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Public Transport and Accessibility in Informal Settlements: Aerial Cable Cars in Medellín, Colombia

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Abstract

The Metrocable in Medellín, the second largest city in Colombia, is perhaps one of the most prominent recent expansions of public transport infrastructure in urban Latin America. This article explores the question how and in what ways the Metrocable affects accessibility of the residents in two municipalities - Santa Cruz and Popular - where it operates since 2004. The presentation combines an analysis of the influence of the metrocable on accessibility in general with a specific inquiry on female residents and the role of security. The paper adopts a differentiated conceptualization and indicators of accessibility. The analysis draws on statistical quantitative data from the Origin-Destination surveys for Medellín of 2005 and 2011/2, expert interviews and about 30 in-depth semi structured interviews with female residents conducted in 2012. The paper concludes with a discussion on the possible lessons and implications for planning interventions that are concerned with improving accessibility of residents in low-income neighborhoods.

Keywords: Accessibility, Informal Settlements, Aerial Cable Cars, Medellín, Colombia
1. Introduction

Aerial cable cars have recently moved into focus as a means to improve access for residents in cities, particularly in locations where the topography limits other forms of public transport. As a highly visible and relatively cheap response to urban transport problems, their well-tested and fairly simple technology has already been introduced in several cities. In some places, these cable car systems connect informal settlements that have emerged over the past decades along steep slopes and hilly terrains and where public transport supply is typically underdeveloped. The major potential of aerial cable cars is seen in the significant increase in accessibility between these settlements and other locations within urban areas (e.g. Brand and Dávila 2011).

In Medellín, Colombia, the integration of the aerial cable car MetroCable with three lines since 2004 is an attempt to improve accessibility to outside destinations in the above sense. Conceived as part of an integrated urban project (Proyecto Urbano Integrado, PUI), and led by the local government-owned mass transit authority (Empresa Transporte Massivo, EMTVA), the MetroCable was complemented by the construction and upgrading of community facilities and public spaces and intensive efforts to involve residents in the planning and implementation. This approach follows wider urban-planning goals to transform the living conditions for residents within informal settlements, to improve the image of these locations, and to demonstrate that after decades of neglect, city planning and politics finally were taking the problems in these municipalities seriously.

This article explores the question how and in what ways the MetroCable as part of an integrated urban-improvement package affects accessibility. It seeks to identify possible lessons and implications for planning interventions that are concerned with improving accessibility of residents in low-income neighbourhoods. The following section introduces the MetroCable with particular focus on the MetroCable line K in the two municipalities Popular and Santa Cruz as a specific case of reference (section 2). It moves on to discuss concept(s), forms and influencing factors of accessibility and the methodology used in the study that informs this article (section 3). The next section explores the linkages between the project and accessibility, paying particular attention on female residents and the role of security (section 4). It is followed by a discussion of the results and lessons for planning (section 5).

2. Public Transport and Aerial Cable Cars in Medellín

Medellín is the second largest city of Colombia with a population of about 2.5 million (Alcaldía de Medellín 2006). It is situated in the centre of the metropolitan area of the Aburrá Valley with more than three million inhabitants (ibid). Administratively, the city is subdivided...
into sixteen municipalities. In terms of socio-economic stratification, Medellín is characterized by a marked segregation. Popular neighbourhoods with predominantly low-income households are situated in the north and northeast and the wealthier neighbourhoods located in the centre and towards the south of the city. According to the most recent origin-destination survey, the total number of daily trips in 2012 reached about 5.6 million, translating into an average number of 1.7 trips/person/day (AMVA/ Universidad Nacional 2013: 161). This fairly moderate average number of trips already suggests that users make their trips to a large extent for ‘essential’ purposes. The origin-destination survey found that by far the largest motives for travel are work (44%) and study (26%), which together explain 70% of all trips. Other motivations are reported to be far less significant.

About 28% of all trips use ‘traditional’ so-called collective public transport (Transporte Publico Collectivo, TPC), made up by privately owned and operated buses (so-called buses, busetas, microbuses) of diverse size and standard. It is currently operated by more than 40 different bus companies with more than 4,000 registered vehicles (Alcaldía de Medellín 2011), which are regulated by transit and transport secretariats in each municipality. A journey with the TPC costs 1,700 COP (around €0.68) or 2,150 COP (around €0.90) when the trip is combined with the metro. The metro mass transit system, operating since 1995, is responsible for about 10% of the total journeys. Its network presently covers two elevated rail lines (line A and B) with 34 stations and three cable lines (lines J, K, L) (Metro de Medellín 2011). Two of them are urban public transport systems (line K inaugurated in 2004 and line J in 2008), along with a third line, L, introduced in 2010 which connects with line K as a tourist route to an ecological park on the edge of the city. They are treated as three additional metro lines in organisational and tariff terms. More recently, two BRT corridors have been opened, the so-called Metroplus. A single ticket with the metro costs 1,800 COP (around €0.75). Discounted rates are available for students, seniors and disabled persons.

