Cycling to a better tomorrow



"Cycle lane" by Tom Anderson

In 2022, the planet is seeking help to "breathe", with air pollution being classified as dangerous to health by the World Health Organization, having caused already more than 4 million deaths worldwide. For example, vehicle emissions continue to contribute significantly to the poor air quality worldwide, urging governmental agencies globally to design and implement environmentally friendly emission-related practices. The same is observed also in Greece [1], where except from the introduction of catalysts in cars, the expansion of the metro network etc, the replacement of cars by bicycles is gaining ground as an easy and economical way of transportation to work or school, for running daily errands (shopping, exercise), as well as for fun. In this context, Athens is embracing the current trend by creating bicycle lanes in central neighborhoods connecting the northern and southern suburbs [2].

However, according to the Sustainable Mobility Unit of the National Technical University of Athens, cycle lanes can be found in only 27 out of 66 municipalities of Attica, serving mainly local routes. Among the 39 municipalities without cycle lanes is the one of Alimos, which is located in the southern suburbs of Athens and is part of the Athenian Riviera. Although the recent results of the European Mobility Week 2021 showed that the municipality was distinguished for its environmental actions and stood out among 3,000 European cities, the lack of cycle lanes from the neighborhoods of Alimos makes one wonder what other actions could improve the air quality in a local scale. To put it simply, what is the connection between the absence of bicycle road infrastructure, the improvement of air quality and the sustainability of cities?

First of all, the establishment of bicycle lanes is expected to increase the number of bicycles on daily use due to the increased feeling of security. This in turn will reduce the number of cars in the streets, immediately resulting to a reduction in carbon dioxide in the local air, which is one of the most important greenhouse pollutants. In particular, bicycles produce zero emissions, saving 150 grams of carbon dioxide per kilometer compared to driving a car. Cycling also has a significant effect on overall fuel consumption. According to a report by the Rails-to-Trails Conservancy [3], approximately 700 million to 1.6 billion gallons of fuel can be saved annually if there is sufficient cycling infrastructure. Of course, less resources are required for the production and maintenance of bicycles as well.

However, as already mentioned, the frequency of bicycle use and the level of the cyclists' security are related. To assess this connection, a questionnaire was distributed to citizens between 11 and 42 years old. The statistics of the survey showed that most people use it for fun (65%), while the rest as a means of transportation (20%) and sports (15%). In addition, the majority state that they do not feel safe riding a bicycle (82%) as they are aware of cases of accidents between bicycles and cars or pedestrians, adding that they consider the bicycle lanes necessary. They also highlighted that if the necessary bicycle road infrastructure existed, they would use their bicycles more often (80%), while those who do not own a bicycle stated that they would be eager to buy one as they would feel safer to use it.

In any case, establishing cycle lanes in a neighborhood is not an easy task. This is further affirmed by the appointed department of the Municipality of Alimos [4], who were willing to answer some questions regarding this matter: "The different geometric characteristics of the roads (uphills, narrowness of the road and sidewalks, the existence of natural obstacles on the sidewalks, e.g trees, etc.), the insufficient funding towards the municipality for the implementation of such projects, the difficulty of integrating cycle lines in the existing road network, the long period of adaptation, the Greek mentality regarding bicycle as a means of transportation, as well as the insufficient driving



"Confident City Cycling Class" by Scott Lowe

education" are major obstacles to tackle. Nevertheless, they also mentioned that the municipality of Alimos plans to establish a network of bicycle lanes throughout the region in order to reduce traffic congestion and especially the environmental footprint in accordance with the objectives of the European Union for abating Climate Change: "A proposal has already been submitted for funding to the Greek Ministry of Environment. This includes a bicycle road that will connect the Alimos metro station with the tram station on Poseidonos Avenue. The proposed route includes major streets like Koumoundourou, El. Venizelou, and Ionia and Alimou Avenues, with an expected length of over 4 km. In addition, a bicycle road will be created on Poseidonos Avenue, connecting the coastal Riviera from Piraeus to the Municipality of Vari-Voula-Vouliagmeni". For its construction, some solutions include the reconstruction of sidewalks and public spaces, as well as paving, which are sustainable solutions where the narrowness of the road is a deterrent. Finally, the proposed bicycle road will pass through points of interest such as schools and stadiums, expecting to solve the citizens safety problems.

In conclusion, bicycles are a means of transportation that contribute positively to the goals of sustainable development of a city. The increased usage of bicycles over cars are directly related to safe transportation, i.e. the existence of bicycle lanes. It is apparent that the combination of these two parameters has not gone unnoticed by local agencies, such as the Municipality of Alimos, who are already taking action. It seems that a better future is a ride away.

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<u>References</u>

[1] European Environmental Agency, https://www.eea.europa.eu/publications/2599XXX/page018.html

[2] <u>https://www.smu.gr/greece_cycle_map/</u>

[3] https://www.eesi.org/articles/view/better-bike-infrastructure-improves-environmental-and-human-health

[4] The journalist acknowledges the Municipality of Alimos for their support during the writing of this article, by answering relative questions.

<u>Photos</u>

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