



# Journal of Economics and Business

**Muñoz Cardona, Ángel Emilio, Martínez Soto, Lorena, and Manrique Miranda, Mauricio. (2021), Urban Happiness from Mobility in Neighborhoods and Downtown: The Case of the Metropolitan Area of Aburra Valley. In: *Journal of Economics and Business*, Vol.4, No.1, 1-11.**

ISSN 2615-3726

DOI: 10.31014/aior.1992.04.01.318

The online version of this article can be found at:  
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Published by:  
The Asian Institute of Research

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# Urban Happiness from Mobility in Neighborhoods and Downtown: The Case of the Metropolitan Area of Aburra Valley

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## Abstract

The entrepreneurship on mobility leading to an improved quality of life should be an initiative of young people living in the different neighborhoods of a city. They can even design exemplary models of territorial ordering for responsible mobility. Young people with some degree of university education are more sensitive to the value of designing more humane cities. Hence, all social transformation in citizen co-responsibility has its origin in feelings of empathy, that is, in the search for urban happiness for the achievement of a dignified human life. The research question is how to motivate youth social entrepreneurship in city neighborhoods for mobility and strengthening of citizen culture. The research methodology was based on 710 surveys on Quality of Life and Urban Mobility in the Aburra Valley applied to young university students in their last semester and eight interviews with youth organizations and municipal secretariats of citizenship, and mobility. The study conclusion is that if more than 90% of daily visitors to the city downtown live in the surrounding neighborhoods, then the strengthening of civic culture must begin in those neighborhoods. If the suburban area is organized, the downtown will be organized.

**Keywords:** Social Entrepreneurship, City of Learning, Urban Mobility, Citizen Responsibility, Urban Happiness

**JEL:** D71, D72, D78, H31, H41, H52, H53, I31

*"How can you know what to do with vehicle traffic without first knowing how the city works and for what else its streets are needed? People don't know what to do with cars in the streets, because they don't know either how to develop a functional and vital city, with or without cars".*

Jane Jacobs (2011, p. 33)

## Brief characterization of the Aburra Valley metropolitan área

The Aburra Valley metropolitan area is the most important in Colombia, covering an area of 1,157Km<sup>2</sup> and consisting of 10 municipalities: Caldas, Sabaneta, La Estrella, Itagui, Envigado, Medellín, Bello, Girardota, Copacabana, and Barbosa. The core city is Medellín, capital of Antioquia, internationally recognized as a Discovery City of Innovation and Learning (*El Colombiano* newspaper 21/06/2019). The Aburra Valley is located

between two large mountain ranges that provide scenic beauty and freshness. According to the Department of National Statistics, the metropolitan area has a population of approximately 3,800,000 inhabitants, as well as an industrial park with 535 large, 1,643 medium-sized, 5,900 small, and 71,302 micro-companies. The informal sector of the economy accounts for about 53% of the employment, the public sector for about 11%, and the private sector for 34% of it. Approximately 80 percent of the population earn less than 3 minimum wages -US\$916 per month; 12 percent earn between 4 and 10 minimum wages and 8 percent earn more than 11 minimum wages per month (DANE, 2018).<sup>1</sup> The municipalities of Medellin, Sabaneta, Itagui, Copacabana, and Envigado have been recognized nationally as having the top quality of life since the beginning of 2000 among the 1,122 local administrative circumscriptions of the country.

## Introduction

Creative economies, unlike the market economy, are based primarily on social entrepreneurship projects in response to local needs. Creative ventures are born from the resilience of local inhabitants, through their imagination cities reduce the decline of the quality of life in their territories (Duque, 2018). Adam Smith, in *Research on the Nature and Causes of the Wealth of Nations* says:

People define their needs according to local customs to provide the goods required for a dignified life, whose lack would be, in a way, unseemly among people of both high and low reputation. The non-consumption of these required goods, either through habit or lack of income causes embarrassment. An honest day laborer would blush if he had to appear in public without shoes. The custom requires the use of shoes as mandatory, so no person of either sex would dare to appear in public without them. (1997a, p. 769)

In other words, local needs change among inhabitants of different countries, territories, and localities, depending on residents' stock of knowledge and solidarity; in other words, on local developments that are socially achieved. While in a developed country telecommunications are by satellite, in a developing country they are by aerial cable, or while for a family in an upper-class area in Medellin the most pressing need is to buy a new car to replace the five-year-old one they own; in a lower-class area, other families' need is to paint the facade of their homes. If human beings are by nature social beings (Smith, 1997), the fulfillment of needs becomes a common language, in what is habitual or natural, in what is communally accepted because it is connatural to all (Muñoz Cardona, 2017, p. 19).

