

## Chapter 14

# Sustainable Transport and Quality of Life Analysis of Cycling Impact in Italy

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### ABSTRACT

*In the last 20 years cities have undergone considerable changes. The current phase of expansion, which took place in the absence of demographic pressures, has diluted urban space into functional areas, scattered randomly throughout the area. The authors therefore identify new mobility needs, met mainly by private means, with implications in terms of congestion and air pollution. Sustainable mobility is a priority intervention for the EU. This chapter studies, after a discussion of the importance of sustainable mobility, cycling in Italy from an economic and strategic perspective. Promoting cycling is important for individual health, environmental sustainability, and transport demand management. In Italy, very few people use a bicycle on a regular basis. The analysis relies on national aggregate data as well as case studies of large and small cities in an Italian region.*

### INTRODUCTION

Over the past decade, environmental problems have no longer been caused simply by local effects from local activities. The globalization of ecological change has been accompanied by the localization of human populations and settlements (Rees, 2003). Cities, of course, have undergone changes and their shape is changing dramatically.

They presents the typical features of the current process of urban transformation “characterized by growth and the differentiation of urban activities which are resulting in new metropolitan spaces that are enlarged and distantiated in terms of scale and scope” (Salet, 2007, p. 6). In fact, the European Commission recognizes urban sprawl (“the low-density expansion or leapfrog development of large urban areas into the surrounding rural land”) as the most urgent of the urban design issues as it leads to green-space consumption, expensive infrastructure and energy, increased social segrega-

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tion and land use functional divisions, reinforcing the need to travel and sharpen dependence on a private motorized transport model, leading in turn to increased traffic congestion, energy consumption and polluting emissions (CEC, 2004; EEA, 2006; OECD, 2000). Transport is associated with many positive connotations, but the impacts and the benefits have a high price (Geerlings, Shiftan & Stead, 2012).

It is important to identify new mobility needs. Sustainable mobility is a priority for action for the EU, although the issue is limited resources. At the same time, it has been found that tourism plays a significant role in the economies of cities, with investment in leisure activities alongside the processes of urban regeneration. In this context, the urban supply system, more oriented towards sustainable patterns, is enhanced by services aimed towards new ways of enjoying the city.

The role reserved for the urban quality of life and livability of the cities is significant and is reflected in numerous studies in national and foreign literature. Urban transport, the excesses of motor traffic, population density and traffic congestion, the concentration of industrial activities and not least the many spatial elements and the weather are all factors contaminating the quality of urban life with the consequences of not livable cities (Cori, 1988, 1997). The power of the automobile has reduced the alternatives offered by other transport modes since, besides the psychological attachment to the private comfort of speed and seamlessness offered by the car (Sheller & Urry, 2000; Urry, 2006), it has inevitably shaped the physical form of urban mobility so that other modes of mobility do not fit in: cyclists and pedestrians have to fight against the symbol of cars, and space for bicycle paths or pavements has to be “stolen” from the “natural”. The importance of urban policies and their effectiveness is closely linked to the ability to exploit the land in all its components by focusing on quality of life and meeting the needs of residents. A quality of life and more specifically,

quality of urban life, as “the state of social wellbeing of an individual or group, either perceived or as identified by observable indicators” (Pacione, 2005, p. 673) oriented also to the principles of sustainability. Urban quality, based on strong elements of identity and specificity, has thus become the determining factor in a process of continuous economic development in an integrated way that involves public and private resources (Travisi & Camagni, 2005).

In this context, strong planning policies that favour non-auto modes of transport assume increasing importance (Kenworthy & Laube, 1997). The efficiency and effectiveness of the transport system, in fact, help to qualify the supply of city services, also it cannot ignore the important role in shaping the image on tourism (Page, 2009). Consequently there are numerous decision to make on the mobility system – including all modes of transportation – concerning policies and actions to revitalize and enhance the local area.

In this perspective, addressing the issues concerning sustainable mobility (meaning “to move people and goods in an environmentally friendly, ergonomic, safe, economical and timely manner”) would make a positive contribution to the environmental, social and economic sustainability of the communities they serve, where the aim is also to contribute in an integrated network of actors involved to the development of competitive cities.

Cycling in particular is a sustainable mode of transport; it is ecological while at the same time offering a tourist attraction role as a possible niche to exploit and promote among the different ways of enjoying the city (Gatersleben & Haddad, 2010; Lumsdon, 2000). Increased cycling should contribute to reducing noise and air pollution and it has important implications for both personal health, having been linked to lower rates of overweight and obesity (Wen & Rissel, 2008), as well as livability and environmental resources.

The bicycle is more energy-efficient than walking (Isfort, 2011). Moreover, its daily use

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