Active Mobility

By Marie Demers (Epidemiologist)
22 June 2015

Active mobility refers to all forms of travel that require human energy (i.e. non-motor) and the physical effort of the person moving. Active mobility occurs via modes themselves referred to as “active,” namely walking and cycling.

Clarifications

Active mobility can also include modes of travel requiring other non-motorized equipment, though their modal share is in fact negligible (namely wheeled devices such as in-line skates, roller skates, scooters and wheel chairs). The expression “active transport” is commonly used to describe active mobility (Public Health Department of Canada, 2010; Delisle, 2013).

Active mobility or soft mobility?

Active mobility is sometimes also referred to as “soft mobility,” but there seems to be no consensus on the latter term, as some consider motorized modes that have a low environmental impact (e.g. public transport and electric bicycles) as soft mobility (Coredem, 2014, Réseau École et Nature, 2009), in addition to active modes. Either way, the two expressions denote sustainable mobility, as these modes aim to reduce the negative impacts of mobility. Moreover, active mobility is often combined with public transport since one must walk or bike in order to get to the latter; so that these modes are called complementary modes. This complementarity has been enhanced and facilitated by mobile technology such as smart phones. Active mobility is an essential part of the transport system; in addition to enabling short trips (which are numerous), it provides access to and ensures connections between other modes of travel.

The benefits of active mobility

In addition to helping to reduce traffic and limit air pollution, active mobility encourages physical activity in daily life, which is beneficial to health, be it for getting to a specific destination (work, school, a friend’s house, shopping or leisure activities) or simply for strolling. Active mobility is also the most common form of physical activity, which can be defined as any force exerted by the muscles resulting in greater energy expenditure than that of a state of rest1 (Réseau français des Villes-Santé de l’OMS, 2013). This energy expenditure helps maintain a healthy weight. Active mobility also helps in the fight against a sedentary lifestyle, which is characterized by physical inactivity, often resulting in health problems.

In this regard, the research describes the many benefits of active mobility for improving overall fitness and aerobic capacity, better managing weight, reducing blood pressure and bad cholesterol, lowering the risk of heart disease and improving mental health (Demers, 2008). The health argument is often used to promote active mobility, both at the individual level as well as for the health of cities, which become friendlier and safer places as active modes become more popular. Active mobility also favors...
greater equitability in terms of travel, as it can be practiced at little or no cost - since equipment needs are minimal - by any age group (i.e. notably children and the elderly who cannot or can no longer drive).

Walking or cycling?

The most popular active modes – walking and cycling – each have distinct characteristics (Papon, 2003). Almost everyone is a pedestrian at one time or another, whereas the proportion of cyclists in a given population is much lower, especially when the journey is itself the goal. Unlike walking, cycling is a vehicular mode whose use depends on the availability of a vehicle and parking spaces at the origin and destination. Moreover, many bikes are used solely for leisure purposes rather than for commuting. The practice of cycling is more affected by the terrain and weather than is walking (strong rain, cold or snow), while the latter depends more on distance. The most popular reasons for walking are shopping and school. Finally, we found that men – and young men in particular - tend to cycle more than women. Pedestrian, passerby, walker, wanderer, stroller, runner and jogger are just some of the many words used to describe those who travel by foot, whereas someone who uses a bicycle is always a cyclist. The term “pedestrian” – the one most commonly used to describe those who walk – does not particularly evoke the imagination and reflects the mitigated attraction to this mode that nonetheless is on the rise (Stemmelen, 2009; Ville et Vélo, 2011).

Some active mobility figures

Walking and cycling as modes of travel vary depending on the user’s age, territorial and national features (in the case of cities, morphology and urban density in particular). The closer to the city center one gets, especially in big cities, the more people walk. In 2008, the modal share for walking was greater in Paris (51%) than in its suburbs (approx. 30%), where the modal share was higher than that of an urban center of 100,000 inhabitants (approx. 20%) (de Solère, 2011).

The modal shares for walking and cycling are higher in European countries than in America and Australia, where urban development has been designed for cars, distances are too great to travel by foot or bike, and amenities for active modes are inadequate. According to OECD data, the modal share for walking varies from 8.7% in the U.S. to 16% in New Zealand, 20% in Norway, 23.1% in France and as high as 28% in Switzerland (Berge and Peddie, 2010; Feypel, 2011). Walking practices vary greatly depending on the city: in Europe alone, the modal share varies from 16% in Athens to 30% in Oslo, 33% in Brussels and 52% in Stockholm (Berge and Peddie, 2010).

