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Session A-2-1 “What cities are more just than most?”

Convened by **Susan Fainstein**

**Comparative justice (injustice) of different regimes governing a single metropolitan area: mobility policies across metropolitan Mexico City<sup>1</sup>**

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*The automobile, a renewable body, has more rights than the human body, which is condemned to decrepitude. (Eduardo Galeano La religion del Automóvil, Montevideo, 1996)*

*Cars do not vote, but politicians are terrified of upsetting them in the slightest. No Latin-American government, whether civilian or military, right wing or left wing, has dared to challenge motorised power. (Eduardo Galeano Úselo y Tírelo 1994)*

*Why is the car treated like a sacred cow? Why, unlike other "privative" goods, isn't it recognised as an antisocial luxury? ... Mass motoring effects an absolute triumph of bourgeois ideology on the level of daily life. It gives and supports in everyone the illusion that each individual can seek his or her own benefit at the expense of everyone else... The spread of the private car has displaced mass transportation and altered city planning and housing in such a way that it transfers to the car functions which its own spread has made necessary. An ideological ("cultural") revolution would be needed to break this circle. Obviously, this is not to be expected from the ruling class (either right or left). André Gorz The Social Ideology of the Motor Car 1973*

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<sup>1</sup> The paper draws from Hector Hidalgo's doctoral thesis *Justicia espacial en la Ciudad de México* and preliminary results of a research project on automobilities in Mexico City, coordinated by Priscilla Connolly and financed by the Mexican Consejo Nacional de Ciencia y Tecnología (CONACyT)

## Introduction

Within an overall tendency of increased inequalities and social injustice at different spatial scales, it is certainly true that some urban regimes pursue and achieve policies that may be considered more just than others. Or, to put it in the words of Amartya Sen (2009), we can comparatively assess political outcomes on the basis of the manifest inequalities they reduce. This is especially true of policies affecting people's mobility, a capability that is spatially variable, not only from one city to the next, but also within a single metropolitan area governed by different administrative regimes.

For decades, researchers have demonstrated the statistical correlation at all scales between spatial mobility and wealth (Schäfer y Victor 2000; Scäfer 2007; Stokes and Lukas 2011). Some even takes this correlation as a proof that mobility is a cause of wealth (Echenique 2007; Lakshmanan 2011). It is therefore hardly surprising that sociologists have begun to place mobility in the centre of social relations: as a "vital indicator of the capability of a person or a community to relate to the rest of the world" (Kaufmann, Bergman and Joye 2004); as in the "mobility turn" (Urry 2007); as in the proposition that the "mobility of individuals, goods and ideas is at the heart of the global changes" (Kaufmann 2011).

From there, the idea that a lack of mobility means social exclusion rapidly expanded through governmental and international institutions (Church et.al. 2000; Grieco 2003; 2015). For instance, since 1996, the World Bank has repeatedly established the goal of providing secure, clean and accessible transport systems (World Bank 1996, 2008). Following the same thread, mobility came to be seen as a basic component of citizenship (Cass et.al. 2005) with local governments in Europe declaring it to be a human right (European Charter 2000)<sup>2</sup>. From another standpoint,

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<sup>2</sup> Article XX of *The European Charter for the Safeguarding of Human Rights in the City*, signed in Saint Denis in 2000, recognises the RIGHT TO MOVEMENT AND TRANQUILLITY IN THE CITY in the following terms:

1. The local authorities recognise the right of the citizens to have a transport system in keeping with the desired tranquillity of the city. To this end, they develop a public transport system accessible to all and incorporating a system of city and intercity links. They manage motor traffic and see to it that it runs smoothly and in harmony with the environment.

the “right to the city” movement in Latin America included mobility in the list of rights that a city should guarantee (Social Forum World Charter 2004).

In this context, Mexico City was among the many cities to draw up a “Charter for the Right to the City” that included the “right to public transport and urban mobility” (Carta de la Ciudad de México 2010, 31). Widely debated and drawn up by a group of mostly radical civil urban associations, the charter was signed with much pomp and ceremony by the head of the Mexico City (Federal District) government in July 2010, together with other government entities.<sup>3</sup>

Foremost in this discourse about the right to mobility is the idea of sustainable transport and the reduction of the use of the private car in daily travel (Montreal 2005; Social Forum World Charter 2004; World Bank 2008, 81). Later developments in official policy documents go even further in proposing that mobility aspects cannot only be dealt with by improving public transport, but also concern access and non-motorised forms of transport (Debyser 2014, 25; Sustainable Development Commission 2011; World Bank 2014). Important international proponents of sustainable mobility policy include World Bank sponsored EMBARQ, which has a branch in Mexico City (Centro de Transporte Sustentable, CTS-EMBARQ Mexico). CTS has been highly influential in formulating transport policies both in this city and at a national level. Another international organisation with strong influence in this country is the Institute for Transportation & Development Policy (ITDP). This has produced much of the research inspiring the local and national sustainable transport policy, including the substitution of “transport” for “mobility” in official discourse and

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2. The municipalities rigorously control the emission of all types of noise and vibrations. They define those permanent pedestrian areas and those restricted to certain times of the day and encourage the use of environmentally friendly vehicles.