Hence, to avoid social decay among the lower social classes and to level up them to more socially acceptable ways of life, the Scottish Adam Smith, advises (1997a, p. 688) to show the inhabitants of poorer municipalities the way the inhabitants of richer localities live so that the former individuals will be aware that there are other ways of life. That is, that there are better and more organized ones; so they will seek, by nature, how to work to reach them, how to improve the conditions in which they currently live. In this manner, the country and the city will avoid the social decline of the poorest, preventing the surge of worse future evils in the due social order (Smith, 1997, p. 228-230).

If we start from the organization of the city around the satisfaction of common needs, then, we can be based on three main assumptions: first, man is by nature a social being; second, man is by nature a sentient being; and third, man by nature seeks what is good or better for himself and his people. It may be stated that the human being learns from experiences and is able of sympathizing with others, that is, he is a sensitive-rational being, perfectible, loving what is good for himself, his own and others; since his well-being is linked to the well-being of those who make up the locality (Smith, 1997, p. 228).

In contemporary societies, technology and developments in telecommunications close gaps among populations. Both show and model ways of life that invite change, increasing citizens' awareness of the possibility to propose

<sup>1</sup> The minimum wage in Colombia for the month of November 2020 is equivalent to US\$272 per month or 227€.

and improve their habitats. These societies become places of learning that are transformed from their very foundations of community and social organization (Muñoz and Quintero 2020).

This is the base that explains why social innovation, community unity, and youth initiatives are at the heart of contemporary economies (Jacobs, 2011, p. 58). There is the case, for example, how a young Lebanese engineer at the celebration of Mother's Day in his country on March 21, 2020, in the face of the world coronavirus pandemic, delivered roses with a drone in the hands of the recipients. The profits were given to social organizations to treat the deadly disease. Initiatives like this, mitigate needs, avoiding sons' feelings of shame, becoming a pride for the creators, like the young engineer, who solved the needs for Mother's Day delivering an outstanding example of national solidarity.<sup>2</sup>

Similarly, 13 youths from the city of Medellin became friends through the link "@deldichoalhechocol", and with a capital of US\$5,548 went out in three vehicles to help street vendors in several parts of the territory, who, because of their economic hardship, cannot keep up with the quarantine set up by the government to control the pandemic. These youths helped 20 people and created a large network of solidarity.<sup>3</sup> There are other examples of community leadership among young people nurtured by the vocational training centers, some of them working with the Integrity Centre of the EAFIT University, the project of Integrity, Respect, and Tolerance: #RespetoIn EAFIT and the Centre for Ethical and Bioethical Research of the Pontifical Bolivarian University.

Through the link #DonatonPorMedellin, the EPM Foundation and the city mayor collected, in just 14 hours, more than 100,000 food baskets and more than US\$3,693,815 for the families most affected by the work stoppage due to the quarantine. It was a great day of solidarity among citizens, businesses, municipal government, and young local artistic union with the city, a show of love for the city and its citizens.<sup>4</sup>

These events have gained strength and social visibility over than those carried out by an opportunistic employer who, taking advantage of his position as a public officer provided 50 wheelbarrows to be loaded with fruit and given to Venezuelan migrants to sell downtown. The daily sales are collected by a manager who pays them only US\$6 per day; as these informal activities are not fully transparent, the officer's name and position are withheld. This business model of non-citizen responsibility has spawned social disorder, mobility problems, and accidents in the downtown area. There have been fatalities of 225 pedestrians in the 2018-2019 period. (Focal interview of Urban Mobility of Medellin, 2019; Osorio, *El Tiempo* (11/02/2019)). As Ana Marin Morales points out in her web article: The Colombian Dream: Drawing the New Routes (15/02/2019),<sup>5</sup> where she claims that the wheelbarrow becomes the first means used by immigrants in the city of Cucuta to haul several kinds of merchandise and get some money. This is an uncontrolled system of informality, as stated by Wallerstein in 1974 and Lefebvre in 1991, both authors quoted by Ana Marin (15/02/2019).

