



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



Journal of Human Ecology and Sustainability

Citation

Manalus, M. A. D., Roxas, E. D. & de Mesa, A. G. L. (2025).

Exploring Inclusive Mobility in a Peri-Urban Setting: Narratives of Persons with Physical Impairments in Pulilan, Bulacan, Philippines. *Journal of Human Ecology and Sustainability*, 3(2), 2.

doi: 10.56237/jhes25HSP001

Corresponding Author

Almira Geles L. de Mesa

Email

ablumbres@up.edu.ph
ablumbres@gmail.com

Academic Editors

Casper B. Agaton
Angelica T. Magpantay

Received: 26 June 2025

Revised: 16 December 2025

Accepted: 19 December 2025

Published: 24 December 2025

© The Author(s) 2025. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY-NC-ND 4.0) license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Original Research Article

Exploring Inclusive Mobility in a Peri-Urban Setting: Narratives of Persons with Physical Impairments in Pulilan, Bulacan, Philippines

Michael Angelo D. Manalus ¹, Efraim D. Roxas ¹, and Almira Geles L. de Mesa ^{1,2}

¹Department of Community and Environmental Resource Planning, College of Human Ecology, University of the Philippines Los Baños, Los Baños 4031, Laguna, Philippines

²Graduate School of Global Environmental Studies, Kyoto University, Yoshida-Honmachi, Sakyo-ku, Kyoto, 606-8501, Japan

Abstract

Mobility is a fundamental dimension of urban life that shapes individuals' quality of life and their ability to participate meaningfully in society. Anchored in the Right to the City framework, this study approaches mobility as more than physical movement, understanding it as a lived experience through which urban rights are claimed, negotiated, or denied. Focusing on persons with physical disabilities, the study employs a qualitative approach, analyzed explicitly through an interpretative phenomenological analysis, to examine everyday mobility experiences in the peri-urban municipality of Pulilan, Bulacan. In-depth interviews were conducted with 14 persons with physical disabilities to document their travel experiences, perceived barriers, and mobility-related considerations. Using inductive thematic analysis, themes were generated from participants' narratives. The analysis revealed that participants' accounts of mobility implicitly articulated three interrelated dimensions of the Right to the City: the right to inhabit, expressed in their struggles and aspirations to live safely and with dignity in the city; the right to habitat, reflected in their constrained access to and use of public spaces and transport systems; and the right to individuation and socialization, evidenced in how mobility barriers shape their sense of self, autonomy, and social inclusion. Mobility challenges for persons with disabilities (PWDs) in Pulilan limit not only movement but also the realization of these urban rights. While participants have adapted to non-ideal conditions, their narratives consistently convey a desire for a more accessible and inclusive community. The study emphasizes the need for targeted, impairment-specific interventions informed by lived experiences. By foregrounding the voices of PWDs, this research contributes to urban planning discourse by demonstrating how inclusive mobility is central to realizing the Right to the City for all.

Keywords— inclusive communities, mobility, persons with disabilities, SDG 11

1 Introduction

Manila, as the capital of the Philippines, ranked 60th out of 65 countries and last in the Asia-Pacific Region in terms of urban mobility readiness and public transit, with scores of 32.8% and 32.3%, respectively [1]. Semanjski [2] defines urban mobility as all forms of movement in an urban setting. The emphasis on this concept lies in its ability to influence individuals' quality of life, especially by satisfying their desires and pleasures. As a result, the importance of mobility in modern society is continually emphasized. Scholars argue that mobility is an essential dimension of the Right to the City, which encompasses, but is not limited to, the rights to work, education, recreation, and housing. Operationalizing the Right to the City arguably entails providing access to urban services, including education, employment, recreation, and other social activities [3, 4]. Although the Right to the City is also regarded mainly as a theoretical concept, it argues that everyone in the city has the right to live, use, produce, govern, and enjoy the city, and in particular the public spaces. Conceptualized by Lefebvre [5] as a critique of industrialization and a response to the demise of cities, the Right to the City centers the politics of urban life, focusing on who should own the city and, therefore, have access to and control over its spaces and services. The Right to the City has been central to the New Urban Agenda of UN-Habitat, which examines its application in cities worldwide. In addition, the concept supports the achievement of Sustainable Development Goal (SDG) 11, focusing on inclusive, safe, resilient cities by ensuring equal access, participation, and benefits for all residents, especially marginalized groups, through better housing, transport, public spaces, and governance, embodying the "leave no one behind" principle for a just urban future.

