

## Challenges for Older Tourists on Public Transportation in Mexico City

Ana Cecilia Reyes Uribe  
Eva Angélica Guerra Ávalos  
Paula Lourdes Guerrero Rodríguez  
José Manuel Quintero Villa

*University of Guadalajara, México*

Correspondence: [areyesu@cucea.udg.mx](mailto:areyesu@cucea.udg.mx) (A. C. Reyes Uribe)



### For Authors

Interested in submitting to this journal? We recommend that you review the [About the Journal](#) page for the journal's section policies, as well as the [Author Guidelines](#). Authors need to [register](#) with the journal prior to submitting or, if already registered, can simply [log in](#) and begin the five-step process.

### For Reviewers

If you are interested in serving as a peer reviewer, [please register with the journal](#). Make sure to select that you would like to be contacted to review submissions for this journal. Also, be sure to include your reviewing interests, separated by a comma.

### About Events and Tourism Review (ETR)

*ETR* aims to advance the delivery of events, tourism and hospitality products and services by stimulating the submission of papers from both industry and academic practitioners and researchers. For more information about ETR visit the [Events and Tourism Review](#).

---

### Recommended Citation

Reyes Uribe, A. C., Guerra Ávalos, E. A., Guerrero Rodríguez, P. L., & Quintero Villa, J. M. (2022). Challenges for Older Tourists on Public Transportation in Mexico City. *Events and Tourism Review*, 5(2), 39-51.

---

---

## Abstract

This exploratory paper attempts to understand some challenges for older tourists regarding the physical accessibility of public transport. It focuses on Mexico City and its global competitiveness as an accessible tourism destination. A review of recent literature and internet sources contributed to raising potential challenges involved to offer an accessible public transport service in Mexico City. Sources reviewed suggest that two modes of transportation -the subway and the bus rapid transit service- were well-equipped with accessible elements, particularly for users with mobility limitations. Yet, important challenges not strictly related to the supply of accessible infrastructure and services were found, such as a high level of insecurity, harassment, and discrimination. The model of public transport management in Mexico City seems to focus on affordable mass transportation, based on the utilitarian aspect of public transportation exclusively. The degree of satisfaction of users, including tourists, is overlooked. Appropriate development of accessible urban tourism, including the supply of public transport, would benefit Mexico City to pursue its competitiveness as an accessible tourism destination for older tourists.

***Keywords:*** Public Transport; Older Tourists; Accessibility; Mobility; Mexico City

---

## Introduction

Life expectancy has changed rapidly, as people are expected to live longer; for instance, in 2019, there were 703 million people over 65 years old in the world, and they are expected to live, on average, an additional 17 years longer (United Nations, 2019). The increase in the aging population is evident among developed countries, and this tendency is followed closely by developing countries (Ritchie & Roser, 2020). Parallel to this demographic change, increasing demand for older adults traveling is a trend (Alén et al., 2012; Balderas-Cejudo et al., 2016; Kim et al., 2015). Thus, tourism destinations might consider a design of products and services to target this increasing market (Alén et al., 2012; WTO, 2016), as aging travelers show a more intensive tourism consumption than younger cohorts, they stay away longer, they have a higher frequency of travels and spend more money (Balderas-Cejudo et al., 2016). Older adults seem to enjoy visiting large urban cities, and among their favorite choices are religious places and historical sites (Musa & Sim, 2010). Traveling seems to be a beneficial behavior as it is likely to increase the participation of older adults in activities that may improve their quality of life (Kim et al., 2015; Vigolo, 2017).

There is no consensus on what should define an older adult traveler (Balderas Cejudo et al., 2016; Nella & Christou, 2016; Pesonen et al., 2015). Nella and Christou (2016) mention that one might consider an older adult using a range from a very low level of 50 to 55 years of age. Similarly, Otoo and Kim (2018) mention that the minimum age established to consider an individual as an older adult is 50 years, since from this age symptoms of aging are more evident than in previous stages, such as graying hair, wrinkles, vision problems and the loss of certain functional abilities. However, from a gerontological perspective, an older adult has a chronological age above 65 years, which is usually the average age of retirement; thus, many times, a retiree is considered to be in the group of older adults (Balderas Cejudo et al., 2016; Pesonen et al., 2015). So, it is difficult to

establish a conceptualization of what an older adult traveler is because this segment is not homogeneous (Nella & Christou, 2016; Pesonen et al., 2015), and that is why it is advisable to study older travelers through sub-segments that share similar characteristics (Nella & Christou, 2016). For this paper, an older tourist is 60 years of age or older. This age has been chosen to match the age established by the government/official secondary source of information used in this paper (e.g., Escuela Superior de Turismo, 2017; Secretaría de Movilidad, 2019).