The borderland between Venezuela and Colombia is a marginalized area. In his book *The Modern World System* (1974) Immanuel Wallerstein calls this a peripheric territory that—in the absence of the state—is managed by informality. These dynamics are set by those who perform the space daily as Henri Lefebvre would say in *The Production of Space* (1991)—in other words: migrants, merchants, mafias. Their needs and the economic opportunities emerge out of a profound social change. The *rebusque* (a word in Spanish that explains the unimaginable local mechanisms to find an income—for sure not regulated by the state) therefore leads the owners of lift dollies to identify a promising business in the crossing-points where migrants need to carry their belongings. Lift dollies are a non-regulated business where tariffs are negotiated between the lifter and the client, and calculated on the pieces of luggage, and distance (Marin, 15/02/2019).

<sup>2</sup> For more complete information see website: <https://www.panorama.com.ve/novedades/Las-entregan-drones-Madres-libanesas-reciben-rosas-en-su-dia-20200321-0031.html> Cases like this became a worldwide example, most of the initiatives led by young people with a vision of social entrepreneurship and a vocation for servant social leadership.

<sup>3</sup> For more complete information see website: <https://www.elespectador.com/coronavirus/jovenes-en-medellin-donan-dinero-trabajadores-informales-afectados-por-cuarentena-articulo-910401>

<sup>4</sup> See website: <https://www.elespectador.com/noticias/nacional/antioquia/la-donaton-por-medellin-supero-los-10000-millones-articulo-914310>

<sup>5</sup> See website of the London journal ROUTED: <https://www.routedmagazine.com/colombian-dream>

Social entrepreneurship should not be confused with community leadership. While the former has a connotation of business with benefit to a specific community, the latter refers to searches for administrative forms of the territory (Muñoz and Martínez, 2020). The social entrepreneur is generally altruistic doing business for the benefit of the community and belongs more to the model of the cities of innovation. Community leadership, as an administrative vocation, values a person's human nature, so it seeks equity and social justice; it belongs more to the model of the cities of learning, as shown by the interviews conducted with the Youth Boards of the Aburra Valley metropolitan area.<sup>6</sup> Community leadership is not based on social, political or religious prejudice. It is based on the integration and commitment of all community members to the achievement of the common goods demanded by the neighborhood.

From this perspective of contemporary practical philosophy, community leadership is the product of a model of social construction, based on the formation and strengthening of feelings of empathy and solidary action. While some social movements and political parties believe that community leadership results from a particular action, this research paper presents it as an action that gains strength within social support, that is, it goes beyond personal efforts. For, while the idea may be born in an individual, the achievement of the goal demands community support; for man is by nature a social being, which goes far beyond the personal self (Muñoz Cardona, 2017).

Having made the above clarifications, this research paper shows the importance of community leadership in the construction of urban happiness. To this end, universities and social organizations must train pedestrians, neighbors, and drivers in the duties of co-responsibility. Demanding and compulsory road education programs should be designed to help improve suburban mobility; models of learning cities should be adopted based on generalized citizen awareness, as proposed by the economist Muñoz Cardona (2017) in the *Ethics of Citizen Responsibility*.<sup>7</sup>

### **Some concepts of urban happiness from mobility**

Urban Happiness in Mobility accounts for the real and effective spaces that people have for enjoying open spaces, for walking together and making use of their natural language abilities: speaking, gesturing, socializing, and learning from others, and even from the other (Fernandez, 2019). In cities more advanced in mobility in Canada, Europe, and Latin America, the moderate or minimal gestures and the look of astonishment of prudent pedestrians educate the reckless; the uneducated who risk their health, tranquility, and emotional well-being of others (Ribetto, 2014).

Hence, Law 1625 (2013) in Colombia invites citizens and localities to improve the conditions and quality of life in public spaces through educational and cultural programs that seek collective welfare. For instance, Article 536 of the Land Management Plans, Law 388 of 1997, and Article 278 of Law 1955 of 2019, have included mechanisms for financing public space and infrastructure projects, that can be funded through the securitization or the issuance of public debt bonds to be repaid in the future according to the valuation of the land.

However, the lack of civic education for the adequate use of public spaces in neighborhoods in large cities of the Aburra Valley of Metropolitan Area, together with the population growth, the increasing number of vehicles, and the delay in the development of road infrastructure for mobility, make these places unsafe for pedestrians with reduced mobility, pregnant women, children and the elderly. These inculturations on the neighborhoods are moved to the downtown area. This increases the accident rates and makes the use of public spaces are danger culturally.