3. The signatory cities undertake to set aside resources to help fulfil these rights, calling upon where appropriate financial co-operation between local authorities, private business and society in general.

<sup>3</sup> As well as the Federal District’s Head of Government, the signatories of the charter were: the president of the High Court of Justice of the Federal District, the President of the Human Rights Commission of the Federal District, a Deputy of the local congress and a representative from Habitat International Coalition, a representative of the Habitat ONG’s and a representative of the Social Urban Movement (Delgadillo 2012).

the priority afforded in policy documents to non-motorised transport and transit that now dominates official discourse at all levels.

Most of the documents about sustainable mobility generated by international entities, local consultants or national governments, while recognising the “unfair” costs of car travel, do not fundamentally question the rights of motorists. They do not tackle the “inconvenient truth” about automobility, the “elephant in the bedroom” so aptly brought to public attention by Hart and Spivak (1993). Even less does this “inclusive” mobility-orientated policy agenda unravel the structural economic dependence on the automobile and associated industries. Echoing Mayer’s critique of the right to the city agenda for not addressing the underlying economic processes from which urban inequalities spring (Mayer 2009 in Brown 2010, 346), it is appropriate to ask the following question. How much justice can the right to mobility agenda achieve without addressing the structural problem of the automobile?

We would like to agree here with Susan Fainstein (2010, 6) who argues (in relation to rich Western societies), that “the system itself will change incrementally as a consequence of continued pressure for justice”. Regarding the question of mobility, Fainstein is in favour of very low fares for intra-city transit, which should be subsidised by higher tolls and taxes on automobiles (Fainstein 2010, 173). But she does not consider, in the context of these countries, that automobility itself is a source of injustice. Perhaps a debate about the role of the automobile in richer and poorer societies can lay bare some of the differences in the possibility of just cities in these different contexts.

This paper addresses this question, not merely as a theoretical exercise but in relation to concrete policies, in this case, with reference to policies affecting mobility in Metropolitan Mexico City over the past fifteen years. Perhaps the question could be better phrased in the following terms. How much justice (and injustice) has been procured by transport and mobility policies pursued by the various regimes that have governed this city. This in turn leads to the following questions:

- What methodologies can be usefully applied to measure the justice or injustice imparted by policies affecting mobility in cities? An important consideration here is to go beyond the simple evaluation of changes in accessibility to look at the effect of public policy regarding on-the-street perceptions of what is just or unjust (use of sidewalks for parking, or treatment of pedestrian's, for example.)
- To what extent does the rhetoric and political colour of city governments really affect mobility policies? What other factors, such as administrative inertia and inherited infrastructure and transport systems, determine such policies?
- What difference does it make to have a democratically elected government or not, and how does the political affiliation of elected governments affect the outcomes of mobility policies? How can city governments, especially left-wing governments, withstand the overwhelming pressure to favour policies that ostensibly favour the motorist? It is difficult to win elections on an anti-car agenda.
- What is the role of critical research vis-a vis the urban justice and rights-to-the-city agenda?

Before attempting to answer these questions, some basic information about Metropolitan Mexico City is required.

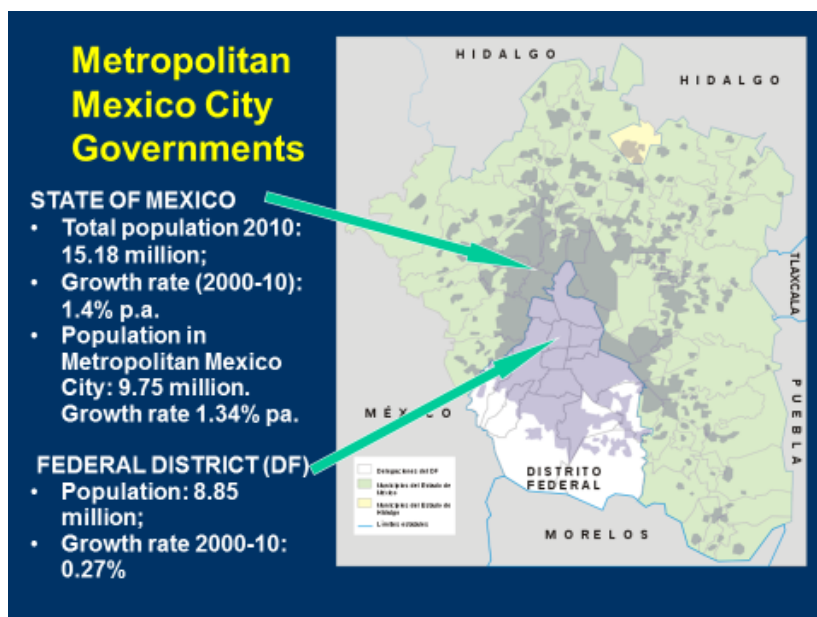


Figure 1.