### **Older Travelers Using Public Transportation**

Transportation elements are relevant to all population groups, as Fatima and Moridpour (2019) explain, transportation is linked to freedom of movement, regardless of rural or urban settings, age groups, and reasons for using different types of transportation. In 2007, the World Health Organization published an age-friendly guide, that included age-friendly transportation aspects to illustrate the specific transportation needs of older adults, such as public transport with good connections and well-marked routes and vehicles, transportation for disabled people, transport stops and stations conveniently located, well-lit with adequate seating and shelter, and vehicles not overcrowded, accessible, and with priority seating (WHO, 2007). The aspects mentioned in this guide do not explicitly address the needs of older adult travelers, but they coincide with studies done on the accessibility of tourist destinations, which include the needs of older travelers (see WTO, 2016).

Older travelers, like other population groups, seek information about the destination to visit, including tours, events, weather information, prices, restaurants, places to shop, and the type of local transportation available (Pesonen et al., 2015). There is evidence of different preferences in the use of transportation by age segment among older adult travelers. For example, Batra (2009) conducted a study on the travel experience and behavior of 384 foreign senior travelers in Thailand, including the preferred means of transportation. The results showed that participants aged 55 to 64 years enjoyed outdoor activities and favored walking, if possible, while those participants in the age group of 65 to 74 years preferred to use buses as a mode of transportation, and this was like those respondents older than 75 years who would choose buses and a tourist guide to visit a tourist site (coach tour).

Also, it has been found that older travelers experience tourist destinations differently from younger cohorts –on the hedonic and risk variables– as they highly consider the risk of using transportation in the destination (García Lirios, 2021). One important aspect when studying the preferences and needs of older travelers is the accessibility of the tourism destination, as this may help to guarantee “the use and enjoyment of tourism irrespective of the capabilities, status or condition of people.” (WTO, 2016, p. 22). The accessibility of a place might be hampered by several barriers, including attitudinal, organizational, architectural, or physical barriers, as well as information/communication and technology barriers (Council of Ontario Universities, 2013). The beneficiaries of accessible tourism include older adults, individuals with physical, sensory, and intellectual disabilities, as well as pregnant women, children, persons with obesity, and those with temporary disabilities. Still, it is important to consider that many persons with physical disabilities, particularly those related to mobility, are older adults (Rantakokko et al., 2013). Mobility refers to the capacity of an individual to move alone and safely from one place to another; however, mobility limitations will increase with advancing age, and several physiological changes, such as a decrease in muscle strength and balance impairments, will eventually cause disability (Rantakokko et al., 2013).

This exploratory document attempts to understand the current status regarding the physical accessibility of public transport in Mexico City. This document focuses on the global competitiveness of this city as an accessible tourism destination for older tourists. A review of recent literature and internet sources contributed to raising potential challenges involved to offer an accessible public transport service in Mexico City. It should be noted, however, that this research effort presents an incomplete picture and constitutes only a preliminary stage on the issues concerned. This is an initial step to expand with further empirical research.

## Transportation in the Travel Experience

Within the tourism activity, people move around from one place to another and physical barriers may affect the tourism experience, including transportation to a destination between countries or within a country (in transit transportation). For instance, an international survey published by the Travelsat competitive index (2012, as cited in WTO, 2016) showed that 43% of tourists with special needs complained regarding their tourism experiences; of those, the main complaint was transportation, as 15% of tourists with special needs criticized the offer of transportation at the destination and 7% of all tourists also complaint regarding the transportation offer. In urban areas, public transportation is likely to be used by tourists, particularly when the tourist destination is a big city with traffic congestion and large distances between tourist attractions (Le-Klähn et al., 2015; Vigolo, 2017). However, not all public transportation is convenient and attractive to tourists. As Vigolo (2017) pointed out, older adults may experience minor disabilities due to aging, and when traveling, the transport aspect is relevant for choosing a destination; this is particularly true regarding physical accessibility, as it can be a key barrier that may affect the tourist experience.