The MetroCable line K in the municipalities Popular and Santa Cruz was the first to open in Medellín. Due to the hilly topography and a lack of infrastructure investment, the municipalities have long suffered from a low connectivity to the city’s public transport system and street network. The two municipalities together had a population of approx. 230,000 in 2005. According to the official census income classification, the population in both localities primarily falls into the income categories 2 (low income) and 1 (very low income) (DANE 2005). The cable-car system is a public-sector project, financed jointly by the municipality and the Metro de Medellín company. In the case of Medellín, all three lines have been financed through normal capital investment budgets. The financial contribution of the Metro de Medellín company is based on the calculation of future returns accruing from increased
passenger numbers using the metro over a 10- to 15-year period, and the difference is justified by the city authority as a social investment (Brand and Dávila 2011). There were a range of motivations to build the Metro- Cable. A cable car was on the one hand an idea to bring passengers down from the hillsides to the metro system itself as a way to increase passenger numbers for a then underutilised metro capacity (ibid). On the other hand, the metro authorities insist that it was always a socially-motivated project and a way of extending the benefits of the metro to the poorest and more inaccessible areas of the city. In this way, the project was designed to demonstrate that the government took responsibility for these areas that were characterised by an absence of local government and deteriorated in physical and social terms. Thus, it had a ‘symbolic’ objective to pay back the historical debt of neglect (DNP 2010). The MetroCable has not been implemented as an isolated project. It rather is part of a plan aiming to increase investment in the informal settlements of the city with the objective to improve the living condition of its residents. This plan was implemented in the form of the encompassing North-eastern Urban Integrated Project (Blanco and Kobayashi 2009).

The investment for the first MetroCable was close to US$24 million at current 2012 exchange rates (Agudelo et al. 2011). The cost per kilometre in urban areas compares favourably with BRT and rail systems and has the potential for less discontent by residents as the land requirements are lower than that of other new transport interventions. On the other hand, due to technical limitations, aerial cable cars are not mass-transit systems and cannot transport significantly more than 3,000 passengers per hour.

The cable line K has a length of about 2 km and covers four stations: Acevedo (the interchange to the metro), Andalucía, Popular and Santo Domingo. The line can operate a maximum number of 93 cabins, each of which carries up to eight seated and two standing passengers (Agudelo et al. 2011).

3. **Accessibility: conceptual approach and methodology**

The intention of this study is to understand how the Metrocable has influenced accessibility for residents. In general, the term accessibility describes the ease of reaching services or destinations (Litman 2012). It is the concern of transport, land-use and social service planners, whereby each profession places a different emphasis (ibid: 3).

Transport professionals generally focus on the quality of the transport that connects place of residence and destination, and the question how to improve usability. This transport-supply perspective takes into consideration various factors such as time, distance, mode, cost, quality, reliability and levels of service. Land-use planners generally focus on geographic
accessibility, such as the distribution of services and destinations and the distances between them (densities, land-use mix, connectivity and walkability). In both land-use and transport planning, access is measured in terms of the time radius at which destinations can be reached, related to the options for reaching these destinations. Social-service planners focus on the options for improving accessibility for particular groups such as access to employment for unemployed people or access to education for school children. In social planning, accessibility refers to people's ability (or their constraints) to use services and opportunities. This is often described in the form of competences or skills (e.g. Hägerstrand 1970, Kaufmann et al. 2004) that may directly or indirectly relate to access. Three areas of skills are commonly distinguished. Firstly, the physical ability or acquired skills refer to knowledge related to rules and regulations of movement, licenses, the ability to afford a service, or the simple intellectual capacity to use information services. Secondly, organisational skills cover planning and synchronizing activities (e.g. adjusting work times to transport offers and availability). Thirdly, cognitive appropriation covers how agents consider, deem appropriate and select specific options (includes their mobility habits as well as security perceptions etc.). Together, transport supply, land-use characteristics as well as people’s abilities or constraints to be mobile define demand as the amount of mobility that people choose.