The emergence of relatively new concepts, such as mobility and accessibility, has led to the apparent need to consider more vulnerable groups in society, like persons with disabilities (PWDs). Studies on mobility in peri-urban areas, particularly of people with mobility challenges, remain limited. The concept of peri-urban development has emerged as a new context for contemporary urban planning and studies, including an integrated framework that has been advancing very slowly [6]. Oftentimes, planning processes fail to consider these groups' situations, which inhibit their participation in societal activities and events. Naami [7] identified 11 types of environments that impede access for PWDs. This indicates that features and functions deemed adequate by administrators and the general public may not be considered sufficient by PWDs. In a more contextualized study, Kett *et al.* [8] found that disability does not merely paralyze daily functioning but also impairs mobility, including access to transport infrastructure, the affordability of long-distance journeys, the provision of subsidies, access to social services, and the availability of transport services. In rural areas, the challenge of developing an environmentally sustainable and inclusive transportation system for people with diverse abilities and economic resources underscores the need for solutions that address diverse needs, thereby enabling flexible, adaptive approaches [9]. This shows that mobility needs to be understood in geographic context while paying attention to the particular question of "mobility for whom"?

It is challenging to ensure that mobility is present in every community worldwide. However, the call to do so continues to echo as PWDs face challenges in their everyday lives. PWDs account for nearly 15% of the global population [10], with the majority living in urban areas. In these areas, the accessibility of services, including food, employment, housing, and healthcare, is limited for PWDs, which consequently causes them to experience difficulties in functioning properly [11, 12]. As important as these services are, transportation grants individuals access to them. With limited access to the aforementioned services, it becomes clear that public transportation plays a vital role in bridging the gap between people and the services they need. As access to such services is recognized as a human right, mobility concerns are critical, particularly for disadvantaged populations facing not only physical but also legal, societal, and administrative barriers [4]. This underscores the importance of examining diverse experiences of mobility, as PWDs often face systemic exclusion from mobility systems due to limited facilities that accommodate their needs, a

lack of policies, and ongoing socioeconomic inequalities [8].

In this context, public transport should be seen not only as another technical service, but also as a mechanism for advancing social and spatial justice [13]. Given the crucial role transportation plays in accessing social services, the Philippines offers a wide array of public transportation options. Common modes of inland transportation in the Philippines include jeepneys, buses, taxis, point-to-point express services, motorized tricycles (*habal-habal*), and pedal-powered tricycles (pedicabs). However, despite these numerous options, private and semi-private vehicles remain preferred by the general public due to worsening traffic conditions and rising travel costs [14]. This has also been the case for PWDs, leading them to use private vehicles [15]. The majority choose to travel by private vehicle because this mode offers greater independence and flexibility [16].

Regardless of the chosen mode of transportation, persons with physical impairments often experience difficulties when traveling due to several identified barriers. Lee and Sener [17] identified five vehicle-specific barriers, six infrastructure-related barriers, three education-related barriers, and three non-modifiable barriers. Among these barriers, infrastructural barriers were deemed to affect PWDs the most, as users cannot resolve them themselves and require support from local administrators. Although these barriers are beyond their power and jurisdiction to address, they can significantly reduce PWDs' perceptions of independence and mobility, ultimately leading to social exclusion and diminished quality of life [18]. Following Amartya Sen's capabilities approach, we can understand mobility and transportation as enabling participation in social, economic, and political activities in urban life, provided that both personal and contextual conversion factors are present [19]. Thus, alterations to current transportation infrastructure and systems are necessary to promote inclusivity and mobility, not only for PWDs but also for individuals from all walks of life.

