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# Sustainable Planning and Transit Infrastructure: Lessons Learned Accessing the Mega-Region: Evaluating the Role of Greenways in Austin, TX Mega-Region Transportation Planning

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Understanding the role of mega-regions in fostering economically competitive regions in the global marketplace is emerging as a key area of concern for scholars. Rather than focusing solely on national economic indicators, scholars are increasingly focusing on the role of mega-regions as key interface units in the global economy. One argument is that building competitive regions requires focusing on nurturing human capital and building strong transportation networks to link into the global economy. Regions that are successful at attracting external talent and nurturing a strong, educated local workforce will be competitive to companies that can either grow or relocate to these successful regions. To be fully competitive in the global network, infrastructure networks to link to the global economy must be in place. From a transportation perspective, this global view of mega-regions has generally led to analysis of the role of large-scale transportation projects such as rail, port, and highway systems in providing access to the global marketplace. While encouraging connections of these large structural components is a key component of mega-region strategy, fostering the type of transportation components that build livable communities is a less well-studied component of a This research analyzes the mechanisms for integrating livability mega-region strategy. components such as transit and active transportation into a broader mega-regions transportation framework. Specifically, this research examines the role of greenway networks as potential regional networks linking transportation, quality of life, and targeted trail-oriented development. A case study of Austin, Texas' greenway network planning is used to examine the potential and constraints of this type of integrated mega-regions transportation planning.

#### Off-Track: The Failure of Commuter Rail in Greater Milwaukee

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This paper looks at the KRM commuter rail proposal for the Greater Milwaukee Area; a line connecting Milwaukee, Racine and Kenosha, and by extension the Greater Chicago Area through their Metra system. Political and economic forces have been blamed for the failure of the project, however, these forces alone do not explain the challenge of the KRM commuter rail. Transit is further constrained by the "mass motorization" of the United States as introduced by Jones (2008). It has been widely documented that United States' transit share has declined precipitously during the past fifty years. Transit in general, and commuter rail specifically, have faced an uphill battle to compete with the private automobile. In the case of the KRM line, one of

the biggest challenges is the cultural dominance of the automobile in southeast Wisconsin. Through the use of primary and secondary sources available on the KRM commuter rail project and the use of basic GIS skills, this paper looks beyond the political and economic forces, viewing the KRM project through the lens of automobile domination in American transportation to explain its failure. One of the distinct advantages of the KRM line is the way it could have connected three of the region's main urban centers more directly than the current road and highway system can, making it easier for commuter rail to compete with the automobile. Furthermore, the stations in these three cities would be near the downtowns or central business districts (CBDs) of these cities where there is population density as well as potential for transit oriented developments. This inquiry adds significantly to the research on commuter rail, and urban transportation in general, by viewing the Milwaukee case through the lens of automobile domination in American society and exploring the broader context of local, state and federal transportation policy.

# Sustainable mobility Policy and public participation: where is the new paradigm for the public action?

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This paper is about the conditions and terms making sustainable transport and mobility policies consistent. The recurrent injunctions for a sustainable urban development underpin the political agendas of major North American government and cities, and particularly the sector of urban transport and daily travel management. Emerging as a central principle of town and country planning sustainable development is nevertheless a weakly regulatory concept. It essentially calls for a renewal of planning practices emphasizing the importance of local constructions and the actors' ability to promote or not promote the integration of social, economic and environmental dimensions as well as the integration of spatial and temporal levels of public actions. The injunction for sustainability has thus reified another traditional requirement of public action, i.e. the consistency of urban policies. Analyzing the change of transportation policies towards sustainability and consistency requires to question the processes involved in the production and implementation of these policies. This paper deals with the new sustainable mobility policy of the government of Quebec and evaluate the role of the public participation in its production. This new policy is clearly based on a new paradigm that deals with many issues of sustainability (social equity, environnemental protection, economic competitiveness). The first draft was submitted to a public participation process (in spring 2013) in order to improve and amend the final version (for winter 2013). We analysed all the written submissions in order to better evaluate the role of this public participation. In this context, the process can be defined as a useful tool for the government to complete its policy. As a matter of fact, it provides new directions and brings to light some important issues. In the next months, we will also analyse how the government will deal with all thèse rich proposals and make trade-offs.