<sup>6</sup> The Youth Table was created under Law 1885 of 2018 in Colombia. One of the main definitions of the Youth Table in Article 5 is: They are spaces for youth participation. These are all those forms of concertation and collective action that integrate a plural and diverse number of organizational processes and practices of young people in a territory. The Youth Tables are made up of young university students, mainly from the human sciences, plastic and social arts. It is also made up of social leaders with low levels of education, especially would be seconded. They are very sensitive to the social and economic problems of their communities.

<sup>7</sup> Learning cities are cities that transform and progress on the basis of communal initiatives for the administrative organization of the territory. They are resilient cities, that is, capable of learning from experience. Learning cities are cities where everyone learns from everyone. Generally, the poor neighborhoods have young university students who study at the best public universities in the city. They are the fundamental raw material of change. They are people who know how to listen and transform craft ideas into technical ideas. Community ideas that are successfully transformed into real ideas become public administrative examples, and can become part of local government agendas.

Jan Gehl says in *Cities for People* (2014): “*Urban obstacles, noise, pollution, lack of space, the risk of accidents are the commonplace faced daily by passers-by in public spaces.*” (Gehl, 2014, p. 3). Jane Jacobs pointed out in *Life and Death of the Big Cities* (1961) how the massive rise of the automobile and the urban ideology of horizontal properties end up destroying space in the vitality of urban life. These cities are losing their community vitality, as Peter Besserman said (1998). Even in the enclosed urbanizations of horizontal property, the community vitality is scarce, as happens in enclosed places that meet only once a year to define the administrative fees for the next year. A city within the city equally solitary, with common spaces rarely used by the co-owners (Jacobs, 2011, p. 74, 92).

Hence, the importance of the public expenditure made in the last ten years by the big cities for the revitalization of urban life; investing in infrastructure to improve spaces and conditions of pedestrian mobility. At the beginning of the 90s in Colombian cities as Bogota, Medellin, Manizales, Sabaneta, and Envigado, the resident co-owners of closed units enjoyed more and better green spaces than the rest of the citizens; and although they were the most expensive housing units to live in because of administrative fees, they were the safest. It was an unavoidable opportunity cost for young couples seeking to have family in safe places.

Since 2000, the most dynamic capital and middle-size cities in the world have made deep changes in the design of urban space: new routes for bicycles, electric scooters, pedestrian walks, cultural boulevards. Pavements have been designed considering the blind and other handicapped people, electronic pedestrian crossing lights, and sound warnings. These urban changes have attracted international recognition, and have followed three models of cities: innovation, knowledge, and learning (Muñoz Cardona, 2019).

However, suburban or peripheral areas lack the same control over vehicle traffic; most homes have no parking spaces. Hence the need for urban space planning that includes not only central commercial areas that generate wealth and employment on a large scale, but also suburban residential areas, where high-value land investments do not exist. In other words, those are the places where working-class families live. A more vital, sustainable, and safe space planning of urban space for pedestrian mobility is needed. It is required an allocation of public resources to the neighborhoods that form and encourage the citizen culture of respect for public space (Jacobs, 2011; 1961; Gehl 2010; Campanella, 1995).

Public spaces that invite walking and motivate the gathering of the whole community, that facilitate socialization among the different populations; as offered by open-air gyms, cafeterias with outdoor service, pedestrian walking-areas oriented to promote cultural interpersonal relations, and enhance the value of local housing (Lora, Powell y Sanguinetti, 2010). A city without borders, that is inclusive and safe, because it induces the existence of vigilant eyes and the active circulation of the people who live in and visit the place, as they claim (Gehl, 2014, p.6; Jacobs, 2011, p.93, 127).

A city of lively streets that invite you to walk or cycle through them. Such places deepen feelings of empathy, encourage sporadic friendship, benefit the economics of formal commerce, reduce levels of population stress, as well as factors of violence, greenhouse gas emissions, cardiovascular diseases due to sedentarism, and noise levels. Cities that promote respect among neighbors.

Public spaces where the intellectual activities blend well with cultural and artistic activities, as Tommaso de Campanella proposes in the *City of the Sun* (1995), are places for the education of the senses; they are more supportive and humane urban environments. The Carabobo Pedestrian Walk in Medellin, for example, integrates government administrative facilities -La Alpujarra Administrative Center - with the art in the Plaza Botero Museum, the Archaeological Museum of the University of Antioquia, RUTA<sup>3</sup>, the astronomical observatory - Planetarium of Medellin- and the recreational with the outdoor movie theater: Explore Park and the North Park with mechanic attractions for children and adults. Each of these points is connected by the METRO mass transit system and municipal bike rental stations on well-signposted routes.