## Public Transport Accessibility

The term accessibility is linked to the ability to move (Lättman, Friman & Olsson, 2016) and includes moving from one place to another through public transport services that are easy to use; these services may also incorporate other factors such as the quality of transit, their utility, and travel costs (Verseckienė, Meškauskas & Batarlienė, 2016). People with mobility limitations might need walking aids and/or wheelchairs either electric or manual (Sze & Christensen, 2017) and physical accessibility is essential for the use of public transport. The literature shows different measures for public transport accessibility, and these measures are associated with the type of disability. Physical and sensory disabilities are frequently mentioned in the literature, but others can also be considered such as those disabilities related to mental and intellectual health (Verseckienė et al., 2016). Among the variables that can be measured, Sze and Christensen (2017) provide a list of elements focusing on physical access to public transport services, such as elevated platforms for loading and unloading of buses, removal of level difference at curbside, and reduction of gap size between platforms and bus/trail transit vehicles. Also, several elements may reduce difficulties in maneuvering for wheelchair users, such as the reduction of level differences and gradient or ramps and the provision of sufficient clear space at the landing of ramps and platforms. Furthermore, geospatial information regarding accessible facilities for pre-trip planning should also be considered, as this can be useful for those individuals with impaired mobility.

Similarly, the Ministry of Tourism in Mexico identifies five main elements to evaluate the accessibility of public transport in Mexico City, including elements for individuals with sensory and

mobility impairments, as illustrated in Table 1.

Table 1. Elements to Evaluate the Accessibility of Public Transport in Mexico City

Elements	Description	Main Aspects
1	The components towards the station (from the pedestrian crossings to the station)	Pedestrian crossing mark, ramp or crossing level, pedestrian-audible traffic light, bridge or lift tunnel, accessible route, public lighting
2	The station platform	Ramp, podo-touch route, touch signal, entrance door, support personnel, call button, visual and audible information, lighting inside the station, the gap between the vehicle floor and the platform
3	The service operation	The service level at peak times and the service level in the vehicle
4	The interior of the vehicle	Seats, armrest covers, handrails, and handholds
5	Modal transfer	Accessible route without many stops and with an information system and sensory orientation

Source: Secretaría de Turismo, 2019.

### Transport Modes in Mexico City

Mexico City, the capital of Mexico, is one of the busiest cities in the world and it is also an important tourism destination for domestic travelers. A city of more than 20 million inhabitants (Agenda de Competitividad Turística de la Ciudad de México, 2013), of which more than 6.3 million people commute each day using public and private transport supply (ONU, 2014). This city has the most complete network of transport services in the country; it also has the fifth-longest underground railway network in the world. Regarding the use of transportation by tourists in Mexico City, there is little information available; however, there is evidence that shows that both, domestic and international tourists, share transport preferences when using local transportation in Mexico City, as they choose the subway and individual taxis mainly; although their arrival transportation to the city is different as illustrated in Table 2. Three out of every four visitors of national origin arrive in Mexico City by bus. The main mean of local transport is the subway, followed by individual taxis. International tourists come mostly from the American continent with 78% of the total number of visitors. Nine out of ten tourists arrive in Mexico City by plane and they usually travel by public transport: subway, individual taxis, and uber (90%) (Escuela Superior de Turismo, 2017).

Table 2. Use of Public Transport among Visitors/Tourists

Origin of Visitors	Main Arrival Transport	Main Local Transport
National Visitors	Bus (73%) Other (27%)	Subway (58%) Taxis (17%) Other (25%)
International Visitors	Plane (92%)	Subway, Taxi, Uber (90%)



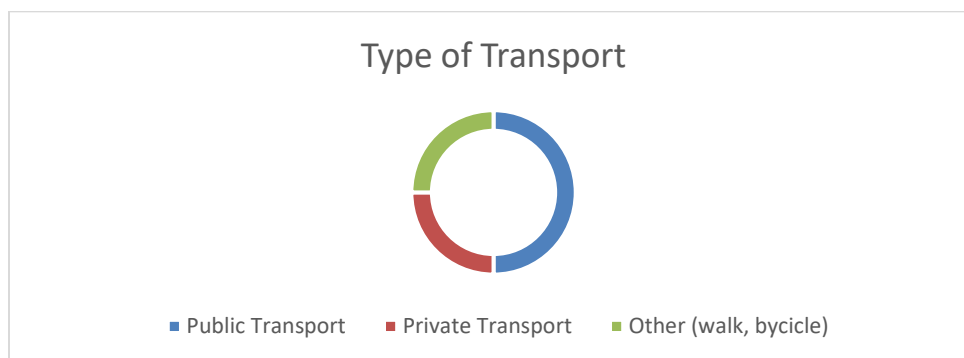


Source: Escuela Superior de Turismo, 2017.

