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**Workshop Theme 13: Urban Form, Transport and Sustainability**



# **Neighbourhood Design Perception and Travel Behaviour in Tyne and Wear, North East England, United Kingdom**

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## **ABSTRACT**

This paper will present empirically based evidence from the UK in respect of the impact of neighbourhood design on travel behaviour using a case-study approach. The case-study is based on the metropolitan area of Tyne and Wear, North East of England. Ten different neighbourhoods have been carefully selected to characterise two different types of traditional and suburban neighbourhood street layouts. The selection of neighbourhoods was obtained through semi-structured interviews with five districts local authorities and the use of Neighbourhood Statistics resources of British Census (2001) to control socio-economic variants within the case-study area.

A pilot study has been completed based on two neighbourhoods within one of the Districts of Tyne and Wear and includes 200 households in two different types of neighbourhoods. The traditional neighbourhood, represented by the Cullercoats area, were generally older settlement than the suburban neighbourhood, represented by the Battle Hill area.

A frequency analysis between perceived and preferred neighbourhood design characteristics indicated that the accessibility factor, among other factors (which includes other amenities, safety, social issues, outdoor spaciousness and attractiveness) shows a significant difference between the pilot study areas. The residents of Cullercoats perceived better accessibility than the residents in Battle Hill although the reported private weekly mileage travel of Cullercoats' residents was 30% lower than in Battle Hill.

Through factor analysis, perceived and preferred neighbourhood design was extracted into 6 factors: safety and attractiveness, public transport service, outdoor spaciousness, social issues, shopping accessibility and space accessibility. The attitudes/travel preferences were reduced to 6 factors: pro public transport use, travel minimising – time wise, safety of car, pro walking, car dependent and environmental – technological awareness. An ANOVA analysis showed respondents from traditional neighbourhood, scored significantly higher than those from suburban neighbourhood on factors for perceived shopping accessibility and public transport service. In the attitudes/travel preferences analysis, the traditional neighbourhood also scored significantly higher on factors for pro-public transport use and interestingly car dependent attitudes.

The pilot analysis shows, therefore, some significant differences arising from neighbourhood design and the way that this can contribute to differences in travel patterns. This confirms results identified by previous studies, primarily in the US, that residents of traditional neighbourhoods perceive better accessibility as compared to suburban residents, although the distance travelled by

traditional neighbourhood residents were lower. The proposed paper for this conference will provide the evidence from the much larger scale, full survey of 2000 households across Tyne and Wear.

**Key Words:** neighbourhood design, travel behaviour, factor analysis

# Urban Form and Social Sustainability: Planning for Happy, Cohesive and ‘Vital’ Communities?

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## **ABSTRACT**

This paper focuses on the relationship between urban form and the *social* sustainability of communities. After defining and justifying our interpretation of ‘social sustainability’, we report on operational performance measures for the different aspects, based on household questionnaire surveys. By linking these data to measures of urban form and of neighbourhood socio-demographics, we show the general patterns characteristic of existing British cities. The broad story suggests that there is a trade-off between the greater accessibility of more compact forms and the apparently more socially stable and cohesive suburbs. However, it is clear that both demographics and the socio-economic dimension of poverty-affluence cut across this and may account for much of the latter pattern. Interesting differences between different criteria of social sustainability also emerge, with social interaction being greatest in medium density forms for example. The implications for planning future new or remodelled ‘sustainable’ neighbourhoods are then discussed.

This paper forms part of the output from the core research programme of ‘Cityform – the Sustainable Urban Form Consortium’, funded by the Engineering and Physical Sciences Research Council under its Sustainable Urban Environment Programme (Grant number GR/520529/01).

**Key Words:** sustainability, urban form

# **The Outward Expansion of the Built-Up Areas of Madrid and Barcelona into their Surrounding Metropolitan Regions (1986-2004)**