## **Metropolitan Mexico City: Functionally Integrated but Politically Divided**

Slightly less than half the population of Metropolitan Mexico City (9 million approximately) inhabit the nation's capital –the Federal District (DF)- while the rest (12 million) live in to municipalities of the surrounding Mexico State (Figure 1). In 2007, 36% of all daily trips originating in Mexico State (EM) ended in the DF, while only 6% of trips originating in the DF go the other way. The mobility conditions in the DF are notoriously better in terms of cost, speed, safety and accessibility than in the neighbouring state. This disparity is partly due to the historical accumulation of public investment, particularly in the Metro system, enabled by Federal Government subsidies to the Capital city in the past. However, recent Federal District governments have continued to subsidise the traditional transit systems (metro, trolleybuses, buses) as well as implementing new forms of transit (BRT) and infrastructure for non-motorised transport. Such measures have been largely absent in the State of Mexico, where both public investment and subsidies towards transit are negligible. In both entities, notwithstanding political rhetoric about rights to the city, mobility and sustainability, the lion's share of transport resources has been used for building urban freeways, including very expensive toll roads built by private concessionaries: arguably, the most socially unjust policy measure, as less than a third of the total population has access to cars.

The comparisons are interesting because of the political context in which the respective policies have evolved. At a national level, political reform has loosened the supreme control that the Revolutionary Institutional Party (PRI) had exercised over Mexico's political system since the late 1920's. This means that elections are now relatively free, even in constituencies like Mexico State, where the PRI retains its hegemonic grip over the State government and many of the municipalities. The Federal District, on the other hand, after almost 60 years with no elected municipal or state governments, achieved political autonomy in 1997. The first election for Mayor was won by the left-of-centre Party of the Democratic Revolution (PRD), which has been in power in City Hall and in most of the sub-district governments ever since. However, the successive heads of government have represented

different political positions. Notably, Andrés Manuel López Obrador (AMLO) who was mayor from 2000 to 2006 is more “left-wing” than his successor Marcelo Ebrard (ME), in power from 2007-2012.<sup>4</sup> In turn, ME is generally considered to be more “left-wing” than his successor, Miguel Ángel Mancera (MAM), who in fact is not even affiliated to the PRD.

For the purposes of this paper, we shall compare diachronically the two DF governments between 2000 and 2012, and both of these synchronically with the less endowed but more “right-wing” governments of the State of Mexico.

### **Methodology to Measure the Justice of Transport Policies**

From a review of the literature, we can identify two authors who boldly lay out their methodology for evaluating the justice of urban policies. Susan Fainstein, in her book *The Just City* suggests three criteria for gauging the justice of a city in the Western World: equity, diversity and democracy. In this paper, we are not evaluating the city as a whole, but specific policies that affect people’s mobility. Neither are we referring to a city in an advanced capitalist economy, but a megacity in an emerging economy. However, Fainstein’s criteria are a good place to start, although we would change the order and possibly relative importance of each one. By relative importance, we do not mean that one criteria should weigh more than another –the indicators are obviously incommensurable- but that, our case at least, democracy is a much more difficult criteria to measure than equity or diversity.

From an apparently different ontological position, though in practice perhaps not so far from Fainstein’s (2010, 6) objective of creating “an argument for a normative framework promoting the (more) just city”, Bent Flyvbjerg (Flyvbjerg 2001,145; Flyvbjerg, Landman and Schram 2012, 5) proposed a methodology based on the following questions:

1. Where are we going (with democracy) regarding the specific problematic (policy or project) under consideration?

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<sup>4</sup> Before the mid-term elections of 2015, both AMLO and ME deserted the PRD for other, more left-wing parties. AMLO founded “Morena”, which won many seats from the PRD in these elections.



2. Who loses, who gains and by what mechanisms of power?
3. Is it (the policy or project) desirable?
4. What should be done?

The advantage of both Fainstein and Flyvbjerg and his colleagues is the importance they place on concrete case studies. They inspire committed evaluations of real outcomes and existing situations, rather than inconclusive debates about the ideal “just city” so criticised by Sen.

We shall start with democracy, then, as this concerns the decision making process, rather than the outcomes and, therefore, comes into play before the short or long-term impacts of the policy considered. For measuring the level of democratic participation in policy decisions about transport and mobility, we suggest two indicators. First, the availability of information prior to, during and after the policy takes place. Any policy carried out in secret can hardly be democratic. Secondly, we will look at the mechanisms of public participation and debate brought into play in relation the decisions taken regarding these policies. Here, we will take a leaf from Flyvbjerg’s book to ask about the extent to which these democratic procedures really effect the power relations behind the policies. This will be revealed when addressing the next question referring to equity.

The impact on social and economic equity, the identification of who gains and who loses, is the second methodological question we address regarding transport and mobility policies. Clearly, there are many ways of measuring this, but we will concentrate on two aspects: the distribution of government investment and current expenditure involved in the policies and projects and the resulting spatial distribution of mobility.

Finally, we address Flyvbjerg’s question about the desirability of the policies and projects, bearing in mind Fainstein’s criteria of “diversity”. For this, we look at the qualities of inclusion/exclusion created by the public spaces produced by the policies, with particular attention to the spaces of automobility. The technique applied here is that of systematic photographic records of such spaces, taken from different

viewpoints: that of the motorist and that of the non-motorist. We can then only speculate about how these spaces influence what is the most important feature of a just city: the person-on-the street's conception about what is acceptable and what is not.