In Mexico City, the use of public transport predominates over private (Aguirre Quezada, 2017; Secretaría de Movilidad, 2019). Although cars represent most vehicles on the road, they mobilize only a small number of trips (Secretaría de Movilidad, 2019). That is, around half of the population travels every day using public transport, and the other half uses private transportation or walks as a mode of transportation (see Figure 1) (Secretaría de Movilidad, 2019). The most common form of public transportation is the use of collective taxis known as minibuses with 67.8%, followed by the subway 16.8%, individual taxis 9.7%, and metrobus 5.7% (i.e., bus rapid transit service) (Secretaría de Movilidad, 2019).

Although the use of public transport predominates over private, the average time of a trip on public transport is higher than that of private transport. A trip in the subway implies 39% more time on average than a trip in a private car; this is also true when using collective taxis with 54%, and suburban buses with 33% (Secretaría de Movilidad, 2019). The main purpose of those traveling in public transportation is to go to work; in second place, people travel to go to school (Islas Rivera, et al., 2012). The average travel time is 49 minutes; around 54% of daily trips are over half an hour. Equally important is the age range of travelers as most of them are adults between 25 and 59 years old. Older adults and children represent a relatively small fraction of the total number of travelers (Islas Rivera, et al., 2012).

Figure 1. Preference for the Use of Various Forms of Transport by Local People



Source: Secretaría de Movilidad, 2019.

### The Accessibility of Public Transport

Based on the literature review and internet sources, two modes of transportation –The subway and the Metrobus (bus rapid transit service)– introduce several elements to improve the physical accessibility of users in Mexico City. For instance, the Metrobus stations have mobility equipment such as ramps on sidewalks to facilitate access to all stations. Though not all, most stations are wheelchair accessible as they offer wheelchair lifts. Regarding other disabilities, the stations provide large-print and tactile Braille signs for the blind and visually impaired, an alert button for people with disabilities to request help, and audio information to hear the next bus arrival. In buses, there are exclusive spaces for wheelchairs, some buses carry wheelchair ramps for easy access from the platform to the bus; also, some buses are equipped with visual announcements on screens for station arrival and audio information systems to announce the approaching arrival. The

web page also offers a download of maps of accessible stations on the Metrobus service (Metrobus CDMX, 2019).

In the subway network, most stations are equipped with elevators or ramps. A detailed list of metro lines is provided on the web page to inform users of the name of each station and address, along with the location of the elevator (if any) and/or stairs and ramps available. Most subway lines have an elevator but are not available at every station. Stations are also equipped with handrails on ramps and stairs and platform-edge warning strips. Also, platform gap modifications or bridge plates are installed to reduce or eliminate the gap between trains and platforms. Accessible restrooms at stations are in operation. Guide dogs are also allowed in all stations and trains of the subway network. All subway trains have four reserved seats for disabled people, pregnant women, and older people, making a total of 10,584 seats. Also, free access cards are available for individuals with permanent disabilities, as well as for older adults with limited mobility (Metro CDMX, 2019).

Although both modes of transportation –the subway and the Metrobus– comply with the general standards and overall requirements to be considered accessible transports, older travelers – domestic and international– might decide not to use any of both, as they are overcrowded (Secretaría de Movilidad, 2019); thus, wheelchair users might need special assistance from the subway staff or otherwise would have very difficult to get on/off the train. Also, the subway and the Metrobus systems are well-equipped with accessible elements, particularly for users with mobility limitations, however, both types of transportation are not the most frequent forms of public transportation.

As mentioned before, 67.8% of all users choose collective taxis and little is known about their level of accessibility, as there is no information available suggesting that collective taxis have equipment or facilities for those with mobility impairments. This may be explained by the type of vehicles used, as most of those collective taxis are combis (a van old model). On the other hand, individual taxis have 300 units fully equipped to transport people with limited mobility. Some taxis have also installed loudspeaker taximeters, and most drivers have been trained for helping disabled people, including older adults and pregnant women. Most of those taxis are in strategic places nearby hospitals focusing on the needs of residents with special needs (Libre acceso, 2019).

### **Accessibility Competitiveness of Mexico City**

At a national level, Mexico City has the largest public transportation system and it is one of the most visited tourist destinations among Mexicans, on a par with that other well-known Mexican destinations such as Cancún and Los Cabos (Agenda de Competitividad Turística de la Ciudad de México, 2013). Unfortunately, little is known regarding the accessibility of public transport services and the competitiveness of Mexico City in comparison with other Mexican cities. Though some evidence, based on a national survey among 20 cities in Mexico, illustrates the degree of satisfaction of Mexicans regarding the use of public transportation, for instance, only 28% of users are satisfied with the information on timetables, stops, and routes available, and 62% of users believe that transport units have not enough space and this make transportation uncomfortable and difficult to access (Instituto Mexicano para la Competitividad, 2018).