Says Jan Gehl: “*the interest in a human dimension within the territorial approach is a reflection of the demand for a better quality of life*”(2014, p. 7), better enjoyment, more urban happiness. These investments in public

mobility generate a highly elastic external effect on the common well-being, as more pedestrian spaces can be replaced by less vehicle spaces, generating a healthier population and a reduction in costs for medical treatment; increased efficiency in local government expenditures; more pedestrian paths integrated with public transport systems; as happens in other knowledge and innovation cities around the world.

These new approaches support a more robust culture and civic virtue. They are stages, in terms of Campanella (1995), to show how a better citizen behavior can be achieved, teach the importance of public space, and educate the senses through playful programs that favor awareness, just as METRO Culture does in the Aburra Valley (Muñoz Cardona, 2019).

For some municipal administrations, monies are more important as collections related to vehicle traffic fines, rights from the registration of new vehicles, fees at the road booths, and fines for violations to traffic lights, than they are for the purpose for which these monies are exacted: maintaining and extending the road network. In other words, vehicle taxes are more important as a tax collection *per se* than as a management tool. The competition between different municipal transit offices, for instance, prioritizes the number of vehicles registered, thus overloading road capacities and increasing the number of accidents involving pedestrians.

The town planner Gehl says: *“For several decades now, the human dimension has been minimized as a matter of concern within urban planning, while other issues, such as managing the constant increase in vehicular traffic, have become paramount”* (2014, p. 3). The absence of responsibility and co-responsibility of the Traffic Secretariats favors disorder in the use of public spaces in neighborhoods and downtowns.

### **Case study methodology**

If we ask ourselves: how to reduce the phenomena of conurbation in mobility, That is, how can we improve the citizen culture regarding mobility? How can we achieve more responsible citizenship through the use of public mobility spaces or how to strengthen the citizen culture for mobility in the neighborhoods of the big cities in the Metropolitan Area of the Aburra Valley? The study assumed that well-trained young people live in poor neighborhoods of several cities in the metropolitan area. In agreement with Anna Yeatman (1987), it is possible to formulate the following hypothesis for research: *“If the sensitivity and knowledge of the young university student living in the city's neighborhoods are harnessed, it is possible to recover the culture of citizenship and reduce the inequalities in living conditions that exist between different localities”*.

From the previous assumption and hypothesis, the research groups of Government, Territory, and Culture of the Superior School of Public Administration of Antioquia, together with the group of Organizational Studies of the doctorate of the Autonomous Metropolitan University of Mexico, carried out a local study of urban happiness for mobility, in 15 poor neighborhoods with the highest population density following an inductive-exploratory methodology.

If young university students from the last term live in the most densely populated poor neighborhoods of the Aburra Valley, then how can we motivate youth social entrepreneurship in the city's neighborhoods for mobility and the strengthening of citizen culture? The research was based on 710 surveys applied to young university students in their final semester of professional training in the Aburra Valley region's public universities, where young people from the poorest urban neighborhoods generally study.

The first condition for the survey was that it had to be carried out only with young people from the last university semester who were born in the territory and live in the most densely populated neighborhoods of the metropolitan area. The second condition was to take the universities of Antioquia, National University of Colombia, School of Public Administration. Metropolitan Technological Institute Antioquia. The third condition was to select quotas by profession to grant a statistical confidence index of 95% and a margin of error of 5%. Besides, eight focal interviews were carried out with the Municipal Youth Bureau and the Secretaries of Citizenship and Mobility, which allowed them to understand the richness of transformative ideas of mobility in their territory.

The study evaluates through questions on city equipment the levels of satisfaction with the quality of public spaces in paved areas for pedestrians, sports venues, pedestrian walks, paved roads, cycle routes, road signs, traffic control, outdoor gyms, libraries, museums, cultural parks, houses of culture and theatres. The evaluation included the satisfaction of the young university students with the safety of the neighborhood and the existence of medical and hospitalization centers.

The answers were cross-checked with interviews with passers-by and socialized in mobility forums carried out by the Metropolitan Area with FundaPeaton.

## Case Study

### Satisfaction with the road and cultural city equipment

The aim is to find out how satisfied young university students studying in the Aburra Valley are with the city's public spaces, that is: how humane are the cities that make up the big city in the metropolitan area, or how well designed they are for people's enjoyment? To this end, 710 surveys were conducted for a level of statistical confidence of 95% and a margin of error of 5%.