In the space of a brief presentation, it is impossible to provide a complete analysis of the last fifteen years of transport policy in a major world megacity. What follows are brief examples of major policies affecting people's mobility and the reproduction of the automobilised city. Neither can we offer many reflections about what is to be done. However, it is clear to us that very little can be done to achieve just cities in emerging nations without addressing the question of power of the automobile.

## The justice of Transport Policies in Mexico City 2000 to 1015

### What are we talking about: Main Policy elements

	Federal District	Metropolitan Municipalities Mexico State	Total
<i>Total number of complete motorised trips</i>	100.0%	100.0%	100.0%
Collective taxi	49.1%	53.8%	51.4%
Private car	31.1%	26.6%	28.9%
Metro	20.2%	17.8%	19.0%
Bus (Suburban route)	3.4%	16.0%	9.7%
Taxis	8.7%	7.6%	8.1%
DF Bus (RTP)	4.2%	1.1%	2.7%
Bicycye	1.0%	3.0%	2.0%
Other	1.3%	1.1%	1.2%
Mmetrobus (BRT)	1.4%	0.7%	1.1%
Trolleybus	1.6%	0.3%	0.9%
Light Railway	0.8%	0.2%	0.5%
Motorcycle	0.3%	0.5%	0.4%

Source: Based on microdata of 2007 Origin-Destiny survey, INEGI/GDF/Gobierno del Estado de México

Table 1 provides a general idea about how residents of the Federal District and the metropolitan municipalities of Mexico City move around in Mexico City on their daily business, based on the last origin-destination survey carried out in 2007. Walking is not included as there is no reliable data on this, a fact that in itself is indicative of the government's priorities when designing their transport surveys.

Collective taxis, in vehicles ranging from minivans and VW Combis to 44 seater buses, meet over half of transport needs. Their distinguishing feature are the fact that they are individual concessions organised in pyramidal associations traditionally linked to the corporatist Mexican political power structure. The drivers and other operational personal usually do not own either the vehicle or the related concession, but rent it on a daily basis from the concessionary. After paying rent, gasoline and maintenance, the drivers' income depends directly on the number of fares they can collect. This low capacity, low quality, hazardous, highly contaminating but highly flexible mode of transport is considered the scourge of the roads by government and transport experts. Official policy repeatedly aims at replacing this system by higher capacity buses concessioned to registered companies, a strategy that has been partly successful in the implementation of the Bus Rapid Transit routes, both in the DF and Mexico State. However given the immense power of the "microbuseros" who move over half the city, no government can dare to confront them directly, while quietly negotiating political support in exchange for new or renewed concessions, soft loans for purchasing vehicles and other relatively cheap ways of maintaining this form of transport provision.

Private cars occupy a distant second place in transport provision in Mexico City, noticeably more so for residents of the DF compared to Mexico State. Government policy affecting cars are essentially of two types. In both the DF and Mexico State, since 2002 there has been a splurge of building high profile elevated urban highways over existing restricted-access roadways, after a twenty-year pause in this kind of infrastructure investment, barring a few elevated bridges. The Mexico City government has also implemented parking meters in several high income mixed use central residential areas.

The metro is used by about a fifth of residents of the DF and only slightly less by residents of Mexico State, usually in combination of one or more other forms of transport. After seven years of inaction, a major policy decision during the period we are considering was the building of an additional metro line (Line 12), initiated in 2008, inaugurated in 2012 and partially closed because of technical faults at the end of 2013. The complete metro system, currently consisting of 12 lines over a total 223 km. has a ridership of about 4 million daily. The metro absorbs about 75% of all DF government subsidies to transport operating cost, implying that the 3 peso ticket (until December 2013) covered less than half of its real cost. This level of subsidy, per passenger kilometre, is still less than that received by government run buses, the limited light railway service and trolleybuses.

Buses, form the next important category, mostly run directly by the government in the DF and by private companies in Mexico State. There is also a policy drive to modernise transform the individual concessions for collective taxi into company concessions for higher capacity bus services, as well as to upgrade existing bus concessions.

It is said that in Mexico City there are more taxis per head than anywhere else in the world; they are also among the cheapest. Operating under the same principal of individual concession as the collective taxis, the use of single-user taxis has more than doubled since the last OD survey in 1994. This partly reflects the increasing need for car access by middle and lower income population in an increasingly automobilised city.

One important mode of transport which does not show up strongly in the 2007 data are 10 new BRT routes, 5 in the DF and 3 in Mexico State. Inspired by the Curitiba and Bogotá experiences, BRT are characterised by having exclusive bus lanes, prepaid fares, controlled access to stations or bus stops. Another distinguished feature is their organisational model: a public-private arrangement, whereby the buses are owned and operated by registered companies who are paid by the distance travelled, while the government builds and controls the infrastructure: roadways and stations. Investment costs in a BRT are 10 times cheaper per

kilometre than a metro, while operating costs per passenger-kilometre is also considerably less, requiring virtually no subsidies from the government at current fare rates.