Also, some evidence shows that public transport in Mexico City faces important challenges that are not strictly related to the supply of accessible infrastructure and services. For instance, some findings revealed that in Mexico City the main challenge is safe transportation, as this city has the highest perception of insecurity in public transportation nationwide. It is also the third city in Mexico with the highest percentage of users who stopped using public transport due to insecurity (Instituto Mexicano para la Competitividad, 2018). Women experience more problems of insecurity

*Events and Tourism Review* Vol. 5 No. 2 (2022), 39-51, DOI: 10.18060/26486



Copyright © 2022 Ana Cecilia Reyes Uribe, Eva Angélica Guerra Ávalos,  
Paula Lourdes Guerrero Rodríguez and José Manuel Quintero Villa

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

and harassment in public transport than men (Secretaría de Movilidad, 2019); consequently, some measures have been taken, as the subway system provides trains exclusively for women and some buses have a pink line for women users as well (ONU, 2014).

Moreover, a national report on urban mobility published in 2014 by the United Nations, highlights that mobility in Mexico is limited and inefficient, but it is women, children, and people with disabilities who are most affected because their specific needs are not considered. Similarly, it was found that people with disabilities and older adults must overcome serious obstacles, either as passengers or as pedestrians, and this group of the population also suffers abuse and discrimination. Thus, abuse and discrimination might be considered attitudinal barriers that may affect the experience of public transport users, including older tourists.

As previously mentioned, the main mode of public transportation in Mexico City—for national and international tourists of all ages—is the subway and individual taxis (Escuela Superior de Turismo, 2017). Domestic and international travelers share similar advantages when using the subway and individual taxis, as both modes of transportation are adequately equipped to be accessible. Regarding their challenges, they are also shared by domestic and international users, such as insecurity, discrimination, and overloaded transportation (Instituto Mexicano para la Competitividad, 2018; Secretaría de Movilidad, 2019). Other challenges, such as public transportation signage—that is primarily in Spanish, may be an additional challenge for tourists who do not speak Spanish, but there are no studies on this subject.

Globally, Mexico City is far from taking the front rank as one of the most visited cities by international travelers. In 2019, the Mastercard Annual Report stated that three cities with high population densities reached the top ten of the most visited cities by international travelers: Bangkok, Paris, and London (see table 3). Due to the outbreak of SARS-CoV-2 important changes have emerged in the number of international travelers and receiving destinations, as several travel restrictions appeared (to reduce contagion). Though, 2019's favorite destinations can maintain their visitor numbers, so as travel becomes more regular and travel restrictions ease.

Table 3. Top Ten Destination Cities World Wide

Rank	City	Total International Visitors (Millions)
1	Bangkok	22.78
2	Paris	19.10
3	London	19.09
4	Dubai	15.93
5	Singapore	14.67
6	Kuala Lumpur	13.79
7	New York	13.60
8	Istanbul	13.40
9	Tokyo	12.93
10	Antalya	12.41

Source: Global Destination City Index 2019. Master Card Report.

If Mexico City wants to welcome the global growing market of older tourists, a significant

*Events and Tourism Review* Vol. 5 No. 2 (2022), 39-51, DOI: 10.18060/26486



Copyright © 2022 Ana Cecilia Reyes Uribe, Eva Angélica Guerra Ávalos, Paula Lourdes Guerrero Rodríguez and José Manuel Quintero Villa

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).



step should be the improvement of several aspects of accessibility, including the public transport service. However, in countries such as Mexico, public transport seems to be driven by a governmental agenda far from targeting national and international tourists. The government seems to focus on affordable mass transportation; for instance, behind Shanghai, Mexico City is in second place for offering affordable transport for low-income users, followed in third place by Buenos Aires (Mohr, Pokotilo & Woetzel, 2021). However, Mexico City lags behind other major cities on several indicators of transport quality and efficiency. For example, cities such as Hong Kong, Madrid, and Moscow offer transport apps and fast internet connections for all users, while Mexico City ranks low on this indicator along with Buenos Aires and Sao Paulo (Mohr, Pokotilo & Woetzel, 2021).

Travel comfort has also been studied, and it includes aspects such as buses and underground stations accessible to disabled passengers, the leading cities worldwide (see Table 4) are those that have been equipped almost 100% with elevators and ramps for wheelchairs users and have several facilities for disable people. Unfortunately, Mexico City is not on the list of the top 20 cities leading accessibility in public transport (Mohr, Pokotilo & Woetzel, 2021).