With these, the study aims to explore the narratives of persons with physical impairments regarding their mobility in Pulilan, Bulacan, specifically the factors to consider when planning trips, as well as the needs and challenges that come with it. Pulilan is one of the 24 municipalities in the province of Bulacan, which is politically subdivided into 19 barangays. The locale was selected for several reasons, including the absence of programs, projects, and activities for PWDs in local plans, and the lack of studies assessing the transportation situation for PWDs in the municipality. Although classified as a peri-urban area, Pulilan exhibits more rural characteristics. In rural areas, public transport and mobility services remain limited, resulting in restricted access, increased car dependency, and ultimately, low mobility [20]. Moreover, given the limited public transportation options in Pulilan, Bulacan, it is crucial to learn from the experiences of PWDs to inform planning and programs towards a more inclusive mobility, taking the Right to the City aspirations seriously.

This study answers the following research questions: (1) What are the narratives of persons with physical impairments about their mobility in Pulilan, Bulacan?; and (2) What recommendations can be made for a more inclusive mobility for persons with physical impairments in Pulilan, Bulacan? Narratives of persons with physical impairments in Pulilan, Bulacan, regarding their mobility were used to develop recommendations for more inclusive mobility in the municipality.

2 Methodology

2.1 Locale of the Study

Pulilan, Bulacan, is a first-class municipality, politically subdivided into 19 barangays, with a total population of around 124,000. It is a peri-urban town located 38 kilometers north of the National Capital Region, the political and economic center of the Philippines (See Figure 1). Barangay Poblacion, with the largest share at 15,096 residents, serves as Pulilan's Central Business District and houses the municipality's vital social services—the municipal hall, police station, and business establishments.

Based on a scoping interview and data from the municipality's Persons with Disabilities Affairs

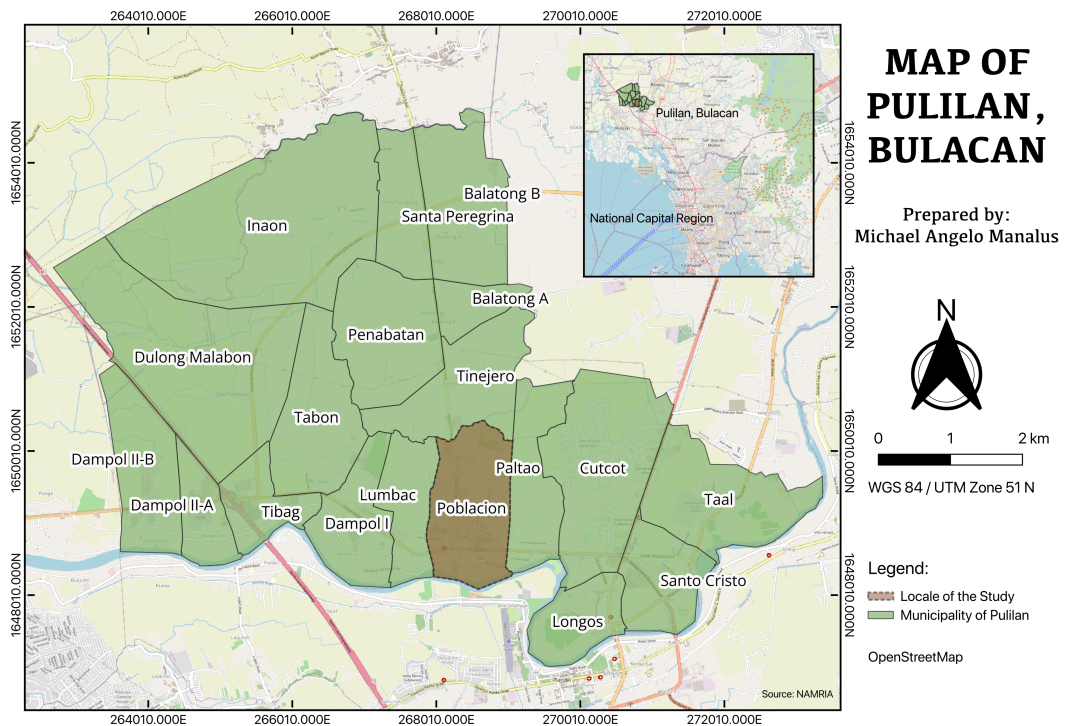


Figure 1.
Locale of the Study

Office (PDAO), Barangay Poblacion has the most significant number of PWDs in the municipality, totalling 502 individuals, accounting for one-sixth of the 3,213 PWDs in Pulilan. Barangay Poblacion has limited transportation options. Aside from private vehicles, tricycles remain the most used mode of transportation due to the inaccessibility and unreliability of jeepneys.