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## **ABSTRACT**

The modern process of urbanisation was experienced in Spain later than that compared with other European countries. It was after 1959 when urbanisation began to advance in an accelerated manner, owing to increasing industrialisation, the crisis of traditional agriculture, general increases in the population and large-scale interregional migrations. Nel-lo (2004) identifies the formation of a series of large metropolitan areas, which dominate the whole Spanish urban system; the consolidation of territorial axis which tended to concentrate population and activities; and the maintenance of the bicephalous nature of the urban network around this time, as the three basic elements of the Spanish urban system in the second part of the 20th Century. As a consequence, Spain's seven principal cities were converted into modern metropolises of a regional, national and in the case of Madrid and Barcelona, European standing, experiencing their major growth in the period 1960–70 in the case of Madrid, Barcelona, Valencia, Bilbao and Zaragoza, and in the period 1970–1980 in Málaga and Sevilla. While traditionally Southern European or Mediterranean cities have been characterised for their more compact urban form, compared to Northern European cities, currently there is considerable concern in Spain over the question of land consumption and the outward expansion of urban areas into surrounding rural areas. This concern can be witnessed within the context of seeking to achieve more sustainable patterns of urban growth, and social and economic, as well as territorial, cohesion, reflecting the contemporary spatial planning policy objectives of the European Commission.

Research carried out between 2003–2006 with funding from the Spanish Central Government, together with complementary funding from the European Commission under the INTERREG IIIB Programme, enabled a comparative assessment to be made of the physical growth experienced by Madrid and Barcelona over the period 1986–2004. Functional approaches to the territorial analysis of the two metropolises have previously contrasted the mononuclear urban form of Madrid, with the more polynuclear form of Barcelona. However this recent research, based upon the interpretation of satellite imagery, has highlighted clear differences in their morphological form. As outlined in this paper, Barcelona's metropolitan urban region has a more compact central area with an important distribution of economic activity in its peripheral area, whereas the central area of Madrid's metropolitan urban region is much greater in spatial and demographic terms, containing a more significant proportion of the urban region's economic activity than the periphery.

**Key Words:** morphology, urban form, teledetection

# **‘Motionscape’ as an Indicator of Urban Vitality: Rethinking on the Late-Modernist Urbanism in a Need for Speed**

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## **ABSTRACT**

The essence of modernity as a state of mind has evolved in “the agitation, turbulence, psychic dizziness, expansion of experiential possibilities, destruction of personal bonds and phantoms in the street and the soul” (Berman, 1994: 31). This basically coincidences with the psychological condition of modernist behavior, based on an endless desire for transformation, construction and reconstruction of the conventional one to achieve the new progressist one. Such an unsatisfied effort essentially resulted with an amazing movement in both space and time, as it has been. If we simply conceptualized this state of motion, we would necessarily employ one term for it: *speed*.

The speed itself has always been a desired condition for modern urbanism in order to organize urban societies within a highly efficient mobility pattern in space. Even though the early modernized cities had experienced such a development process and entered a new phase of so-called post-modern transformation, which is highly defined by space-free virtual communication infrastructure; the developing countries are currently in a reconstruction process to adapt existing urban setting into a ‘new’ condition: *automobile dependant urban mobility*.

As a prototype of the semi-peripheral developing country, Turkey has being experienced extremely increasing private automobile ownership and usage since the neo-liberal policies, introduced in the mid-eighties. Since then, Turkish metropolitan cities have been in an endeavour of organizing their own urban infrastructure to be compatible with this emerging mobility pattern, which is highly based on the notion of speed. Only in the last five years, thirty new underpasses and multi-storey crossroads were constructed and frothy new ones are in the agenda of the local government in addition to new accelerated arteries and inner-city highways. The scale of such a (re)formation / surgery process within an existing urban body -including the heart of the city-compels planners and policy makers to rethink about the contrary relationship between the speed and the vitality of the city.

Although there have been so many studies to understand early phase of the auto-dependant urbanization in western urban geographies historically, the number of studies evaluating the ‘peripheric’ condition of late-modernization remained limited. In the case of Ankara, the capital metropolitan city of Turkey; the main aim of the paper is to discuss the influence of the late-modernist urbanism within a ‘need for speed’ – on the changing perception of ‘motionscape’, which is a prominent indicator of the quality of place in the contemporary cities.