Table 4. Leading Cities for Travel Confort

Rank	City
1	Istanbul
2	Beijing
3	Toronto

Source: Mohr, Pokotilo & Woetzel, 2021.

As Gronau (2017) argues, some governmental strategies for increasing national and international tourism arrivals remain focusing on attractions and accommodations, as well as the implementation of marketing strategies for tourism products; while the role of transportation of tourism remains disregarded, and this includes public transportation in the destination place. Thus, the affordability aspect dominates the public transportation agenda in Mexico City (Mohr, Pokotilo & Woetzel, 2021). Although it was found that the subway and the Metrobus system fulfill most physical accessibility requirements, both types of transportation are not the most frequent forms of public transportation as 67.8% of all users choose collective taxis. So far, the public transport offer in Mexico City leaves aside the quality of transport, including accessibility, as the total experience of users seems irrelevant.

### New Challenges for the Future of Transport Supply

Due to the outbreak declared by the World Health Organization of the coronavirus pandemic COVID-19 (SARS-CoV-2) on January 2020, and the recent multi-country outbreak of Monkeypox disease in July 2022, new barriers related to public transport have appeared. The public transport service is of particular importance as it is considered a highly contagious place because it gathers many people (Whitworth, 2020). For instance, a study among german people showed that participants were especially worried about being infected in places with high public traffic such as public transport, shops, and restaurants (Gerhold, 2020). Consequently, this pandemic threat has changed the use of public transport and the way people used to travel, but, for how long? Dixon, Bornstein, and Pankratz (2020) consider that,



It is difficult to predict with confidence which changes will be temporary responses and which will be permanent. It is possible that the trends over the past decade will be undone by the combined effects of the pandemic and the potential economic fallout. But these crises could act as a catalyst, propelling cities towards a future mobility that is cleaner, safer, faster, equitable, and accessible. The challenges will no doubt vary widely between cities (p. 8).

## Conclusion

In Mexico City, the public transport supply has a long road that had yet to be traveled towards offering a good public transportation option for both residents and visitors. The review of the literature establishes that changes must be done focusing on solving safety issues, growing congestion problems, improvement in comfort, and the reduction of traveling time among others. So, the reduction of physical barriers will be insufficient, as other accessibility aspects should not be overlooked, including, discrimination, social exclusion (attitudinal barriers) (ONU, 2014), and risk factors (García Lirios, 2021).

Although this research work provides a small picture of the accessibility of public transport in Mexico City, and its possible influence to compete with other international tourist destinations, an initial recommendation for more research may be offered. More information is needed on how tourists, including older tourists, use and perceive urban public transport in Mexico City. Thus, future empirical studies should consider the implementation of quantitative and qualitative methods to determine:

- The type of public transport used more often by older visitors in Mexico City and other major tourist destinations in Mexico
- The reasons why some types of public transportation are more popular than others
- The potential influence of some socio-demographic and cultural characteristics of users when choosing a public transport service
- The possible influence of the type of transportation used by old tourists in their countries of origin
- The weight played by the public transport offer in the choice of a destination (push and pull aspects)

As discussed by Le-Klähn et al. (2014), local users and tourists may have different expectations and perceptions of the public transport offered in Mexico City, thus it would be appropriate to investigate them separately. As mentioned before, some types of public transport services in Mexico City (e.g., the subway system) are under-used by older Mexican residents, but they are frequently used by tourists of all ages, and little research has been done to know the reasons behind them. Appropriate development of urban tourism is likely to benefit the urban communities, as tourists can be new target groups of public transportation supply (Gronau, 2017). A good indicator of changes in the offer of accessible public transportation for older travelers will be an increase in older residents using several modes of transport in Mexico City.