2.2 Research Design

The study employed a qualitative phenomenological approach, specifically analyzed through an interpretative phenomenological analysis (IPA). IPA centers on three philosophies of knowledge: phenomenology, the understanding of lived experiences; hermeneutics, the interpretation of meanings; and idiography, the uniqueness of each case [21]. IPA, compared with descriptive phenomenology, can better elucidate the experiences of underrepresented populations, including PWDs [22].

The phenomenological approach [23] was used to capture the lived experiences of selected individuals with physical impairments regarding mobility in the peri-urban context. With themes and sub-themes developed, relevant theoretical frameworks were explored and employed to explain, interpret, identify patterns, and highlight the narratives' peculiarities. The research anchored its theoretical basis on Lefebvre's right to the city, given its high relevance to the language, themes, and stories of the participants.

2.3 Participants of the Study and Inclusion Criteria

Participants were selected through a purposive sampling based on the developed inclusion criteria. This allows for a focus on and depth of understanding of a population's unique characteristics rather than generalization. The inclusion criteria limit participants to those with physical impairments, specifically those with impaired walking, vision, or hearing. They can be of any age or gender.

Participants must regularly access the buildings in Pulilan, Bulacan, approximately 3-4 times per week. They must also use public transport or engage in active transport and be willing to participate in an interview for the study.

The participants were drawn from a sorted list of individuals identified by PDAO officer based on the specified impairments. The individuals were contacted one by one; those who agreed proceeded with the interview. Data collection concluded upon reaching data saturation, when repetitive narratives were observed, and no new information or themes emerged.

Table 1. Socio-Demographic Profile of the Participants

Sociodemographic Profile	Frequency	Percentage (%)
1. Age		
15-30 years old	2	14.29
31-45 years old	3	21.43
46-60 years old	8	57.14
61 years old and above	1	7.14
2. Sex at Birth		
Male	7	50.00
Female	7	50.00
3. Employment Status		
Employed	7	50.00
Unemployed	7	50.00
4. Household Income		
5,000 PHP and below	4	28.57
5,001-10,000 PHP	1	7.14
10,001-15,000 PHP	3	21.43
15,001 PHP and above	1	7.14
Do not know	5	35.71
5. Type of Physical Impairment		
Orthopedic Impairment	10	71.43
Visual Impairment	2	14.29
Hearing Impairment	2	14.29

A total of 14 participants participated in the one-on-one interviews. As shown in Table 1, 8 of the 14 participants are aged 46-60 years. There was an even distribution by sex (male or female) and employment status (employed or unemployed). In terms of household income, most (5) participants are not aware of the exact amount, followed by 4 participants with a household income of 5,000 PHP or below. Furthermore, the majority (10) of the participants are classified as persons with orthopedic impairments. Those with visual and hearing impairments each account for 2 participants.

2.4 Research Instrument and Data Collection Methods

The primary research instrument used in the study was an interview questionnaire. The research instrument comprises four sections that examine participants' socio-demographic characteristics, travel experiences, travel barriers, and travel considerations. The interview was supplemented with relational mapping, a tool used to visualize participants' travel routes for easy recall of their travel experiences, barriers, and considerations.

During data collection, one-on-one interviews were conducted with participants to obtain detailed insights into their perceptions of mobility in Pulilan, Bulacan. Given the complexity of the

interview questions, the interview was done face-to-face with the assistance of digital technology. Moreover, assistance from a household member was requested during the relational mapping section of the interview for participants who expressed difficulty in writing and drawing. All data obtained from the interviews are qualitative and derived from primary sources.