**Key Words:** motionscape, speed, urban mobility, late-modernity



# **All About the Money? Social Inclusion and the Car**

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## **ABSTRACT**

Current urban policy in the UK rests on the triumvirate of regeneration, sustainability and social inclusion. However, an analysis of the social impacts of car-use exposes a policy dilemma, rooted in the tensions between environmental, economic and social objectives. Intuitively, the primary function of the car can be considered as one of serving social inclusion. The mobility that comes with private transport increases personal freedom and expands opportunities, securing greater access to economic participation, social networks, leisure activities, education and medical services. Nonetheless, the dominance of the car and the wider impacts of car ownership also give rise to a range of environmental externalities, which can be seen as exclusionary by virtue of impacting most significantly on already disadvantaged members of society. However, additional to environmental concerns, the influence of the car on social dynamics operates at a more pernicious level; traditionally, diversity has been seen as one of the virtues of the city but the separation of urban functions since the advent of private transport has also meant the increasing separation and segregation of different social groups. Similarly, the nature of the car is such that, as “private” transport, by definition it reduces opportunities for the kinds of casual social contact that have been theorised as central to neighbourhood and social cohesion.

Within the wider policy framework, contemporary holistic approaches to regeneration policy aim to improve the economic wellbeing as well as the physical fabric of participant communities. However, increased economic affluence is correlated with increased levels of car ownership and use. This in turn, produces further externalities - both environmental and social – which threaten levels of social interaction and cohesion. One approach to resolving this dilemma could lie in a better understanding of how spatial scale interacts with other socio-economic determinants of car ownership. This paper presents empirical research exploring the determinants of car ownership and examining changes in the relative strength a range of social inclusion indicators using the British Household Panel Survey.

**Key Words:** social inclusion, car, transport, logistic regression, BHPS

# Applying Transit Orientated Development for Glasgow

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## **ABSTRACT**

### **Introduction**

The development of a public transit system for Glasgow has commenced in earnest with the development of *Clyde Fastlink* – a dedicated bus rapid transit (BRT) system. Phase 1 has been developed to support on-going regeneration initiatives to the west of the city, along the north bank of the River Clyde. Phase 2 seeks to develop further western links to regeneration initiatives such as Clydebank Rebuilt and attractions including Braehead Centre and Southern General Hospital.

Early opportunities to develop a public transit system (a third phase of *Clyde Fastlink*) providing eastward connectivity has been established in association with masterplanning for Scotland's top regeneration priority – *Clyde Gateway*. This presents the opportunity to develop a transit orientated development supported by appropriate urban form that delivers successful sustainability.

### **Clyde Fastlink**

*Clyde Fastlink* provides a cost effective means of delivering a public transport system to meet Glasgow's needs. It is a state-of-the-art BRT system that provides reliable, comfortable and quick services. Regular halts along its route allow ease of access for users.

As phase 1 of *Clyde Fastlink* rolls out to connect Glasgow's regeneration developments along the north bank of the River Clyde it is clear that significant benefits will accrue including significant patronage and modal split.

Phase 2 currently in development proposes to extend the network westward along both banks of the River Clyde. This will provide BRT connections to Clydebank on the north bank and regeneration projects, Southern General Hospital and Braehead on the river's south bank.

### **Clyde Gateway**

Scotland's first regeneration priority is Clyde Gateway. This has offered an opportunity to incorporate at the beginning of a regeneration process a public transport corridor (possibly Clyde Fastlink phase 3) as a necessary component of creating sustainable communities through masterplanned regeneration.

A scheme like Clyde Fastlink provides the spine on which masterplanning for the Clyde Gateway can be developed. A transport corridor has been identified and incorporated into the Gateway scheme through enhanced connectivity that bridges the Clyde. This allows excellent connections between population and business. Evidence suggests that housing density of around 25 hectares

per hectare can support Clyde *Fastlink*. This combined with a minimum population of 7,500 to support viable and vital centres suggests denser urban form outcomes that are appropriate for inner city locations.

Other public transport provision for the Clyde Gateway including heavy rail and conventional bus must also be harnessed to ensure a range of real modal choice that can ensure public transport's attractiveness given that the direct access from the M74 and East End Regeneration Route for the private car has been established.

### **Conclusion**

Clyde Fastlink will emerge as a key component of Glasgow's 21<sup>st</sup> century public transport network. Through its considered integration into masterplanning for the Clyde Gateway a sustainable form of placemaking has been promoted that affords the opportunity for truly sustainable places. The trick will be in implementation that facilitates the introduction of *Clyde Fastlink* with new population and employment.

**Key Words:** Transit, Form, Sustainability

## Vital City Form

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### ABSTRACT

Vitality, if understood in its societal dimension, can be best grasped if understood as an urban condition generated by the mere presence of people – as simple its definition so complex its actual achievement. In this abstract we want to reflect briefly on a new understanding on the urban to frame new potentials for sustainable urban vitalities by analysing a city's retail landscapes.