## References

- Agenda de competitividad turística de la Ciudad de México (2013). *EGAP Gobierno y Política Pública del Tecnológico de Monterrey*. Campus. Ciudad de México. Tecnológico de Monterrey. Available at: <https://www.turismo.cdmx.gob.mx>
- Aguirre Quezada, J.P. (2017). Movilidad urbana en México. Cuaderno de Investigación 30. Dirección General de Análisis Legislativo. Instituto Belisario Domínguez. Senado de la República Mexicana. Available at: <http://bibliodigitalibd.senado.gob.mx/handle/123456789/1870>
- Alén, E., Domínguez, T., & Losada, N. (2012). New opportunities for the tourism market: senior tourism and accessible tourism. In Kasimoglu, M. (Ed.). *Visions for Global Tourism Industry- Creating and Sustaining Competitive Strategies*. In Tech. Rijeka, Croatia. pp. 139-166. Available at: <https://www.intechopen.com/books/visions-for-global-tourism-industry-creating-and-sustaining-competitive-strategies/new-opportunities-for-the-tourism-market-senior-tourism-and-accessible-tourism>
- Anuario Estadístico de Turismo (2019). Gobierno de la Ciudad de México. Secretaría de Turismo. Available at: <https://www.turismo.cdmx.gob.mx/storage/app/media/Docs/Anuario%20estadistico%20Turismo%202018.pdf>
- Balderas-Cejudo, A., Rivera-Hernaez, O., & Patterson, I. (2016). The strategic impact of country of origin on senior tourism demand: the need to balance global and local strategies. *Journal of Population Ageing*, 9, 345-373. DOI 10.1007/s12062-016-9146-2
- Batra, A. (2009). Senior pleasure tourists: examination of their demography, travel experience, and travel behavior upon visiting the Bangkok metropolis. *International Journal of Hospitality & Tourism Administration*, 10(3), 197-212. DOI: 10.1080/15256480903088105
- Council of Ontario Universities (2013). Understanding barriers to accessibility. Available at: <https://www.uottawa.ca/respect/sites/www.uottawa.ca.respect/files/accessibility-cou-understanding-barriers-2013-06.pdf>
- Dixon, S., Bornstein, J., & Pankratz, D. (2020). Urban transport – Cities rethink the basics. The 2020 Deloitte City Mobility Index. London, United Kingdom: Deloitte LLP.
- Escuela Superior de Turismo (2017). Perfil del Turista que visita la Ciudad de México. Reporte Ejecutivo. Instituto Politécnico Nacional. Secretaria de Turismo.
- Fatima, K., & Moridpour, S. (2019). Measuring public transport accessibility for elderly. MATEC Web of Conferences 259, 03006. Retrieved from: <https://doi.org/10.1051/mateconf/20192255903006>
- Felix Elvis Otoo & Seongseop (Sam) Kim (2018). Analysis of studies on the travel motivations of senior tourists from 1980 to 2017: progress and future directions. *Current Issues in Tourism*, 1-25. DOI: 10.1080/13683500.2018.1540560
- García Lirios, C. (2021). Image of the destination in knowledge management for the reactivation of the tourism economy in the face of Covid-19. *Events and Tourism Review*, 4(2), 28-35. DOI: 10.18060/25626
- Gerhold, L. (2020). COVID-19: risk perception and coping strategies. Results from a survey in Germany. AG Interdisziplinäre Sicherheitsforschung. Available at: <https://psyarxiv.com/xmpk4/>

- Gronau, W. (2017). On the move: emerging fields of transport research in urban tourism. In, Bellini, N. & Pasquinelli, C. (Eds.). *Tourism in the city*, Switzerland, Springer International Publishing, pp. 81-91.
- Instituto Mexicano para la Competitividad (2018). Índice de movilidad urbana: barrios mejor conectados para ciudades más equitativas. Available at: <https://imco.org.mx/indice-movilidad-urbana-2018-barrios-mejor-conectados-ciudades-mas-equitativas/>
- Islas Rivera, V.M., Hernández García, S., Zaragoza, M. L., Arroyo Osorno, J.A., & Ruvalcaba Martínez, J.I. (2012). Caracterización de la movilidad (urbana e interurbana) y el transporte de pasajeros en México. Publicación Técnica 377. Secretaria de Comunicaciones y Transportes. Instituto Mexicano del Transporte. Ciudad de México.
- Kim, H., Woo, E., & Uysal, M. (2015). Tourism experience and quality of life among elderly tourists. *Tourism Management*, 46, 465-476. <http://dx.doi.org/10.1016/j.tourman.2014.08.002>
- Lättman, K., Friman, M. & Olsson, L.E. (2016). Perceived accessibility of public transport as a potential indicator of social inclusion. *Social Inclusion*, 4(3). Available at: <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-42572> (accessed March 2020).
- Le-Klähn, D.T., Hall, C.M., & Gerike, R. (2014). Analysis of visitor satisfaction with public transport in Munich. *Journal of Public Transport*, 17(3), 68-85. <http://doi.org/10.5038/2375-0901.17.3.5>
- Le-Klähn, D.T., Roosen, J., Gerike, R., & Hall, M. (2015). Factor affecting tourists' public transport use and areas visited at destinations. *Tourism Geographies*, 17(5), 738-757. <https://doi.org/10.1080/14616688.2015.1084527>
- Libre acceso (2019, December, 2019). Taxis preferentes. Available at: <http://www.libreacceso.org/taxi-preferente-2/>
- Mastercard Annual Report (2019). Global destination cities index. Available at: <https://newsroom.mastercard.com/press-releases/bangkok-tops-mastercards-global-destination-cities-index-for-the-fourth-consecutive-year/>
- Metro CDMX (2019). Información accesibilidad. Available at: <https://www.metro.cdmx.gob.mx/>
- Metrobus CDMX (2019). Información accesibilidad. Available at: <https://www.metrobus.cdmx.gob.mx/dependencia/acerca-de/accesibilidad>
- Mohr, D., Pokotilo, V., & Woetzel, J. (2021). Urban transportation systems of 25 global cities. Elements of Success. McKinsey & Company Report. Available at: <https://www.mckinsey.com>
- Movilidad Urbana e Interurbana (2014). Reporte Nacional de Movilidad Urbana en México 2014-2015. Gobierno de México. Ciudad de Mexico.
- Musa, G. & Sim, O.F. (2010). Travel behaviour: a study of older Malaysians. *Current Issues in Tourism*, 13(2), 177-192. <http://dx.doi.org/10.1080/13683500902854104>
- Nella, A., & Christou, E. (2016). Extending tourism marketing : implications for targeting the senior tourists' segment. *Journal of Tourism, Heritage & Services Marketing*, 2(1), 36-42. <https://doi.org/10.5281/zenodo.376336>
- Pesonen, J., Komppula, R., & Riihinen, A. (2015). Typology of senior travellers as users of tourism information technology. *Information Technology & Tourism*, 1-23. DOI: 10.1007/s40558-015-0032-1
- Rantakokko, M., Manty, M., & Rantanen, T. (2013). Mobility decline in old age. *Exercise and Sport, Sciences Reviews*, 41(1), 19-25. <https://doi.org/10.1097/jes.0b013e3182556f1e>
- Ritchie, H. & Roser, M. (2020). Age structure. Available at: <https://ourworldindata.org/age-structure>.