## Big Events and Impacts in the Urban Mobility System

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Paper Title: Big Events and Impacts in the Urban Mobility System Author: Decio Rigatti (UniRitter – Laureate International Universities, Porto Alegre, Brazil) Topic Cathegory: Infrastructure, Capital Projects, Networks, Transport, Urban Services Abstract Text: In 2014 Brazil will host the World Cup and the championship will be held in several cities across the country, which are currently investing considerable efforts and money in their infrastructures in order to reach the so called "FIFA's requirements". The works comprise mainly aspects related to urban mobility, including the expansion and improvements in airports, connections among the main transport terminals – particularly the international airports – to the main accommodation areas of the cities and to the stadiums as well. The impacts in the cities can be identified at least in two different aspects regarding the overall mobility within the cities: a) what will be left to the cities after the games are over (new or renewed avenues, new modes of transportation, underpasses, overpasses, and so on); b) what are the impacts in the mobility during the works (traffic disruptions, limits in the traffic flows). The goal of this paper is to analyse the impacts of the changes introduced in Porto Alegre City, Rio Grande do Sul State, one of the 2014' World Cup host city in its mobility structure. Space syntax techniques (Hillier & Hanson, 1986) will be used as a tool to evaluate three different moments: a) previous to the works, meaning the usual mobility system and the related traffic infrastructure as it was before the works started; b) during the works, comprising the changes imposed in the mobility system; c) after the completion of the works. It will be possible to understand the impacts in the overall urban mobility when large scale and simultaneous works are introduced in the city. Furthermore, we can identify if and in what extent all the present investments in urban infrastructure will affect the mobility system in the future, after the games are over.

Strategic integration of public transport networks with airport infrastructure in the megalopolis of Mexico City: Evolution and challenges.

Presenter: Diana Garcia Cejudo, Delft University of Technology (<u>d.garciacejudo@gmail.com</u>)
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This paper analyses the five airports of the metropolitan airport network of Mexico City (AICM, Toluca, Puebla, Cuernavaca and Queretaro) in relation with their connection or disconnection to public transport networks on the local and the regional scale. Airports represent the contemporary global gateways of metropolitan areas worldwide. In the case of the megalopolis

of Mexico, air transport was traditionally used only by upper social segments of the population, however, during the last years, the introduction of low-cost airlines in the country has caused that the amount and economic range of people travelling by plane is expanding to other social segments requiring more affordable means of getting to the airport than those traditionally used in the past as private car or taxis. In spite of their role as relevant attractors in their region demanding transport connection not only for their travellers for also for the people working in them, airports in the megalopolis of Mexico are characterized by their lack of integration with public transport networks. Notably, the development of airport infrastructure has been done gradually and in most cases public transport connection if implemented, was in later stages of the airport infrastructure development process. In the megalopolis of Mexico City this lack of integration affects negatively the attractiveness of the alternate venues of the metropolitan airport network that are currently underused, contributing to the saturation of Mexico City airport and negatively affecting the competitiveness of the other cities of the region. This paper states that the development of mobility networks linking airports to public transport in the region could be used as a strategic tool not only for enhancing airport accessibility but also for improving the mobility experience for different types of regular (non-airport related) users of public transport in the region, as experience in other countries has shown. Concluding, this paper explores the possibilities and potentials for improving the integration of the five existing airports to public transport as well as the challenges this integration would face and the benefits this might bring for the region.

### Transit dependence and transit equity in the Portland, OR region

Presenter: Eugenio Arriaga Cordero, Portland State University, (eugenio@pdx.edu) Author: Jennifer Dill, Portland State University; Lisa Bates, Portland State University; Eugenio Arriaga Cordero, Portland State University; Jake Warr, Portland State University In many metro areas, the pursuit of economic development and "choice" riders has been driving investments and service provision for transit agencies. While recognizing the role that transit service plays as a social service, there has been a lack of understanding about the transit-dependent rider. Transit agencies meet Civil Rights Title VI requirements by analyzing racial minority and low-income populations, but a focus on transit dependent riders provides a different view on transit equity questions. In this research, we develop a conceptual framework based on access to personal vehicles as a means of transportation, distinguishing by the reason for riding transit. This creates a continuum of mobility and access to alternatives that allows for a focus on transit dependence among "non-choice" riders. Using the Oregon Household Activity Survey and an on-board survey of TriMet riders, we focus on low-income transit dependent riders to understand how their travel patterns, activities, and home locations differ from choice riders and from low-income drivers. We find that choice riders travel further in less time and with fewer transfers than poor transit-dependent riders; and poor drivers' travel patterns are more similar to high-income drivers than they are to poor transit riders. Low-income individuals get further and make better time by driving, while higher income choice riders can reach destinations with relative convenience. As we consider issues of accessibility and transit equity, we ask how transit agencies can consider both ways to better serve those currently dependent

on transit, and ways to make it possible for low-income drivers to depend on transit in the ways that choice riders can. Policy implications include land use and housing recommendations as well as transit service solutions.