Another new transport mode that began to operate after 2007 is single 27 km. long suburban train route from the centre of the Federal District to outlying metropolitan municipalities to the Northwest. Largely a federal government initiative to use existing rights-of-way, this railway was concessioned to the Spanish rail car manufacturer, CAF, which had practically no experience in handling a whole rail service. The Railway, inaugurated in 2008 is running at about 50% capacity at 160 thousand passengers a day, a ridership that is less than 1% of the modal split. This lack of success is largely due to its expensive fare and insufficient access and interconnections with other modes of transport. Interestingly, in spite of initial adherence to the project by the Mexico State government, in recent reports, neither of the metropolitan governments claims this project as part of their policy.

### **Democracy in decision making and evaluation**

#### *Public information in the Federal District and Mexico State*

Fairly detailed operational data of the publicly-run transport services in the Federal District are published on their respective websites, in annual government reports and, two years later, in disaggregated versions of public accounts. No such information is available for concessioned transport services, which means virtually all transport in the State of Mexico, except its BRT and some figures on the suburban train line.

Regarding transport and infrastructure investment in both the DF and Mexico State, it is difficult to obtain project descriptions and the costs that might be involved until the tendering process is complete. This means that discussions on the project's economic and social costs, possible alternatives and probable impacts cannot draw on reliable information, as this is not available before the deal is clinched with concessionaries, contractors and financiers. However, in the DF, it is usually possible to establish *ex post* roughly how much projects cost from public accounts

and other official documents, such as the cost-benefit or environmental impact studies, obtainable only by request. The registered expenditure seldom coincides with the investment described in the publicity given to the project initially.

In the case of Mexico State, the format of its public accounts make it much more difficult to ascertain the expenditure and specifications corresponding to a particular project. Once the project is underway, as in the case of the DF, documents such the cost-benefit analysis and environmental impact study are sometimes available on request.

If the information about approved projects is scarce, alternative schemes receive even less attention. It is virtually impossible to find out about different solutions that might have been under discussion in closed negotiations between the government and the economic actors responsible for producing roadways and transport systems. Reasoned public discussion about alternative strategies for city-wide transport development is therefore extremely difficult.

The exception to this rule is at the local level, where residents directly affected by the construction of transport infrastructure generate public discussion and, almost inevitably, protest against the project. However, residents are often not previously informed about the project that will affect their neighbourhood until all the important decisions have been made, or even until the bulldozers arrive on site. This is especially true of highway construction in Mexico State where the local population is usually unaware of what is happening until the pernicious effects kick in. These often include structural damage to homes, intense noise 24 hours a day, traffic congestion, reduced accessibility to local amenities, fragmentation of neighbourhoods as well as more generalised negative environmental impacts.<sup>5</sup> Protest at this stage is never effective in blocking the project, although sometimes, some members of the affected community gain individual compensation.

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<sup>5</sup> Various undergraduate dissertations in Urban Sociology carried out between 2012 and 2013 at the Universidad Autónoma Metropolitana-Azcapotzalco, Mexico City, have documented these kinds of impacts and residents' reaction to them.

*Democratic participation: planning, public consultations, plebiscites, population surveys and protest*

In spite of the paucity of information available for reasoned debates, obligatory public consultations are deeply entrenched in Mexican planning law. Urban development plans, including both strategic objectives and land use zoning regulations have to be put out to public consultation before approval by the legislature. Transport development programmes, now called “mobility” programmes, are not subjected to public debate, but do need to be discussed in the legislative body. Significantly, they are also drawn up independently of the urban development plans. However, the government bodies responsible for these types of plans, the urban development and mobility secretariats of the DF and Mexico State governments, respectively, are not the instances that decide on matters such as major road investment or transport projects. This type of decision usually emanates from higher levels of government, while the Secretariat for Public Works or other specialised public bodies are responsible for implementing the projects. For instance, both the construction and running of the metro is in the hands of separate government entities, while the elevated urban highway construction during the AMLO administration was in the hands of a specially created trust fund. Consequently, an important task for the urban and transport development plans, or rather, for the consultants hired for the job, is to incorporate projects already decided into the “plan”, providing the necessary technical justification and political legitimation. Reasoned debate on the desirability, or not, of large investment projects does not form part of the participatory planning exercise.

This situation is well illustrated by the Integral Transport and Roadways Plan for 2001-2006, approved by the local legislature in November 2002 (PITV 2001-2006). This programme contains a detailed diagnosis about the insufficiency of road infrastructure in the DF justifying the necessity of what would be the one of the most important public works of the AMLO administration: the construction of “second floors” or elevated highways, over the existing restricted access urban motorways. The decision to build these highways had already been taken two years previously with the creation of the Trust Fund responsible for its implementation. Curiously, the

PITV 2001-2006 does not mention the second major transport project of the AMLO administration: the introduction of a Bus Rapid Transit (BRT) along Mexico City's main thoroughfare connecting the North and South edges of the city, thus initiating the government's commitment to developing a network of BRTs to replace the collective taxis and existing buses. This idea occurred later, in 2003.