*Satisfaction with the enjoyment of natural resources, quality of recreation services and the neighborhood.*

According to Table 1, the 71.5 percent of young university students in their final semester say they are satisfied and very satisfied with their neighborhood. This research data is very significant if we take into account the violence that the different neighborhoods and communes of the Aburra Valley metropolitan area endured in 2018 and 2019.

Table 1: Aburra Valley. Citizen satisfaction with

Satisfaction Level	Natural resources	Leisure and recreation	Neighbourhood
1	1.9%	2.2%	3.7%
2	3.2%	4.5%	5.9%
3	18.0%	19.5%	18.8%
4	40.5%	35.1%	30.1%
5	36.4%	38.7%	41.4%
<b>Total (710)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

*Source: Centre for Regional Economic Studies CEER of SSPA and the research group Government, Territory and*

Culture of Antioquia (2018-2019). Satisfaction level: 1 is not very satisfied. 5 is very satisfied. 3 regularly satisfied. In fact, 64.8 percent of university students say they are satisfied and very satisfied with the security of the suburb in which they live, and 26 percent say they are moderately satisfied. In other words, only 9.2% say they are dissatisfied and very dissatisfied.

The result of the research is highly relevant because it shows the importance that young community leadership can have in their localities by feeling comfortable with their neighborhood by more than 71.5% (see table 1). That is, it shows the possible impact on the will to transform, that added to their professional training would become an opportunity cost with a high marginal benefit.

As for the places of leisure and recreation offered by the big city in the metropolitan area of Valle de Aburra, 73.8% of young university students in the last semester claim to be satisfied and very satisfied (see table 1). According to the students evaluated, the gymnasiums in open spaces have been a great success for the social exchange of experiences, for the community meeting in recreational-sports activities, for recognition between neighbors, for the recovery of spaces or dead spots under bridges, for safe areas for the socialization of young people and adults. 19.5% qualify for regular leisure and recreation places, mainly the young university students of Copacabana, Caldas, La Estrella, and Girardota. Only 4.1% say that they do not have any in their localities.



In terms of satisfaction with the enjoyment of natural resources, 76.9% of young university students in their final semester said they were satisfied and very satisfied (see table 1); however, 18% of young university students, mainly in the municipalities of Medellin and Itagui, said they were moderately satisfied and very dissatisfied with the high level of pollution and the high level of vehicle traffic. This makes it almost mandatory for local governments to look for new administrative agreement points for environment control in the 10 municipalities, both in terms of territorial planning and the registration of new vehicles, the construction of new roads, and the use of public roads for mobility.

The city of Medellin began in 2019 designing linear green parks in the center of the city as part of the public transportation stations, that have a stock of 65 electric vehicles and 150 kilometers of bicycle routes throughout the Aburra Valley.<sup>8</sup> There were made investments to meet the mobility needs of more than 71,000 users, with the construction of 100 bicycle stations and the extension of pedestrian routes. Thus, public spaces reduce pollution and improve the environment with public health benefits. Likewise, approximately 1,000 users of electric skateboards now roll along the cycle routes.<sup>9</sup>

It should be noted that the levels of satisfaction of young university students with the resources and public spaces for leisure and recreation are equally high. This reaffirms the effort made by the Metropolitan Area in its investments financed with 0.2% of the property tax rate for the valorization of the urban jurisdiction and the proceeds from fines, permits, licenses, and collection of environmental fees that go from 0.15% to 0.25%. Also, the municipalities of the metropolitan area invest their own money in environmental resources and public spaces for local recreation and leisure.

#### *Satisfaction with the urban mobility equipment: roads and pedestrian pavements*

Table 2 states that 52.5% of young university students rate the quality of traffic control in the Aburra Valley as good, that is the half. This means that the other half qualify the quality of traffic as regular and bad.

Table 2: Aburra Valley. Quality rating of mobility equipment

Quality of traffic			Paved roads			Signalling of routes		
Well	Regular	Bad	Well	Regular	Bad	Well	Regular	Bad
52.5%	32.5%	15.0%	70.0%	25.2%	4.8%	67.2%	25.7%	5.2%

*Source: Centre for Regional Economic Studies CEER of SSPA and the research group Government, Territory and Culture of Antioquia (2018-2019)*

According to studies carried out with the Secretaries of Mobility, the most frequent reason for dissatisfaction with the quality of transit services was the arbitrary nature of the sanctioning process and the corruption of the guards in some municipalities. The municipalities with the best evaluation of the quality of traffic services were in this order: Envigado, Sabaneta, La Estrella, Caldas y Medellin.