In addition to the participants, a key informant interview with a representative of the Municipal Planning and Development Office (MPDO) was conducted to capture their perspectives on mobility and the transportation situation in Pulilan, Bulacan. However, as they are not the primary participants in the study, their responses were considered supplementary information on mobility in Pulilan, Bulacan. Lastly, secondary data, such as scholarly books and journal articles, were used as references to support the claims made in this study, thereby enhancing its reliability and authenticity. The data were gathered from November 2024 to January 2025.

2.5 Data Analysis

The research followed a modified IPA protocol to elicit meanings and interpretations of the participants' diverse lived experiences [24]. As summarized in Table 2, the protocol includes transcribing audio files into text; reading and rereading each transcript and interview notes; identifying themes and patterns; interpreting and drawing connections to emerging themes and knowledge in the field; and explaining findings within a relevant theoretical framework.

Table 2. Modified Interpretative Phenomenological Analysis Protocol [23, 24, 25]

Steps	Description
Step 1: Transcribing audio files into texts	This is an initial step of data cleaning and processing. It involves familiarization with the verbal and non-verbal contents of the interviews, which are essential to the participants' meaning-making, providing insights into their attitudes and perspectives on the subject matter.
Step 2: Reading and re-reading each transcript and interview notes	This step deep dives into the content to determine initial themes and key points.
Step 3: Identifying themes and patterns	This step focuses on three tasks: understand the phenomenon from the perspective of the participant; look for emerging themes, patterns, and peculiarities in the ideas, language used, and experiences of each case; and make interpretative comments to analyze the participants' understanding.
Step 4: Interpreting and drawing connections on the emerging themes and knowledge in the field	This step systematically analyzes the linkages among themes, organizing the results from individual cases to collective experiences to draw interpretations.

Furthermore, the relational map was consolidated to visualize the travel barriers and considerations of persons with physical impairments in Pulilan, Bulacan. The map was created through a GIS mapping application, specifically QGIS. These analyzed data, in turn, led to recommendations for promoting more inclusive mobility in the municipality.

2.6 Ethical Considerations

In conducting this study, the researchers prioritized participants' physical and mental well-being. At the beginning of the interview, the study's background and rationale were explained to each participant to ensure understanding of the interview's purpose. The participants were then asked to provide consent for their voluntary participation. In compliance with the Data Privacy Act of 2012, a confidentiality clause was read aloud, and consent to it was obtained through a signature

or thumbprint, with the signature or thumbprint recorded. Participants were asked to consent to photography, audio, and video recording at the start of the interview.

Data collection was conducted in a place where the participants could share their thoughts freely and comfortably. Easy-to-read interview questionnaires with large font sizes were provided, particularly for individuals with visual impairments. For those who cannot see or read the questionnaire, able-bodied household members completed it on the participant's behalf. For those with hearing impairments, assistance from a household member knowledgeable in sign language was requested only when communication difficulties arose. On the other hand, for participants with impaired walking ability, the interview was conducted while seated and required no strenuous physical activity beyond speaking, writing, and drawing. To protect participants' well-being, brief breaks between questionnaire sections and snacks were provided to prevent stress from the continuous flow of information. For participants who expressed discomfort or distress during the interview, the interview was terminated immediately, and the participant was removed from the participant list. Once the interview was completed, the researcher informed the participant when to expect the study's findings. During data interpretation, pseudonyms were used in presenting the narratives.

3 Results and Discussion

Peri-urban areas, as defined by Haldar et al. [26], refer to new landscapes that result from the blending of urban and rural attributes. Pulilan, although classified as a peri-urban town, exhibits greater manifestations of rurality, with public transport and mobility services remaining limited. PWDs are particularly affected, as they continue to face barriers to transportation. In the municipality of Pulilan, Bulacan, the experiences of persons with physical impairments have been collected to identify the challenges they face and how these challenges specifically affect their lives. This section discusses the travel experiences, barriers, and considerations that affected the mobility of the selected persons with physical impairments.

3.1 Travel Experiences

Participants described their travel experiences, detailing the typical stages of their trips. Lived experiences comprise a combination of social and physical encounters, similar to Lefebvre's notion of lived spaces, which represent the person's use of space in their daily environment [27]. After rigorous coding and themes identification, the experiences were summarized (see Table 3 into three categories: the right to inhabit (live), the right to habitat (use public space), and the right to individuation (sense of self) and socialization (social inclusion). These recurring themes were anchored in Henri Lefebvre's right to the city, which explains the fundamental collective right of inhabitants to shape their urban environment [28].

