

# “From highways to boulevards, from roads to streets”

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## Intro

Urban traffic and transportation plans have the potentials to become more comprehensive planning tool for the urban environment. Starting from analyzing the UK context that created a framework of well-established tradition in urban street design, and the US recent tradition of tearing down highways and form based codes, this paper aims to underline the potentials of urban transportation plans when approached as innovative planning tools, able to create and build a more complex, integrated, thriving urban environment. These plans can actually support other planning tools, create a different urban landscape designing new grids and new systems, reducing space for vehicular traffic and connecting new green and pedestrian infrastructures to the existing public realm. They can also link land uses and transportation policies, selects a variety of transportation means to access the city that can actually help specific urban contexts to develop a mix of uses. Innovative transportation plans have the potential to create new urban geographies, different from traditional hierarchy of spaces and roads. Cities all over the world are facing traffic congestion problems and are investing in their transportation systems. This is due fundamentally to increasing rate of urbanization across the globe. Millions of people cluster in mega metro region, challenging the existing infrastructures and policies related to transportation. This document will focus on the impacts that transportation and traffic plans can have on the public realm.

## Different approaches to transportations issues

If the vehicular traffic volume increases and the existing infrastructure network cannot keep up with it, the easiest solution is to build a new highway or to expand the existing one. Obviously, this kind of approach does not take into account environmental sustainability and apply a short-term strategy that can provide an immediate but temporary release to the problem. Nevertheless, many cities are still pursuing this strategy to solve their traffic and transportation issues.

In other cases, the new infrastructures are built not to accommodate vehicular traffic but instead, to expand public transportation systems. Cities are increasingly investing in special buses routes, light rail and subways, but also car sharing and vanpooling. In both cases, the city's officials have to roll out general master plans to coordinate their investments.

If building infrastructures is a common strategy to solve mobility issues, in some cases it is true the opposite. Seoul, Portland and recently San Francisco, just to cite some of the most famous examples, have decided to tear down their highways; at least the ones that affected in negative ways the proximate surroundings. The torn down highway was outplaced by a park in Seoul and Portland and by a smaller urban boulevard in San Francisco. Still, we argue that despite the objective benefits of these kind of interventions, the rationale behind them is not so far from what brought the highways. The approach is always the same one: build an infrastructure, perhaps greener and more attractive, but still an infrastructure that is often disconnected and isolated from the existing, exactly like the one that was there before. These kind of interventions are the result of a way of planning that proceeds with extraordinary, isolated, episodes more than reconsidering the whole system of networks and open spaces that constitute the public realm. Traffic and transportation issues are just the tip of the iceberg of the urban environment that every citizen experience in their daily navigation of the city. Here we argue that traffic and transportation plans should not take into account the traffic fluidity and public transportation capacity only, but have the breath to redesign and improve the public realm as a whole.

## The UK and US context

The country who invested the most, in terms of planning quality public spaces, is no doubt the United Kingdom. Its urban planning re-known past makes this country one of the most advanced in terms of street design. In England, every new development and project has to follow some basic principles in order to achieve quality public spaces and well-designed streets. There are manuals<sup>1</sup> that will indicate the best practices and the right methodologies to curate every single detail of the streetscape, from the lamppost to the pavement size and materials, the storefronts design and the colors nuances options. Crossings, as well as the traffic signs have to respond to a certain standard of quality. Transportation and traffic plans have to compel to these rules and integrate them within their design.

In America, cities are built around cars and the streetscape is too. Most of American cities presents highways juxtapose to smaller neighborhood-scale boulevards and streets to connect the different suburbs to the main thoroughfares. There is little attention to the street's design because there is actually few people using those streets. Streets are considered just necessary strip of asphalt, useful to travel from one place to another.

Recently environmental sustainability issues have challenged this model, and subsequently the quality of life that this growth pattern produces started to show some cracks. The so-called baby boomer generation escaped the city, pursuing a suburban life dominated by cars and McMansion homes. Today the trend has reversed, and younger generations are going back to the city urban core. It is in this context that many transportation infrastructures located in central urban areas, are today considered not

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<sup>1</sup> Manual for Streets 2007, <https://www.gov.uk/government/publications/manual-for-streets>

sustainable. In some cases they have been torn down, and replaced with public amenities, such as parks, boulevards and so on. We argue though, that despite the evident benefits of these kind of interventions, most of them are lucky and rare episodes that do not really have the capacity to rethink American cities network of public spaces. It has been just since the early 2000s, that American planners started to use form-based codes to reshape and improve cities' street scape<sup>2</sup>.