The second main reason for dissatisfaction with the quality of road control is vehicle saturation, mainly of motorbikes. According to the Secretariat of Mobility, by October 1, 2019 there were 900,000 registered motorbikes in Medellin. The third reason, according to the focal interviews carried out in the Secretariat of Citizenship and Mobility Forum of FundaPeaton is the disorder in the parking of vehicles in the outskirts.

Medellin, Itagui, Girardota, Barbosa, and Bello are the cities in the metropolitan area with the most vehicles parked on public roads, both in downtown and suburbia. They are also the municipalities with the most traffic jams, the highest number of traffic accidents. The cities of Medellin and Bello are the locations with the most reports of

<sup>8</sup> Medellin, the Aburra Center has almost 115 kilometers in cycle routes, the Aburra South has 18.7 kilometers and the Aburra North has 13.7 kilometers and for all of Antioquia more than 500 kilometers. See the newspaper El Colombiano (30/12/2017) available on the website: <https://www.elcolombiano.com/antioquia/ciclorrutas-la-apuesta-en-el-sur-del-valle-de-aburra-EM7943413> and the report of the (11/02/2020) where an analysis of the best and worst cycle routes in the city of Medellin is made: <https://www.elcolombiano.com/antioquia/cuales-son-las-mejores-y-las-peores-ciclorrutas-de-medellin-ME12439647>

<sup>9</sup> For a better reference on road growth in the Aburra Valley, see the interview with Eugenio Prieto in the newspaper El Mundo (20/02/2019) available on the website: <https://www.elmundo.com/noticia/El-valle-de-Aburra-expande-EnCicla-y-las-ciclo-rutas/375812>

fatal pedestrian accidents, according to reports delivered by FundaPeaton in 2018 and 2019.<sup>10</sup> Hence, 32.5% of young university students in the metropolitan area say that the quality of traffic control is moderate; 11.6% say it is poor, and 3.4% say it is non-existent, in other words young university students are not satisfied with the quality of traffic control (see table 2).

Similarly, some students claim that the traffic speed control cameras do not achieve the expected objective due to the large number of vehicles that jam the available road structure of the metropolitan area and do not allow speeding. The photo fines generate profits for the businessmen who own the cameras and for the municipal governments, but they do not help in the solution of the regions' vehicle problem. Fatalities continue to rise.

As for the quality of the paved roads in the Aburra Valley as a whole, 70% of the young university students in the last semester say that they are good, 25.2% say that they are moderate, 3.8% say that they are bad and 1% say that they do not exist, that is, 4.8% of the roads are in poor condition. About signposting on roads to facilitate mobility, help to reduce accidents, assist in the right circulation of vehicles and the mobility of pedestrians; 67.2% of the students surveyed say they are good, 25.7% say they are regular and 5.2% say they are bad and 1.9% say they are non-existent (see table 2)

In other words, the neighborhoods and downtown areas of the Aburra Valley metropolitan area have good roads and are well signposted. More than 90% of the inhabitants of those areas say they are very satisfied with the quality of the water, sewerage, gas network, sanitation, and public transport services -METRO, Escalators, Metro Cables, Commercial Lines, Metro Plus, and Integrated Electric Bus Service- (Muñoz Cardona, 2019a).

Table 3: Aburra Valley. Quality rating of pedestrian pavements

Sports scenarios				Pedestrian walkways			
Well	Regular	Bad	Doesn't have	Well	Regular	Bad	Doesn't have
81.3%	16.2%	1.8%	0.7%	67.1%	29.1%	2.7%	1.1%

Source: Centre for Regional Economic Studies CEER of SSPA and the research group Government, Territory and Culture of Antioquia (2018-2019).

As for paved zones for the mobility of pedestrians and to facilitate safer mobility, 67.1% of university students in the last semester of the metropolitan area say that they are good, even signposted for blind people and people with reduced mobility; but 29.1% say that they are moderate because they lack space for pedestrians (see table 3). The main reason is that the informal economy has taken over public spaces (FundaPeaton, 2019). In other words, the road infrastructure in the metropolitan area is good, it meets social needs providing wide coverage, but not with quality, due to the lack of control over the use of public space.

As for the quality of the sports scenarios, 81.3% say they are good. The metropolitan area features an abundance of sports venues: excellent football, volleyball, and basketball courts. The vast majority of the football courts are made of synthetic grass, to maintain the health of the residents who live near these sports units. 16.2% say that they are moderate; 0.7% say they do not have any, and 1.8% say they are bad (see table 3). In other words, the metropolitan area has good and abundant sports venues.