Cities from time being were per se places of human exchange. Although the social exchange quickly was surmounted by the economical these two dimensions remained strongly interlocked and the major magnetic forces that drew people from the countryside to the urban centres.

Since industrialization and the spread of consumerism our cities have considerably changed: Alienation and individualism increasingly eroded the social substructures of society – the “Gemeinschaft”, community, family – and with it their spatial expressions within the urban – city, district, block. Small-scale and thus more intimate contacts diminished over the last decades (Sennett), as a consequence nowadays social interaction mostly take place on the anonymous city level, by individuals following similar interests or even lifestyles. If we draw the impact of this alienation on urban vitality, a strong tendency of polarization manifests enhanced by other large-scale spatial changes like a continuous flight to the periphery. This additional lost of urban thickness (a thinning out towards a *Zwischenstadt* (Sieverts) reformulates a new perspective on feasibilities of urban vitality.

The urban function of shopping is undoubtedly the most promising and attractive one to generate vital urban areas but bear certain risks of commercialisation our cities. Due to its own success, shopping often inversed the relation to the urban environment and started to drain energy instead of generating synergic spin-offs. A broad understanding is needed to enable the best and avoid the worst. Surprisingly, although post-war shopping is a major research field, little is understood about the spatial implications of shops in a larger system.

We would base the envisioned long paper on ongoing research on Berlin and the Randstad that investigates the retail landscape on a city scale. Seeing shops in their totality and as a system generates new possibilities to analyse urban form. Furthermore, the fast mapping tool of shops allows investigations of urban centrality and vitality. Until now surprising new insights emerged, revealing a complex interplay of different urban conditions, starting from more obvious ones like accessibility (infrastructure) and human density (working + living) to less evident ones, as direct links to social composition and urban morphology. The large-scale perspective is their implementation into current and future urban planning.

**Key Words:** vitality, shopping, urban form

# **Political Determinants of Good Public Transport: Governance Structures and Effectiveness**

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## **ABSTRACT**

Public transport is one of the major challenges in metropolitan areas to sustainable development and the economic prosperity of urban areas.

Besides a good infrastructure, the performance of public transport is crucial when it comes to the question of how to alter the modal-split between private and public transport. Therefore, we compared data on the governance schemes as well as on the costs, the quality and the time effectiveness of public transport systems in 45 Swiss urban areas. We developed a typology of governance schemes which distinguishes between vertical and horizontal coordination as well as between private and public organization forms. We conclude that a governance scheme which includes both vertical and horizontal integration of public and private actors performs significantly better than any other mode of organisation of public transport in urban areas.

**Key Words:** public transport, metropolitan governance

# **The Functionality of Scotland's City-Regions**

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## **ABSTRACT**

The concept of the 'city-region' is one that has remained somewhat elusive despite efforts to theoretically underpin the term. This is especially true in the context of Scotland. A number of ways of defining and measuring the city-region have been suggested in the current literature, although no author has so far attempted to produce a single operational definition of 'functional rationality' with respect to city-regions.

After briefly reviewing the literature on measuring and defining the city-region, the author considers several different ways of conceptualising the city-region, firstly as a 'daily system', secondly as something wider and less tangible but with a defined threshold and thirdly as an even wider region that has territory assigned to it in order to exhaust the spatial scale of Scotland. Different ways of measuring these concepts of the city-region (some established in the literature, some not) are considered. It is concluded that commuting patterns should be deployed as the primary vehicle for considering the nature and extent of the city-region. A number of reasons exist as to why this should be so, the most important being that commuting manages to encompass many of the other measures in a highly meaningful manner.

**Key Words:** city-region, functional rationality, commuting

# **Capturing Financial Contributions from Private Developers towards Transport Infrastructure – The Edinburgh Tram Scheme**

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## **ABSTRACT**

Edinburgh has identified major investment in new public transport infrastructure as a pre-requisite for major city growth and redevelopment. Since 2004 an important element of the City's funding strategy has involved securing financial contributions to new infrastructure from private developers. This is done through the use of planning agreements linked with new planning permissions. The amount of financial contribution required is calculated using a formula-based policy.