So much for planning as an instrument of democratic participation. However, the elevated highways scheme was subjected to a rather extreme form of democratic consultation: a plebiscite realized in September 2002. The plebiscite was convened precisely because the only reasoned debates about the project in the public media came out strongly against it. The main criticisms were that the project meant spending large amounts of public money in favour of a minority of motorists and that it would increase car use (Cuadri 2001). The government's argument was that there had been no major road building in the Federal District for various decades and that it was time to rectify the situation. In all events, AMLO resolved that the citizen should have the last word and put the matter to a plebiscite, to be organised by the local electoral authorities.

The plebiscite contained only one question: Are you in favour or against the construction of the "second floors" over the "Periférico" and "Viaducto" (the two main existing restricted access highways)? The level of participation was decidedly low: 6.6% of registered voters (less than half a million votes), much less than the 33% needed to represent "the will of the citizens" stipulated in the government's initiative for the plebiscite. The results were 66% for and 34% against. From the geographical distribution of the vote, it is clear that the plebiscite did not in any way reflect opinion about roadways but expressed popular support for the government, particularly AMLO. The only sub-district where there was a majority vote against the project houses a population with the highest average socio-economic level in the DF (and the whole country). These residents, who did not vote for AMLO and his left-wing party in the elections, have the highest car ownership and car-use rates. Living in the proximity of the elevated highways while not being directly affected by their construction, they were clearly the first to benefit from additional road space. The



results in the rest of the districts follows a similar pattern, with votes in favour being inversely proportional to income and car-ownership levels. People whose houses or places of work were directly affected by the construction works or permanently by the highways were never consulted or even informed about the project.

Nobody was consulted about the BRT scheme, although there was considerable protest, again on political principal, from the same wealthy neighbourhoods that had opposed the elevated highways.

The following DF government, headed by Marcelo Ebrard (ME) from 2006 to 2012, continued with the elevated highway scheme, but under a different model: the extensions of the “second floors” were built as toll roads by concessionaries between 2007 and 2011, and their completion is still underway in June 2015. There was some previous public debate and commentary in the media, but opposition was less vehement, as less public investment was involved. It was generally considered “fairer” that motorists should pay for the use of the new highways, while the overall impact on the city was much less debated.

One exception to this was the fierce opposition from a low-income neighbourhood directly affect by the construction of a totally new toll road, the “Supervía Poniente”, connecting the wealthy Southwestern quarter of the city with an emblematic high profile development to the West. This road not only bulldozed through the poor neighbourhood, causing forced demolitions and evictions, but also bisected significant amounts of land declared as “ecological reserve”. The protesters thus included affected residents, environmental groups, a growing non-motorised transport lobby as well as transport experts who questioned the premises on which the project was based. There were sit-ins and Jane’s Walks. The protesters even procured a recommendation by the Human Rights Commission of the DF that there should be a public consultation about the project (CDHDF 2011). All this was to no avail; the people were forcibly evicted and the “Supervía Poniente” was built anyway.

In contrast to the lack of public consultation about highway construction, the 2006-2012 DF government took more care to establish public consent for other transport

and environmental policies. In 2007, a “green consultation” was carried out, this time not as plebiscite organised by electoral authorities, but as a survey commissioned to a university-based Citizen Observatory<sup>6</sup> (InfoDF 2007; Mitovsky 2007). The survey collected more than a million responses, of which three quarter were printed questionnaires deposited in specially created modules throughout the city, while the rest were answered by telephone. There were 10 questions, the first of which asked if the contestant agreed that the available public resources for transport should be applied mainly to the construction of a new metro line and to expand the network of BRTs to 10 lines. The second question asked about the preferred route, out of choice to two, for the new metro line. Another five questions ask about other transport measures, such as the substitution of collective taxis for new vehicles, the replacement of gasoline consuming taxis for low emissions cars, obligatory school buses, the prohibition of cars from circulating one Saturday a month (as an extension of the existing day-off-the-road programme) and obligatory emissions tests on goods vehicles. The remaining questions concern a range of environmental policies such as green roofs, water treatment plants, stricter control of invasions of ecological reserves (!) and the construction of an integrated refuse treatment plant. Most of the people who bothered to answer the questionnaire obviously did so to support the government as, with the exception of the “off-the road-on-Saturday question”, over 80% of the replies were affirmative replies.

During its term of office, the government did build the metro line (with disastrous results), extended BRT network to five routes and partially accomplished the other policy goals mentioned in the questionnaire. It is not clear what would have happened if the results of the survey had been negative.

If the attempts at public consultations carried out at various moments by the DF can be criticised on many accounts, the Mexico State authorities have never attempted such an exercise. Although they emulate the policies implemented in the DF, such as concessioned elevated toll roads, BRT routes, substitution of collective taxis by higher capacity vehicles, among other measures, the need for legitimising their

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<sup>6</sup> The “Observatorio Ciudadana” based at the Universidad Autónoma Metropolitana-Cuajimalpa.

decisions clearly has not been an issue. The question for us remains is what difference does this make? The policies are similar in both cases, although there are important differences regarding the information available, the possibility of public debate and the treatment of those directly affected by the individual projects.