- Secretaría de Movilidad (2019). Plan estratégico de movilidad de la Ciudad de México. Una ciudad, un sistema. Gobierno de la Ciudad de México. Available at: <http://semovi.cdmx.gob.mx/media/plan-estrategico-de-movilidad-2019>
- Secretaría de Turismo (2019). Guía de recomendaciones para el transporte accesible en el sector turístico. Available at: <https://www.gob.mx/sectur/articulos/guia-de-recomendaciones-para-el-transporte-accesible-en-el-sector-turistico?idiom=es>
- Sze, N.N., & Christensen, K. M. (2017). Access to urban transportation system for individuals with disabilities. *International Association of Traffic and Safety Sciences*, 41, 66-73. <https://doi.org/10.1016/j.iatssr.2017.05.002>
- United Nations (2014). Reporte nacional de movilidad urbana de México. 2014-2015. ONU HABITAT/Grupo Mexicano de Parlamentarios por el hábitat. Ciudad de México.
- United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights. Available at: <https://www.un.org/development/desa/en/news/population/our-world-is-growing-older.html>
- Verseckienė, A., Meškauskas, V. & Batarlienė, N. (2016). Urban public transport accessibility for people with movement disorders: the case study of Vilnius. *Procedia Engineering*, 134, 48-56. <https://doi.org/10.1016/j.proeng.2016.01.038>
- Vigolo, V. (2017). Population aging: challenges and opportunities for the tourism industry. In *Older Tourist Behavior and Marketing Tools*. Book series. Tourism, Hospitality & Event Management (9 volumes). Springer International Publishing.
- Whitworth, J. (2020). COVID-19: a fast evolving pandemic. *Transactions of the Royal Society of Tropical Medicine & Hygiene*, 114, 227-228. <https://doi.org/10.1093%2Ftrstmh%2Ftraa025>
- World Health Organization (2007). Global age-friendly cities: a guide. World Health Organization. Retrieved from: <https://apps.who.int/iris/handle/10665/43755>
- World Health Organization (2020). Coronavirus disease (COVID-19). Weekly epidemiological update 1. Available at: <https://www.who.int/publications/m/item/weekly-epidemiological-update---17-august-2020>
- World Health Organization (2022). Multi-country outbreak of monkeypox. External Situation Report 1. Available at: <https://www.who.int/emergencies/situations/monkeypox-oubreak-2022>
- World Tourism Organization (2016). Manual on accessible tourism for all: principles, tools and best practices. Module I. Accessible Tourism – Definition and Context. World Tourism Organization. Madrid, España.
- World Tourism Organization (2019). International Tourism Highlights. World Tourism Organization. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284421152>.