The first theme is the right to inhabit or the right to live. Focusing on survivability, this theme captured narratives of how participants thrived and navigated the peri-urban town. This covers sub-themes such as efficiency, prioritizing safety, and normalization.

As movement becomes challenging for persons with physical impairments, efficiency becomes crucial. Some participants report that when they need to leave their homes for trips, they ensure that the journey to and from their destination is worth the effort of preparation, which includes, but is not limited to, getting themselves ready and securing transportation. Moreover, they make sure the trips are worth every penny they spend, as their budget is limited. They consider a trip "worth it" when they accomplish multiple errands during it. Because moving around is difficult for the participants, they seek to conclude their trip as quickly as possible—for instance, by limiting their time outdoors to an hour. To ensure this is followed, they plan their trip, including which places they will visit and the order in which they will see them.

Table 3. Summary of Travel Experiences

Themes	Sub-themes
Right to inhabit (Being able to survive and live)	Efficiency Prioritizing safety Normalization
Right to habitat (Use of public spaces)	Poor design and maintenance Unreliability Restricted mobility Convenience
Right to individuation and socialization (Sense of self and social inclusion)	Independence Strong support system Discriminatory attitudes and unsafe environment

As Jennifer Santiago (pseudonym) describes:

“Mas nakakatipid ako mamili kapag maramihan at isabay na rin ‘yung pagbabayad ng kuryente at tubig.” (“I save more when I buy groceries in bulk and pay for the electricity and water bills too while I am outside.”)

Prioritizing safety becomes second nature. Participants use the available equipment and facilities provided by their chosen mode of transportation and/or their destinations. For example, these may include handrails, wheelchair ramps, platform lifts, and seatbelts. Others bring their own safety equipment. Some participants emphasized that it is preferable to wait for a less cramped vehicle, even if this entails longer transit times, because it would be safer and more comfortable for them.

As Samuelito Santos (pseudonym) explains:

“Mahirap tumuntong sa jeep kaya ang ginagawa ko nalang, naghihintay ako ng jeep na walang sakay sa unahan para antimano ay doon nalang ako.” (“It is hard to hop on the back of the jeepney, so what I do is, I wait for a jeepney without a passenger in front so that I will take that seat.”)

Strikingly, several participants have treated their situations as the norm. When asked about changes to the transportation system they could envision, the majority of participants acknowledged that the current state of the transportation system is already at its full potential. Hence, most participants do not want to improve the public transportation system, not because they do not want to, but because they believe that it cannot be improved any further. They added that they would make do with what is available and what is being offered. Moreover, they would rather change their lifestyle than expect change from service providers, as such change seems hopeless. These feelings are often due to systemic barriers that seem insurmountable, the lack of positive experiences in Pulilan, and perceptions of the country as a whole. Among the stories shared by the participants, those of Emily Razal (pseudonym) and Edward Beltran (pseudonym) encapsulate the ideas in Nick Joaquin’s essay, “The Heritage of Smallness.” In the essay, he argued that Filipinos, shaped by colonial rule, were always to feel “small” and to settle for what is manageable, without dreaming extravagantly [29].

As Emily Razal puts it:

“Wala naman, sa akin ay okay lang naman miski ano.” (I have no suggestions to improve transportation; anything is fine with me.)

Edward Beltran expresses this similar thought.

“Wala eh, hanggang diyang nalang siguro talaga ang mga jeep.” (“I think that, maybe, that is all the jeepneys can do and provide.”)

On the other hand, others perceived this as Filipinos being resilient [30], a trait that, in a positive sense, connotes the ability to survive difficult situations, but, in a negative sense, can be used to normalize systemic problems.

The second theme is the right to habitat. This pertains to the use of public spaces. The majority of the narratives have reflected poor quality of public spaces and facilities, as evidenced by sub-themes of poor design and maintenance, unreliability, and restricted mobility. In contrast, convenience emerged as a recurring theme in the use of a particular transportation service.