### **The costs and beneficiaries of transport policy**

#### *2000-2006 DF government policy*

According to the Public Accounts for the DF for 2002 to 2011, the total budgetary expenditure of the trust fund responsible for the construction of the 13.4 km of elevated highways during the AMLO administration amounted to 9,264 million pesos, or approximately 926 million dollars. Of this, only 7,000 million pesos are payments to contractors and suppliers during the construction period of 2002 to 2005. The rest appear to be overheads, including over 1,500 million pesos spent after the project was finished in 2005, when the trust fund supposedly stopped functioning. It is not clear if these sums include a *quid pro quo* arrangement between the DF government and two major cement supplies, amounting to 250 thousand cubic metres of cement in exchange for publicly-owned land valued at 277 million pesos. An audited report by the local legislature found excess expenditure of at least 368 million pesos in the form of unjustified payments to contractors and fines for late delivery that were not charged, among other irregularities. The fact that the findings of this report is available to the public, as somewhat remarkable, considering previous administrations of the DF and to other federal entities. Government responses to these findings was to provide dismissive justifications, emphasising that these roadways were built at an extremely low cost to the local taxpayer, and without recurrence to public debt.

The project, as executed, is not without technical problems, as will be shown in the following section. There was a serious accident during construction involving the death of one worker. Remarkably, as far as we know, there has been no official or unofficial evaluation of the project, in terms of number of users, increased speeds, induced traffic, induced congestion, environmental impacts, noise, or any other

aspects that should have been pondered, particularly as the elevated highways continued to be extended by subsequent governments.

The 9,264 million pesos invested in this first stage of elevated urban highway construction should be compared to expenditure on the first line of the BRT, initially covering 25 km., built between 2004 and 2005 (extended to 30km. in 2007). The estimated costs for this were as follows: 671.5 million pesos for infrastructure, including stations and roadways; 280 million for upgrading the exclusive bus lanes with hydraulic cement, 358 million for the articulated buses, of which 75% corresponded to the concessionaries; 46.4 for the pre-paid ticketing system (Dahl 2011). In all, 1,266 million or 12% of the cost of the elevated highways. In 2007, over 233 thousand passengers used this first stage of metrobus every day. In 2014, this line transported 470,000 passengers daily; more than all the individual metro lines except for lines 1, 2 and 3 (Metrobus 2015).

#### *2006-2012*

The next stages of the elevated highway development, promoted by the 2006-2012 DF government was financed and built under a 30-year concession by private companies. The Spanish firm OHL, working with Mexican affiliates, won the concession for the Northern stretch, consisting of 9 km. of overhead roadways and one tunnel, at an estimated cost of 7,339 million pesos. The concession for the 16.7 km. long Southern section went to a Latin American Consortium (IDEAL) working in collaboration with the leading Mexican contractor ICA. The official argument justifying the decision to build this stretch of overhead highways was that traffic conditions in the Southwest section of the city would complete seize up, as 65,000 people in private cars uses the controlled access “Periférico” road while a further 94,000 travelled in public transport restricted to the lateral lanes. (These figures should be compared to the almost half a million passengers that travel daily on Line 1 of the BRT). In June 2015, the toll for using either of the two sections of these elevated highways was 3.84 pesos per km. (25 Us cents).

The other major road project promoted by the DF government in this period is the 7.18 km. long “Supervía Poniente” which connects these elevated highways to the

Santa Fe development to the West of the city. The 30-year concession for this toll road went to a consortium composed of the Spanish OHL (again) and Mexican real estate developer COPRI and Mexican contractors SAPI and ATCO. Apart from the road concession itself, COPRI and ATCO had considerable stakes in adjacent landholdings that, in spite of being classified as “conservation land”, they have since developed. Officially, the project needed an investment of 2,607 million pesos or 363 million (US \$ 30) per km.: expensive by any standards. According to various critics (Remes 2015; Rodríguez 2015; Serdán 2015), the number of vehicles using the roadway is much less than the estimates presented by the concessionaries in their winning proposal (an average of 35,100 daily in 2014, compared to the projected 46,460). The resulting shortfall in income from tolls might lead to the need of bailouts, at the taxpayer’s expense, similar to those that occurred following the “Tequila Crisis” of the mid 1990s, after the bankruptcy of the concessionaires that built intercity toll roads under President Salinas de Gortari (1988-94). If a financial bailout is necessary for this and the other concessioned highways in similar conditions, far from costing nothing to the local treasury will turn out many times more costly than direct public investment.

In spite of lower than expected use of the Supervía Poniente and the other elevated toll roads, traffic on them is often gridlocked, due mostly to bottlenecks at entry and exit points. The construction of these highways has also affected the non-toll paying traffic circulating beneath, as the slipways occupy what used to be the two lane lateral roads, also occupied by public transport.