One important aspect of cognitive appropriation of particular relevance for this study is security. The perception of security and/or the lack of it have an important impact on the choice of a means of transport. It is a multidimensional constraint that is not easy to quantify. The perception of security is to a great extent very subjective and depends on personal experiences and attitude, as well as the image and narrative of the place that is in our case the means of transport, the station or the way to/from the station. Different groups of people can experience the same place in a very different way.

Security influences the accessibility in several ways. The lack of security in an area can cause a shortage of transportation, as it was the case in the focus area of this study, when for example taxi drivers would not serve the Comuna Popular. In cases like this the inhabitants have fewer options of transportation. Means of transportation felt to be unsafe constrain the accessibility as people will use them only at certain time e.g. not late at night or not at peak hours, or only under certain conditions, for example not alone. The more unsafe the users feel in a certain means of transportation, the more likely it is that they try to avoid a trip. If there is no alternative it is possible that people forgo the trip because of their fear. This can have large impacts on many areas of life like job opportunities, resources and the social life. The lack of security in public transport accounts for an increase of isolation of the inhabitants of unsafe areas.
The impact of a means of transportation in the context of security can be measured qualitatively by analyzing to what extend the users feel secure, as well as quantitatively by analyzing firstly the number of trips that are made and secondly the amount of options to get safely from one place to another.

The study on which this paper is based adopts a differentiated and multidisciplinary perspective on accessibility. It combines indicators of accessibility from transport, land use and social planning alike. The analysis covers two levels of disaggregation. The first level considers the entire population in the communities on the basis of statistical quantitative data from the Origin-Destination surveys for Medellín of 2005 and 2011/2. The second level considers accessibility for female residents in the communities. The analysis here draws on expert interviews and about 30 in-depth semi structured interviews with female residents conducted in 2012. The objective of this empirical study was to analyze to what extend the MetroCable is a secure means of transportation. As focus group for qualitative in-depth interviews the group of women was chosen. Women are highly affected by the constraint of security for several reasons. Worldwide women are less likely to own their own vehicle and are dependent of the public transport and have to cope with unsafe situations. While men mostly travel to and from work, women have to make more divers trips to provide for their family (e.g. trips for shopping, to bring their children to school, to the doctor etc.). Trips of women diversify more in destinations as well as in times e.g. to more afield areas or at times when only few people travel. Furthermore there are gender based reasons: Women are more likely the victim of sexual harassment and assault, and because of their physique they are usually more vulnerable. Also women very often travel with children, pregnant or with heavy bags, what makes them vulnerable as in that case they cannot defend themselves that well.

The variables used to analyse accessibility are shown in Table 1 below.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of analysis</th>
<th>Source</th>
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<tbody>
<tr>
<td>Destinations that actually are reached (e.g. trips), specifically: number of passengers between MetroCable stations during morning/afternoon peak</td>
<td>Entire Population, female residents</td>
<td>Origin – Destination survey 2011/2, qualitative Interviews</td>
</tr>
<tr>
<td>Cost, affordability</td>
<td>Entire Population, female residents</td>
<td>Secondary sources, qualitative interviews</td>
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</tbody>
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4. **Results: how the MetroCable relates to accessibility**

**Destinations that are reached**

Based on the available mode choice and trip data, the residents of the two municipalities exhibit a mobility pattern that is quite different from the overall average in the city. To begin with, the amount of reported trips per person of about 1.2 in 2005 was comparatively low. The average motorisation rate was about 7 vehicles/1000 inhabitants in 2005, compared to an overall city-wide average of 54 vehicles/1000 inhabitants, and 434 vehicles/1000 inhabitants in the municipality 14, in which the highest number of cars per inhabitants were registered (AMVA 2006). Consequently, the amount of trips by car was very low with less than 2%. In contrast, the motorcycle was used for almost 4% of all trips, which is not much lower than the overall average.

A striking difference in the modal split of people in the two municipalities to the overall patterns is the strong role of walking. More than one out of three journeys is made on foot. Likewise high is the use of collective public transport and the metro, which includes the MetroCable (which is not treated as a separate category by the origin-destination survey). Together, these modes counted for more than 50% of all trips.

“On Monday when I go to the meeting, it is about half an hour only up the hill. But for example to go to Saludcoop (medical center), I need about one hour, if you go fast enough.”