The paper will review what has been achieved to date and the significance of this scheme in delivering the £550m Edinburgh Tram project. It will then go on to identify the general lessons that can be learned from the scheme especially given that it is being delivered within a currently constrained national policy framework. Consideration will also be given to possible future threats to this and similar schemes e.g. through introduction of the proposed Planning Gain Supplement.

**Key Words:** transport, development, funding

# **Commuting to Work and De-Concentration in Metropolitan Areas of Copenhagen, Paris and Prague**

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## **ABSTRACT**

The main purpose of this paper is to compare spatial de-concentration in metropolitan areas of selected European capital cities: Copenhagen, Paris and Prague. The analysis uses data on jobs, population and commuting to work for small-areas (NUTS5 maximum). This allows a rigorous treatment and a fairly direct comparison of patterns and trends between the cities. Key questions asked are what are the differences between the city regions and how these differences in the de-concentration may be explained. Commuting to work indicates the spatial-functional linkages in settlement systems, reflects centralisation and de-concentration of jobs and residences and reveals functional dependency in non-urban areas. The primary comparison between Copenhagen/Denmark, Paris/France and Prague/The Czech Republic is assessed against the benchmark of Greater London, United Kingdom; and the two 'icons' of American urban form: Los Angeles and New York.

**Key Words:** commuting, urban structure, peri-urban



# **Public Transport Orientated Development: Lessons from North America and Asia**

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## **ABSTRACT**

Faced with the need to address issues like urban sprawl, traffic congestion, accessibility and climate change, a broad range of policy options must be considered in order to reach a sustainable future. One of these opportunities brings residences, shops, jobs and leisure closer together by locating them in close proximity to a network of rapid, reliable and high capacity public transport corridors.

Public transport oriented development (PTOD) and its associated policy tools are a way of generating a critical mass of traffic that can justify the large-scale investments that need to be made in rapid transit networks. By attracting an intense level of mixed-use activity within a five-minute walk of stations, it is possible to greatly reduce the need for car use, which is more attractive when daily activities are dispersed. As a larger number of stations generate PTOD, the network becomes highly interconnected, and a greater proportion of daily activities enter the catchment of a node on the network.

This paper discusses the policies that can be used to increase densities, provide public amenities, reduce parking and provide strong linkages between the station and surrounding areas. A partnership between the public and private sector is required. The public sector must be willing to invest in a system that is capable of reducing the need for new road infrastructure and reducing crime by presence. The private sector can benefit by providing a more desirable location for its workers and potential cost savings through the reduction of parking provision.

One of the keys to promoting PTOD is by connecting its local objectives to strategic regional and national objectives. By intensifying station precincts with mixed-uses, it can be demonstrated that congestion growth, carbon emission growth, social exclusion and crime can be reduced. Additionally, accessibility and community vitality can be increased.

Policy tools like “eminent domain” (compulsory purchase), “density bonusing”, “public sector coordination”, “tax increment financing” and “joint ventures” will be reviewed, as a means of overcoming the many barriers that restrict the widespread implementation of PTOD. These barriers include NIMBYism, a lack of public sector financial and policy commitment, complicated land acquisition and planning processes, financing and marketing with the perception of risk, and the accommodation of multiple transport modes in station areas.

A review of international best practices presents empirical evidence of the implementation of various policy tools for the successful development of specific PTOD projects in the developed and developing world. The creative adaptation of various planning tools to local circumstances

has been proven to succeed in places as diverse as Portland, USA and Hong Kong, China. In the current context of urbanisation and climate change, PTOD becomes increasingly important. By clearly articulating how its success has been achieved it will be possible to make PTOD a part of mainstream planning, rather than a selectively implemented idealistic alternative.

**Key Words:** public transport orientated development, transport and land use integration, sustainable transport

# **Retailing and the City: an Investigation into the Relationships between Urban Form and Retailing in Edinburgh**

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## **ABSTRACT**

Edinburgh is a relatively compact concentric city, and as such is regarded by the UK Government as the most sustainable urban form<sup>1</sup>. Yet, its radial transportation network is unable to handle the huge volume of commuters and shoppers it draws from across the Central Belt of Scotland<sup>2</sup>. Even with the addition of an outer ring road network the congestion problems persist, thereby suggesting that the compact city is not without its difficulties.