Following the example of the DF, during the same period (2006-12) the Mexico State government also promoted concessioned “second floors” over the existing restricted urban highway “Periférico Norte”, as well as an ambitious programme to improve regional connectivity in and around Metropolitan Mexico City. If public debate about such projects in the DF is limited by restricted information and lack of public awareness, in Mexico State, the possibility of such debate and protest is virtually inexistent. At least, compared to the agitation around the construction of the

“Supervía Poniente”, the equally invasive and environmentally harmful highways built in Mexico State (and elsewhere) have largely escaped public attention.

It would be unfair not to mention the other side of mobility policy, both in the DF and Mexico State, favouring public and non-motorised transport. In the DF, the major investment went into building the new 26 km. long metro line inaugurated late 2012. The estimated cost was 26,274 million pesos: ten times the cost of the “Supervía”, over five times the investment in 80 km of BRT. This was 70% more than the contract cost. The contract arrangements differed from those employed in previous metro construction in Mexico City where overall control of the design and project management lay in the hands of the government. This time, a “turnkey” lump sum contract was put to tender. A consortium comprised of the tradition metro builders, ICA, the French Alstom, and a relative newcomer, Carlos Slim, won the contract. Instead of buying the rolling stock outright, the government entered into a B.R.T. (build-rent-transfer) contract with the Spanish CAF, also a previous supplier to the Mexico City metro. These new arrangements have proved disastrous. The redesign of the initially planned route introduced sharp curves in an overhead stretch that could not resist a lack of technical fit between the specifications for rail and rolling stock. As a result, half of the line had to be closed in March 2014. The cost of repairing the line will probably exceed all public expenditure in the BRT expansion to date.

As promised in the “green survey” of 2007, as well as the metro, the DF government has pushed forward with expanding the BRT system, with five new lines plus an extension to line 1 (instead of he promised 10) all completed in the 2006-12 period, with a sixth line now under construction. The government investment in these lines was under 4,227 million pesos (Metrobus 2014), excluding investment in vehicles which is paid for by the concessionaries.

Mexico State government also built three lines of concessioned BRT in its territory. Although these are less successful than their counterparts in the DF, because of design and operational faults. They are, nevertheless, considered an improvement on the collective taxis and buses they replace.

Other mobility policies implemented in the DF have been the bicycle rent scheme operating in centrally located high-income and touristic areas, the provision of some cycle routes in the same areas, and the introduction of parking in a limited number of these neighbourhoods. Both of these projects are concessioned to private operators, so require minimal direct public investment. The bicycle rent scheme does not address problems facing cyclists in areas where the bicycle use is higher, namely, in the low-income outskirts of the city. Parking meters mostly effect the working population that travels to central areas on a daily basis, rather than the resident population who mostly have garages. In all event, these schemes have been widely publicised as iconic examples of the DF government's sustainable mobility policy. Some municipalities in the Mexico have implemented cycle routes, with limited success, as these are often invaded by street vendors, motorists, minibus drivers and pedestrians. In general, therefore, the benefits of policies favouring non-motorised transport are limited to the central, more affluent, areas of the city.

### **The spatial injustice of automobility: inclusion and exclusion in public spaces**

It is clear from the above that the greater part of government monetary and political resources in Metropolitan Mexico City benefits private motorists who represent less than a third of the population. This is occurring in spite of policy declarations giving priority to pedestrians, cyclists and users of public transport over motorists and goods vehicles (GDF 2003, SEMOVI 2012-18). There has been no serious policy designed to reduce the use or ownership of cars, even in the face of official recognition of the costs and dangers of vehicle emissions at local and global scales. The result is an ever-deepening chasm between the city of those with cars and those without cars and, after the introduction of the concessioned urban highways, between those motorist who can afford to ride on top and all other road users. Notwithstanding recent improvements in electoral democracy, participative planning, access to public information, particularly in the Federal District, the outcome is the same: the car is sacred and shall not be thwarted.

The spaces produced by these pro-car policies deepen the chasm, not just because of the physical barriers they create, but also because of the increased social tolerance of the resulting spatial injustices. People struggling to mount three flights of steps to cross a motorway become invisible after a time, while the aspiration for a better way to get to the other side recedes as the concrete piles up overhead. As pedestrians, we have to get accustomed to dodging fast-moving traffic, leaping over holes in the road, breathing in the exhaust of 5 million cars. The front entrance is always for the car; the back entrance, for employees and poorer customers, improvised between leftover spaces and concrete pillars. The sidewalks become narrower and narrower until they vanish, making unequally “shared spaces” a fortuitous feature. Cars rush past three feet away from the only window of a house all day and all night; the highways are the noisiest parts of the city, so the engineers say. The engineers forgot that it rains for half the year in Mexico City; under the “Distribuidor San Antonio” it is like Niagara Falls. Even monumental sculptures must give way to the needs of the motorcar. Mere residents must make sacrifices for the greater four-wheeled good. Cars themselves have to make some sacrifices if they want to achieve a three-minute ride at 80 km/hr. For this illusion of speed, they must queue up to access the urban freeway and then again, to descend into the common road network to join the buses and taxis and non-fare-paying cars.

These images of spaces created by the construction of urban highways in Mexico City could be complemented by analysis of induced traffic, engineering faults and more detailed comparative studies. The argument that emerges is the same. Policies favouring the car create more unjust cities.

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