*(interview partner)*

“When you walk to the city center, it may take longer, it can take about two hours, in a velocity that is not too fast and not too slow.” *(interview partner)*
Although the data on the modal split of the recent origin-destination survey does not provide separate data for the MetroCable, it contains some passenger data. Accordingly, the line has been used by around 43,000 passengers/day (AMVA/ Universidad Nacional 2013), with a demand close to system capacity during peak hours. Disaggregated data on the morning peak (6–8 am) shows high passenger flows from east to west (i.e. down from the municipalities to the metro station Acevedo in the valley), in particular between the stations Andalucia and Acevedo.

![Number of Passengers between MetroCable stations](image)

**Figure 1:** number of passengers between MetroCable stations during morning peak 6–8 am (left) and afternoon peak 5–7 pm (right); based on: AMVA/Universidad Nacional 2013: 13

The data on the morning peak (6-8 a.m.) shows high passenger flows from east to west, i.e. down from the municipalities to the metro station Acevedo in the valley), in particular between the stations Andalucia and Acevedo. This suggests working trips seemingly of the group of workers with their work locations outside the area in other parts of the city.
Costs

The single fare is that of a ‘normal’ metro ticket (1,800 COP). No separate ticket is needed for a transfer to the metro. The combined tariff permits to the cable-car with the metro and the Metroplus, and the use of a prepaid card (tarjeta cívica) reduces the single fare by about 200 COP. This makes the use of the cable car economically attractive for long journeys, where a transfer to another mode of transport saves about 33% compared to two bus journeys (Brand and Dávila 2011). The city likewise offers an integrated ticket, which permits the combination of the mass-transit modes with some privately operated buses that run along so-called integrated roads (rutas integradas).

For the female interview partners the aspect of costs in many cases is the most important criteria. The choice to make a trip depends highly on the simple question if the person can afford it on that day or not. Other criteria like time, comfort or safety are largely secondary in comparison.

“For example the two busses I take to work, one is 1,700 pesos and the other is 1,500. But sometimes I say ‘today I can’t pay them both’, and then I walk to the Metrostation. (...) I walk like eight or nine blocks (...) and then I get home for 1,800 pesos. (...) I tell you, everything depends on how much money you have at that moment.” (interview partner)

“There are many bus lines, but if you can’t pay the trip? There are many people who walk to the city center. (...) Many women say they have not been to the center a whole year! Many families don’t see each other a long time, because (of) financial (reasons).” (interview partner)

“No, because sometimes when you don’t have the money, you can’t move, look last time (there was) a funeral, and I didn’t have the money for the trip, and it was hard to get there walking, because it is always far away (...), and in the last moment I could borrow the money and I went (...) but sometimes you can’t go because of the lack of the money.” (interview partner)

In case they decide to make a trip the expansion and the tariffs of the system Metro/MetroCable gives them the possibility to reach more destinations than by a conventional bus for the same amount of money. This has a positive impact on the social life of the residents.

Travel time (Duration of journey)
The residents’ consideration of travel time includes various aspects: what are the operation hours of service, how fast is the means of transportation and how does this differ across a day and how long does it take to get to the station or point of departure.

The MetroCable operates on a weekday are from 4.30 am to 11 pm, thus from very early in the morning until very late at night. The big problem for all means of transport in Medellin is the rush hour in the morning and in the evening. People wait in very long queues to be able to enter means of transportation, the MetroCable not being an exception.

![Figure 2:](image) long queues in the afternoon at Acevedo station (source: the authors)

The fact, however, that the MetroCable is a continuous conveyor, meaning that there is no waiting time for the vehicle to arrive but the cabins arrive and leave constantly, has a positive effect: people feel less “waiting”, because they can see the MetroCable moving all the time. At the same time, streets are highly congested during rush hour. Buses, cars and taxis get into long traffic jams.

“One and a half hours to get to work, and in the evening I sometimes need even more time, because there is more traffic and jams.” (interview partner)
“(I) when I take the bus (I) need nearly two hours because of all the traffic jams. In the evening I arrive (at home) at around 9:30, 10:00 p.m.” (interview partner)

This problem does apply to the MetroCable which operates as a sole means of transportation with its own track. It does not depend on any other means of transport on its way. Also the track is linear so the MetroCable does not have to make any loops or detours because of the lay-out of the roads. The conventional busses have no fixed stops on their tour; people just tell the driver to stop to enter or exit the bus. This often causes long delays on the route because the bus has to stop on “every corner”. In contrast the MetroCable has only few stops, and at the station the cabins do not stop but slowly pass so passengers can get in and out.