This paper is part of a larger project that seeks to investigate the sustainability of the compact city, and focuses on the characteristics of the urban retailing landscape within Edinburgh. More explicitly, it explores how urban form affects the accessibility and attractiveness of comparison shops and the behaviour of shoppers. The principal elements of urban form examined include population density, the diversity of land use within the immediate vicinity, accessibility in relation to road and foot movements, and the characteristics of the built retailing environment.

The analysis begins by mapping key urban form and property market features using GIS to give spatial representation of the Edinburgh retailing market. A theoretical gravity model developed to enable the impacts of changes in key elements of urban form on retail expenditure flows and the attractiveness of shopping centres to be simulated. The model is then calibrated and estimated.

Preliminary findings show that higher density forms support larger shopping centres and a more diverse retailing mix, by making retailers and units more viable. Density, travel times, the scale and type of retailing environment, the concentration of retailing within the area, and pedestrian accessibility impact on the trade flows generated by comparison retailers, which in turn will influence the viability of retailing developments, via property values, costs, risks or timing. Enclosed retailing space appears to be a significant determinant on shopping patterns.

Surprisingly, results suggest that the availability of free parking has little impact on comparison shopping but this may be because most enclosed retailing centres and malls have purpose built car parks, and the importance of this is captured by the variable measuring the type of retailing environment. Perhaps unsurprisingly, the provision of open, green space has little impact on shopping flows. It may improve the overall urban environment but the insignificance of this suggests that the scale and diversity of retailing units and associated services are substantially more important influences on shoppers' behaviour than the availability of green spaces.

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<sup>1</sup> Urban Task Force (1999). *Towards an Urban Renaissance*. London: E and FN Spon.

<sup>2</sup> Bramley, G. and Kirk, K. (2005) Does Planning make a Difference to Urban Form? Recent Evidence from Central Scotland, *Environment and Planning A* (37) pp.355–378.

**Key Words: urban form, retailing**

# **Planning the Romanian Urban System: from City to City-Region**

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## **ABSTRACT**

Cities are increasingly being seen as critical to the economic success or failure of regions, states and nations. Despite increasing globalization, many experts see economic growth being driven by these 'global city regions', which have strong concentrations of emerging and traditional industries, supportive infrastructure and a highly educated population. Despite globalization the local clusters are even more critical to national competitiveness than ever before. As a result of their economic success, the scale and growth of some cities is unprecedented. It is creating challenges to urban planners and the urban infrastructure never seen before. In this rapidly urbanizing world, cities are not just important for achieving sustainable economic growth but also achieving sustainable development.

The last EU's enlargement of 1 January 2007 put Romania and its regions in the middle of these general problems presented. This paper will try to expose the general context of this problem in Romania, with comparative examples, but especially to point the effects of regional economic development on urban social issues, important point for the sustainability. Is Romania following an example in its regional policy or is creating its own model of sustainable region? In the same time, another critical problem is: how to avoid the creation of another "French desert" model, seeing that Bucharest, by creation its metropolitan area, seems to rewrite the story of Ile-de-France region.

**There are two essential questions that I would like to highlight in my paper:**

1. What city form is creating this Romanian regional urban development? Are the functions changing?
2. Did all the Romanian cities undergo a similar transformation as Bucharest, the capital?

This paper will contribute to the understanding of planning the urban system in a former soviet state.

**Key Words: Romanian urban system, cities, urban development**

# Central Europe: Urban Typology Based on Airport Location and Accessibility

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## **ABSTRACT**

Air transport in Central Europe has been undergoing a dynamic development after 1990. The main causes are the changing organisational framework in connection with deregulations as well as changing political, economic and social context of Central Europe.

Air transport is one of the pillars of the current globalised economy therefore it has important consequences both economic and regional (localisation of some economic activities is strongly connected with easy accessibility of air transport). This leads us to the assumption that the importance of airport location within a city (or an urban region) is growing. It presents one of the factors influencing the relative accessibility of a city (or and urban region) in the context of the European and global settlement system. Generally speaking, an airport location and its accessibility within a city (urban region) presents one of the most important geographical characteristics – a range of authors stresses the need to link airports to a quick and high capacity system of public transport.

The aim of the paper is to develop a typology of cities with comparable size and importance in the region of Central Europe based on the evaluation of airport location and accessibility in its spatial framework. The items analysed will be the airport location itself in connection with the centre of the city (distantial and temporal remoteness), accessibility using individual and public transport (the type of link to the system of public transport, travel time, relative importance of various means of transport, the way of connection to regional and national transport systems). In addition to the current state, the paper will pay attention to the development after 1990 considering the dynamic growth in air transport and the importance of certain Central European airports after the economic and political changes.