The UK street design manuals, the American form based codes, the highways demolition interventions and replacement, are all very powerful tools to tackle traffic and transportation issues and improve the quality of open spaces. On the other hand, these tools tend to concentrate heavily on single episodes within the urban landscape, rather than pursue an overall strategy to enhance the quality of the public realm.

### **The traffic and transportation master plans**

Our experience as planners helped us to understand that in order to affect and improve city's public spaces the best tools are master plans. In this document we would like to underline the role of transportation and traffic master plans, often neglected planning tools that present more potentials and capacities that one would expect. Cities usually approach traffic and transportation plans to tackle problems related to traffic congestions and circulation, inefficient use of streets and parking lots and to design public transportation systems. We had experienced that these plans can do much more. Traffic plans present some features that makes them useful tools to analyze the city under various aspects and deliver integrated solutions that takes into account the overall complexity of the city's open spaces.

#### **The Scale**

In order to understand traffic flows, street hierarchy and commuting routes, traffic plans have to take into account the whole city, or at least wider part of it. They affect the city in all its complexity, from the local to the regional scale, giving planners the opportunity to keep under control the general picture and portray future visions for the city.

#### **Streets scape**

Traffic master plans focus on streets, they analyze and design how highways bypass or enter the urban grain, and they reshape crossing and red light synchronization to make traffic more fluid. Furthermore, they can be used to redesign the streetscape, if they are integrated with elements of urban design.

#### **Regulations**

Traffic master plans dictate a series of norms, from speed limits to accessibility to parts of the city that can implement transportation policies and overall incentives certain uses instead of others of the open spaces.

#### **Parking systems**

These plans take into account the parking system; they have the capacity to establish temporary alternative uses for parking lots that are many times the most neglected and bleak elements of the public realm. In addition, by implementing or rearranging parking solutions the plan can experiment different strategies to free cities center from vehicular occupation of the streets' sides.

#### **Alternative transportations means**

Mobility is one of the most important aspects of traffic and transportation master plans. Because of the scale of their area of interest, they can be used to design comprehensive bike lanes, establish exclusive bus paths, incentives car sharing and vanpooling, locate public transportation stations in the best sites possible.

#### **Alternative routes**

Because traffic and transportation plans analyze the entire urban grain, they can identify new and alternative paths to cross the city in order to activate neighborhood that perhaps present green parks but are cut from the principles routes of commuting.

#### **Networks**

The traffic and transportation master plans create networks of relationships between the different areas of the city. They read and understand the city as a complex construction made of parts, each of which presents different features. By focusing on and understanding the different elements of the public realm such as streets, open spaces, parks, historic building, and local assets in general, they create new connections and trigger new uses and developments otherwise unexplored.

Traffic and transportation plans can affect the quality of the public realm in deeper and more interesting ways that one could expect. They have all the potential to tackle traffic and mobility issues combined with public realm quality and variety. They are master planning tools that every city has to develop anyway, and we advocate they should become strategic plans to rethink the cities open spaces. Also, traffic and transportation master plans have the capacity to affect the built environment as well as to trigger sustainability policies.

### **Conclusion**

The public realm, the open spaces network, the quality of its design, it is what makes a city more or less successful, more or less attractive. The same attractiveness will trigger a series of positive effects for the city economic growth and development. In order to improve this network of spaces, the quality of the design that shape the public realm we cannot rely only on sporadic episodes, mega interventions that certainly have positive effects on the city but that rarely affects the entire system of networks.

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<sup>2</sup> The Form Based Code Institute (FBCI) was found in 2004

Master plans are the best tools to do so, and transportation and traffic plans are tools that cities deliver frequently and that can be expanded in their duties and values. They could be the framework on which underpin other punctual plans. Finally, if integrated with urban design elements under the form of form-based codes of street design manuals, they can deeply transform and improve cities public realm.