

## **Mobility and access: the importance of an integrated transportation network for economic sustainability and quality of life**

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### **Statement of the Problem:**

Population mobility and transportation access have become the main topic of public discussion in South Florida in recent years. As of 2014, the Miami Metropolitan Statistical Area (MSA) which comprises the Miami-Dade, Broward and Palm Beach counties, is the eighth most populous area in the United States, as well as the eighth most densely populated area. The significant population increase over the past two decades, combined with the geographic characteristics of the area which borders the Atlantic on the east the protected Everglades National Park on the west, have created significant transportation challenges. The urbanized area is as little as five miles wide (east to west), and reaches 20 miles at its widest, but stretches approximately 110 miles (180 km) from south to north. Among the world's urbanized areas, only one – New York - equals the length of the Miami MSA.

The adverse effects of increasing traffic volumes and gridlock observed on most major roads in the area has produced an increased interest by the community on the relevance of transportation to quality of life and sustainable development. In the context of transportation, sustainability is “a way to make our communities more livable by integrating and balancing economic, social and environmental needs.” (American Public Transportation Association) Previously, transportation was evaluated primarily in terms of mobility (physical movement), but increasingly it is assessed in terms of accessibility (people's ability to obtain desired goods and services). This shift towards

accessibility connotes a greater attention to the effects of transportation choices, or their absence, on community livability.

**Objectives:**

The research paper pursues two main objectives related to the understanding of the connection between transportation and quality of life. First, the research focuses on exploring the significance of transportation for the South Florida area from the economic, social and environmental perspectives. The analysis includes a study of topics such as the demographic changes in the area over the past twenty years, the occupations, wages and economic opportunities in the area, as well as the social aspect of transportation which refers to the effects of transport development on patterns of social and economic differentiation, and on the advancement of economic opportunity through improved mobility and access.

The second objective is to assess how transportation challenges are being addressed by decision-makers in South Florida. This objective is addressed with a discussion of the feasibility of various options, the understanding of environmental and financial constraints, and the engagement of multiple stakeholders in the transportation planning and implementation process. Integration refers to both connectivity between modes of transport but also the maximization of access to it through land use planning. For example, transit-oriented development (TOD) was popularized as a modern planning tool in the early 1990s when Peter Calthorpe published “The New American Metropolis” where he explained that TOD exists when “moderate and high-density housing, along with complementary public uses, jobs, retail and services, are concentrated in mixed-use developments at strategic points along the regional transit systems.” (Calthorpe, 1993) These transit-oriented developments “have the potential to provide residents with improved quality of life and reduced household transportation expense while providing the region with stable mixed-income neighborhoods that reduce environmental impacts and provide real alternatives to traffic congestion.” (Dittmar and Ohland, 2004)

**Methodology:**

The research relies on secondary data analysis to assess community needs for an efficient, reliable and accessible transportation network. Of primary focus is the

relationship between residential hubs and employment opportunities, commuting patterns and costs. Additionally, the study also looks at population preferences, especially from the “Millennial” generation which in addition to being very technologically savvy also has a preference for the use of alternative transportation modes, not personal vehicles.

For the analysis of the second research objective, the authors present comprehensive analysis of planning strategies that aim to address transportation challenges in the Miami area. More specifically, the analysis includes land use, transportation mode choices, and the funding mechanisms to finance improvements.

Main results and contribution:

The research highlights the importance of accessible and affordable transportation for the livability of a community. Moreover, it integrates the topic of transportation within broader issues of sustainability, connecting transportation with economic opportunity, social equality, and demography.

### **Bibliography:**

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