The analyses will look at cities in the Czech Republic, Slovakia, Germany, Hungary, Austria and Poland. Taking into account the varied historical and economic situations in the mentioned countries, it is expected that there will be certain differences in the overall importance of air transport and also in airport accessibility in individual cities.

**Key Words:** airport location, urban typology, Central Europe

# **Traffic Jam: the Politics and Practice of Congestion Mitigation**

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## **ABSTRACT**

Around the world, mobility and congestion relief has risen to the top of the urban agenda, rivalling concerns about other issues that challenge the vibrancy and vitality of cities such as public safety, affordable housing, health care and education. This paper traces the varied reasons why redressing road congestion has become a top priority, highlighting how constituencies concerned about environmental degradation as a result of car emissions and urban sprawl have found allies in groups such as health care professionals, labour unions, big business, social justice organizations and suburban commuters. Stemming from the coalition of interests concerned about congestion, it is shown that urban rail projects, particularly those that are off-road and do not interfere with the amount of road space allocated to cars and trucks, have become the congestion mitigation strategy of choice.

And yet, while widely popular, international evidence is presented to suggest that these interventions often fail to meet their expectations with respect to ridership, financial returns, environmental amelioration and the promotion of social inclusion. In this light, the paper concludes by examining the conditions under which urban rail projects are successful, and identifies complementary policies and investment strategies to mitigate congestion.

**Key Words:** traffic congestion, public transport

# **To Study the Effect Large Infrastructures Impose on Urban Development and to Generate a Model using the Example of the Canton of Geneva**

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## **ABSTRACT**

### **Procedure:**

The periphery of Geneva, where a section of the city bypass opened in 1993, was studied on three different levels :

- firstly, an analysis of the region's dynamics as a whole;
- secondly, an analysis of the demographic evolution and employment market at a communal level; and
- thirdly, an analysis of the evolution of the man-made environment at a district level.

The afore-mentioned studies permitted the computation of a model (multiple linear regression) that describes the relationship between the changes in the man-made environment of a certain area and its accessibility.

### **Results:**

The study showed that the relationship between the freeway and the urban development of the canton of Geneva was not obvious. The demographic redistribution from the city centre towards suburbea seems to have no apparent relationship with the new infrastructure. The influence of accessibility manifests on the employment location; this was observed by an increase in employment figures, higher than average, for the areas near the new bypass and city centre.

These phenomena were not directly translated into building activity, as two neighbouring sectors can develop totally differently. The relationship with accessibility is not obvious.

The model confirmed the perceived trends and revealed the importance of vacant land for building activity to exist. In other words, urban development is hampered by the shortage of available land and the other location factors become insignificant.

**Key Words:** accessibility, location, building activity



# **City-Regions in Europe: the Potentials and the Realities**

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## **ABSTRACT**

The aim of the paper is to analyse the recently very fashionable ‘city-region’ (metropolitan area) issue. Two very different sources of information will be taken into account for the same group of cities. One of these is a very fresh ESPON analysis on urban functions for all EU metropolitan areas, which differentiates between morphological and functional urban areas. The other is a recent URBACT project, which focuses on exploring administrative set-ups and territorial policies within eight European metropolitan areas (Birmingham, Budapest, Cologne, Frankfurt, Glasgow, Lille, Malmö and Milan). The combination of these two empirical sources allows the comparison between geographic-economic ‘realities’ and administratively-politically dominated ‘actions’ for the eight case study urban areas.

On this empirical basis it is interesting to explore the large differences between EU countries and regions towards city-region cooperation. Dominated on the one hand by local conflicts between settlements of the same area and on the other hand by the challenge for international competition between metropolitan areas, there are substantially different cases observable, how metropolitan-wide policies are built up (top-down or bottom-up) in relation of planning, economic and regulatory functions. From the analysis it becomes clear that in the European context the boundaries of national states and administrative-political regions (and settlements) constitute very strong barriers against policies which would aim to optimize the position of the metropolitan areas.

Within the general topic the paper aims to have a special outlook on public transport solutions on city-region level.

**Key Words:** city-regions, metropolitan governance, European urban development