The MetroCable with a velocity of 18km/h (Metro de Medellín 2013) is not a very fast means of transportation per se. But given its specific characteristics (few stops, dedicated track), users get to their destination quite quickly. A journey from the river valley to the highest station – 400 metres above the valley – takes about 15 minutes, which is significant less travel time than traveling by bus or walking.

“I like it (the MetroCable) because of its speed, it is very little time it takes, it is much less time you need to get from one place to another.” (interview partner)

However, access time to the stations is an issue because of the hilly topography. Interview respondents living a bit further away from the stations report that the many lines of the conventional busses that pass “around the corner” are often more convenient. From the interviews, the time limit people are willing to spend walking to the nearest station is about 10 to 15 min.

In conclusion, lengthy periods of walking and queuing of more than an hour in peak periods may inhibit the use of the MetroCable and make a conventional bus slightly quicker. On the other hand, this disadvantage is compensated by the generally very good, accessible location of the stations and their generous layout and good organisation, which makes waiting time not unpleasant (Bernet 2013).

Reliability

The conventional bus system does not follow a certain timetable and depends on the traffic on the streets. This leads to situations, when passengers have to wait a long time for a bus without announcement or suddenly the arriving of two or more busses of the same line at the same time.
“There is a bus route (...) but how often? There is no constant transport there, the bus passes from time to time, you have to wait until the bus passes maybe.” (interview partner)

As a continuous conveyor the Metrocable does not have specific timetable that users must keep in mind. This gives the users a very high flexibility for the planning of their trip. However, there is to say, that timetables does not play an important role for the transport users in Medellín, as buses and the metro do not have fix timetables either. Nevertheless in these cases the time of waiting plays a role for the time needed for the trip.

The MetroCable is closed for maintenance only around ten days per year (Seeber 2010: 2, 32). Also it tolerates wind speed up to over 100 km/h (METRO 2004: 6) and is not constrained by road accidents.

Access to and making use of information

To plan and make a trip in the most cost and time-saving, safe and comfortable way, passengers highly depend on information. The system Metro and MetroCable provides a lot of information about stations, timetables, costs and short-notice announcements both at the stations and the company website. A great number of personnel are present at every station to answer questions and assist passengers. However, not all passengers seem to make use of the provided information. For example only few interview partners confirm to own the tarjeta cívica.

“Me, for what do I need the tarjeta cívica, I don’t use the MetroCable every day. It serves the people who work or study, who use it contantly.” (interview partner)

Statements like these are surprising. This card reduces cost of travel. Users only need to charge the card with the amount needed for their single next journey, so there is no expensive up-front payment. The reasons why the card is not used although reduction of mobility costs is an important topic for the residents of the Comuna can partly be explained by the lack of awareness, partly because households do not widely access the relevant information through the internet where it is made available.

Safety and Security

Actual safety and security may differ from felt safety and security, but for the choice of a means of transport the way the passenger feel is as important if not more important.

Concerning road safety the conventional bus system exhibit several problems in the perception of passengers. Many bus operators are informal which means that there is no control of the state of the vehicles and the training and state of the driver. Women participating in the focus group discussion report trips with defect vehicles, aggressive or
even drunk drivers. The infrastructure in the Comuna partly is in unsafe condition and women
tell about their fear of an accident due to the hilly topography and the state of the roads. In
comparison, the MetroCable is a very safe means of transport. Because of its dedicated
track there are no accidents with other vehicles or pedestrians. It meets the highest current
technical standards and is subject to frequent safety checks. The formalized character of the
process of traveling with the MetroCable, the new and always cleaned facilities of the
stations and the cabins as well as the strong presence of personnel makes people feel safe.

Security plays an important role especially for women. Women participating in the focus
group discussion report that they generally do not feel very secure while traveling with public
transportation in Medellín. With respect to gender based reasons the Metro is viewed very
badly as it is often overcrowded and in the anonymity of the crowd women get groped or
verbally or physically harassed nearly every day. The same holds true for conventional
busses. Also in taxis women do not feel secure as they feel helpless and at the mercy of the
driver. Nearly every interview partner had a story to tell about herself or a friend being in a
dangerous situation with a taxi driver. The problem got so exigent that an extra taxi service
for women started to operate in 2011.