Walking tends to be practiced more by women, those under 25, the elderly and those with low incomes (Berge and Peddie, 2010). A 2008 French national survey shows that walking is relatively unaffected by the season or weather; cycling practices, however, triple between the winter and summer months (Papon and de Solère, 2010).

Cycling practices also vary greatly from one country to another (from 2% in the U.K. to 3% in France, 4% in Austria, 10% in Germany, 18% in Denmark and 26% in The Netherlands in 2008), as well as between cities in the same country (in Germany alone they varied from 6% in Stuttgart to 22% in Freiburg and 38% in Muenster between 2000 and 2009) (Buehler and Pucher, 2012). Bicycle use is more common among men and those under 18, though in countries such as Germany, Denmark and The Netherlands it is common among adults of all ages (Buehler and Pucher, 2012). Unlike walking, which is more common in big cities, cycling is preferred in small and medium-sized cities (Papon, 2003).

The limitations and obstacles to active mobility are numerous: they include distances that are too great to travel (due largely to personal capacities, cultural habits, etc.), a low density spatial organization where use functions are separate from one another, an unsafe environment due to excessive motorized traffic, lack of urban design for pedestrians and cyclists, extreme weather conditions, the feeling of being pressed for time and, finally, force of habit, which sometimes leads people to use their cars for
very short trips. The fact that active modes were long considered the lot of the poor may also limit their use. As Stemmelen (2009) points out, the image reflected by a given mode of travel is an essential part of its appeal. But beyond the obstacles and in order to proliferate, active mobility must be pleasant, practical and safe.

Active mobility infrastructure includes sidewalks, foot paths, pedestrian-only areas and walkways, access ramps, parks, bike lanes, bike paths, bike parking at train and subway stations, self-service bike rental stands, signals for pedestrians and cyclists (including traffic lights) and traffic calming measures.

Active mobility accessories are those items that make traveling easier and those that are an inherent part of it, but whose functionality is linked to related activities (Lavadinho and Winkin, 2008). The first group includes clothing, footwear and the various wheeled devices (bikes, roller skates, shoes with built-in wheels, rollerblades, scooters, jumping stilts, etc.). The second group includes cell phones, MP3 players, iPods, iPhones, iPads, backpacks, wheeled suitcases, fanny packs and glasses. We could also include miniature cameras, GPS and pedometers. These devices allow pedestrians and cyclists to develop functional autonomy and optimize their travel time, thus making them “nomad actors” (The Economist, 2008) in the public space and not just mere passersby.

Increasing active mobility depends on a news sharing of roads and public spaces between motorized vehicles and other users, both in terms of urban design and regulations to ensure a more harmonious coexistence between the different modes, thereby making walking and cycling safer and more easily practiced as modes of travel and ways of inhabiting space (Demers, 2008). Active modes are complimentary to public transport as a portion of the trip can be made on foot or by bike. The development of public transport is therefore conducive to active mobility (Stemmelen, 2009; https://fr.forumviesmobiles.org/projet/2013/06/24/marche-suivre-950).

Bibliography


**Mobility**

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

**Active Mobility**

Active mobility refers to all forms of travel that require human energy (i.e. non-motor) and the physical effort of the person moving. Active mobility occurs via modes themselves referred to as “active,” namely walking and cycling.

En savoir plus x
Lifestyle

A lifestyle is a composition of daily activities and experiences that give sense and meaning to the life of a person or a group in time and space.

En savoir plus x

Associated Thematics :

Lifestyles
- Alternative mobilities

Policies
- Cycling & Walking

Theories
- Concepts

Marie Demers

Epidemiologist

Marie Demers is an epidemiologist at the Ecole Polytechnique de Montreal.

To cite this publication :


1 https://forumviesmobiles.org/en/dictionary/446/mobility
2 https://forumviesmobiles.org/en/dictionary/2888/active-mobility
5 https://forumviesmobiles.org/en/thematics/politics/cycling-walking
7 https://forumviesmobiles.org/en/authors/2999/marie-demers-epidemiologist