#### *Satisfaction with cultural spaces*

As for the cultural scenarios that serve good professional and citizen training, insofar as they help to generate citizenship respectful of others and the other, 66.4% of young students in their final university semester state that the metropolitan area has good libraries, mainly in Medellín, Caldas, Envigado, Sabaneta, and Itagüí. The 22.9% say that they are regular, mainly students from Barbosa and Bello; 4.5% that they are bad, especially students from the municipalities of Girardota and Copacabana; others say that they not have, mainly students surveyed from the

<sup>10</sup> See the newspaper El Colombiano (03/10/2019)<https://www.elcolombiano.com/antioquia/accidentes-de-motos-en-medellin-que-se-esta-haciendo-para-reducir-las-victimas-mortales-FP11695077>.

townships. In general, it could be concluded that the metropolitan area achieves good coverage at 89.3%, see table 4.

Table 4: Aburra Valley. Quality of the cultural spaces

Quality of libraries		Well	Regular	Bad	Doesn't have	Total	
Valle de Aburra		66.4%	22.9%	4.5%	6.2%	100.0%	
Teaters		Cultural Parks		Museums		Culture house	
Yes	NO	Yes	NO	Yes	NO	Yes	NO
61.6%	38.4%	83.0%	17.0%	62.9%	37.1%	71.4%	28.6%

Source: Centre for Regional Economic Studies CEER of SSPA and the research group Government, Territory and Culture of Antioquia (2018-2019).

As for the supply of cultural and recreational parks, the metropolitan area achieves an excellent coverage with CEDEZOS, UVAS, Andres Bello House, Debora Arango House and museum, Fernando Gonzales House, El Dorado, Arvi Park, Marco Fidel Suarez House, Fernando Gonzales House, Memory House, Explore Park, Theater houses and RUTA<sup>1</sup>, among others. 83% of final semester students claim to enjoy such resources. 71.4% of university students surveyed say that municipalities in the metropolitan area have a Culture House. 61.6% say that they have theatres and 62.9% museums.

In other words, the metropolitan area has young people who are well trained, both in academics and in ethical sensitivity to others, who could help rebuild the social fabric by teaching the ethics of civic responsibility to respect public spaces. Companies and local governments could take advantage of the investment made by the 10 municipalities and the Metropolitan Area in city infrastructure, motivating social entrepreneurship and community leadership. This investment would help to reduce youth unemployment and would make room for new political and city cultures.

It is not irrelevant that more than 28% of students state that in their municipalities there are no Theatres and Museums as they are institutions promoting musical art, performing arts, and cultural education (see table 4). The municipalities with the least amount of equipment, according to students, are Girardota, Barbosa, and La Estrella.

## Conclusions

The first conclusion is that the population surveyed is satisfied with the way that the Aburra Valley Metropolitan Area authorities have managed the city road and cultural facilities. The initiatives to recover public space have been successful, and have motivated a change in the attitudes of citizens towards care and respect for public goods. In this way, the construction of public spaces where the intellectual, cultural, and artistic activities may be integrated, is one of the formulas for success in the construction of cities for urban happiness.

However, mobility in the neighborhoods requires urgent attention. Due to poor traffic control, mobility problems have become one of the major triggers of violence and insecurity. Hence, the importance of pedestrian empowerment through the community leadership of young university students who live in and know the neighborhood. Vehicle insurance companies, driving schools, as well as Mobility and Citizenship Secretariats should be included in the design of training programs and public awareness for the use and respect for pedestrian paved areas, the importance of vehicle maintenance, and careful driving. Socialization training may be provided at the headquarters of Social and Community Organizations. It is also convenient an administrative strategy that in addition to empowering community leaders provides them with resources and awareness programs for local planning of public spaces.

Transit officers should know the city, learn to dialogue with the communities and know what they need their streets for. It would be helpful to complement the administrative model of control in the central areas of the city with the design of training programs in the neighborhoods: "*We are all pedestrians*", appealing to the creativity of the young university students who live in the town for the design of models of civic responsibility. If local transit

authorities work conjointly with suburban communities, they will be able to regain mobility and instill a road culture actually missing, in other words, “the downtown changes if the behavior of the people who visit it, changes. *And the people who visit it most live in the suburban settlements. In other words, if the periphery is organized, downtown will be organized. If the neighborhood is cultivated, downtown will be cultivated.*”

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