In the MetroCable the women of the focus group feel secure for several reasons. Most
importantly the cabins only transport a maximum of ten passengers (eight sitting, two
standing). The cabins are spacious enough that even then it is not crowded. Passengers sit
in two rows facing each other. This makes it impossible for someone to grope or touch
another person without everybody noticing it. The privacy of the passengers is protected. In
case someone does not feel comfortable there is the chance to change the cabin at every
station, without losing time, as the MetroCable is a continuous conveyor. At every station the
door opens automatically and security personnel are checking every cabin. Also there is an
emergency button in the cabins.

To the aspects safety and personal security of women a third aspect of security adds in the
case of the MetroCable in Medellín. Because of the specific political and social situation of
Colombia and Medellín crimes and violence have a huge impact on the mobility of the
residents of the Comuna Popular and Santa Cruz. The area has been the scene of wars
between different groups like guerilla groups, paramilitaries and drug cartels, and the
residents have gotten in between. In the interviews women tell about not being able to leave
the house because of current shootings, about bus drivers that are part of violent groups
themselves and threaten their passengers, and about the lack of police presence.
“But in this time (before the construction of PUI and the MetroCable) there were some busses where it was very unsecure for the people (…), they killed people there in these busses, many assaults and all this. Also it was unsafe because they came into the busses and were looking for people, and then they took them (…) but this was the time, and (the bus) was the means of transportation, so we had to (use it), very difficult.” (interview partner)

Conflicts between criminal gangs had caused so-called ‘invisible borders’ between different parts of the Comunas that were controlled by different gangs. Residents from one part could not cross these borders without the danger of becoming a victim of the conflict. The construction of the MetroCable – together with the other measures of the Proyecto Urbano Integrado (PUI) has had a great impact on the overall situation in the area. The changes in the infrastructure of the Comuna and the presence of security personnel have minimised these ‘invisible borders’ that in other parts of the city are still a big problem for the residents in terms of accessibility (Bernet 2013).

5. Discussion and conclusion

As outlined in the introduction, this article seeks answers to the question how and in what ways the MetroCable as part of an integrated urban-improvement package affects accessibility for residents in the two informally built settlements Popular and Santa Cruz.

The study shows the potential that a holistic and integrated urban improvement initiative can have for accessibility of residents in low income settlements. In particular, it shows clear improvements of accessibility with respect to variables related to the transportation perspective: a reduction in travel time, reliability and even costs when compared to the alternative of taking a bus.

At the same time, the case highlights that changes in the transport supply cannot easily overcome accessibility constraints of all residents in informal settlements, in particular affordability constraints. Conventional buses and walking continue to be the main transport modes for the majority of the population in the municipalities Popular and Santa Cruz. As the female interview respondents of this study confirmed, the use of the MetroCable is impossible or only possible on very rare occasions. There is likewise little evidence to suggest an increase in the number of journeys for non-essential trips which might at least indicate greater participation in city life. The data on the travel patterns shown in the previous sections suggest that the ability, or better the constraints, of the residents to use the MetroCable differs between groups of residents. The low average number of trips per person/day, which suggests a restriction to only the most necessary trips, and the overwhelming proportion of journeys made on foot, clearly point out that affordability for a
The majority of the residents is the major constraint. An exception seems to be the group of workers with their work locations outside the area in other parts of the city. This observation is confirmed by the interviewed women. Advantages are more limited for those in the informal sector of the economy (the great majority in the study area), children and young people, housewives, the elderly and infirm.

A remarkable finding is that users highlight that the introduction of the stations and operation of the MetroCable, in combination with the rehabilitation of the surrounding public spaces, has improved the general security in the vicinity of the system. In their view, this has improved accessibility in the area. Interview partners in this research report that before the introduction of the MetroCable, they often could not get a taxi that would drive into the Comuna because of many assaults, and even the police avoided the area. This situation has changed entirely with the arrival of the MetroCable, which is also demonstrated by the large number of tourists including residents from other parts of the city who now visit the Comuna (Bernet 2013). In the last years the MetroCable has become a landmark for the city of Medellín. The residents identify themselves with it and are proud of it. It has become a main touristic attraction. Tourists come with the MetroCable to the Comuna, enjoy the view over the city and take a walk around the station Santo Domingo. This better image of the Comuna helped to reduce the stigmatisation of the residents that had had a huge impact on their lives.

In summary, the MetroCable can be seen as a demonstration of public attention and kind of a symbol of the presence of the government. After years of feeling neglected by the government people have started to gain trust in the governmental justice system (see Cerdá et al.: 1048).
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