Poor design and maintenance were explicitly described in the participants’ use of public utility vehicles (PUVs). According to the participants, PUVs were designed solely for aesthetic purposes, without considering the needs of people with physical impairments. This also encompasses tight seating arrangements that do not allow the appropriate seating capacity—relative to the size of the vehicle—to be met, the absence of passenger safety equipment, such as seatbelts, and unregulated airflow inside the vehicles. Furthermore, vehicles are neither regularly cleaned nor properly inspected, resulting in such problems as exhaust emissions that are hazardous to humans and the environment.

Elizabeth Navasero (pseudonym) narrates,

“Marami akong nasasakyan na mga tricycle at jeep na sira na ang mga sandalan, ayaw pang ayusin. May iba naman, sa bandang ulunan ay may bakal kaya hindi komportable at safe para sa mga pasahero.” (“I have ridden a lot of tricycles and jeepneys where the seats are already worn out, and the drivers still do not fix them. Some use metal as the material for the headrest, which is not comfortable and safe for passengers.”)

The unreliability of transportation leads participants to prefer private vehicles. The majority of participants reported that they have long preferred private vehicles to public transportation because they are better suited to their lifestyles. This is deeply rooted in their repeated experiences of long wait times to secure a ride, which are attributable to the lack of designated PUV terminals. As a result, PUVs are often unavailable when participants need to ride them. Most participants reported that hailing a ride becomes more difficult at night because fewer drivers and operators are available during these hours. By chance, they are available, though drivers charge relatively higher fares. On the other hand, some participants complain that most areas within the municipality remain inaccessible, as reaching them requires multiple modes of transportation and transfers that create difficulties. Moreover, the pickup and drop-off locations of PUVs, particularly jeepneys, are often primary far from the actual destination points.

Dean Suarez (pseudonym) shared:

“Nakakahapo na talagang sumakay ng mga jeep, bus, at tricycle lalo na kapag Monday, kaya nag-aral akong magmaneho para sariling sasakyan nalang ang gagamitin ko.”
 (“It is tiring to ride jeepneys, buses, and tricycles, especially during Mondays, so I took driving lessons so that I can use my personal vehicle instead when traveling.”)

Most of the participants experienced restricted mobility. The major concern of the participants regarding mobility is that they must postpone handling errands and pile them with other tasks, as preparing for and paying for them are already tedious. They can only go out when the errand is deemed urgent and cannot be delayed further. Furthermore, they can only go to places that have been verified as accessible by people they know or through word of mouth. For instance, they visit places frequented by many people, such as malls and institutional buildings. Long-distance trips

should be carefully considered, as they can be strenuous for PWDs. According to the participants, a trip is considered long-distance if it takes more than an hour to return home.

As James Borromeo (pseudonym) narrates:

“Sa mall lang ako madalas pumunta kasi maganda at masasabi kong madali lang maka-pasok at makaikot, hindi tulad ng bagong department store. Naku! Walang elevator, matarik ang hagdan, at ‘yung hawakan tinakpan pa ng mga bulaklak.” (“I go to the mall often only because it is beautiful there and I can say that it is easy to enter and roam around, unlike the newly-built department store. Oh my! There is no elevator, the stairs are steep, and the handrail is covered with flowers.”)

Meanwhile, some participants highlighted the convenience of using tricycles. Participants shared that they ask PUV drivers, specifically tricycle drivers, for their contact information and use them as a vehicle-for-hire, so they do not need to worry about locating transportation. The participants take these measures for convenience to ensure a smooth journey.

In the words of Maria Gonzalez (pseudonym):

“Nagpapapunta ako ng tricycle sa bahay at kapag wala akong matawag, hindi nalang ako lumalabas kaysa naman ma-stress pa ako sa commute.” (“I call for a tricycle to pick me up at my house and if my contact drivers are not available, I will opt not to go out altogether instead of being stressed with commuting.”)

The third theme is the right to individuation and socialization. Individuation refers to the development of a sense of self, whereas socialization relates to participation in society. This is a critical aspect of the rights to the city, as it calls for social inclusion and justice. This addresses the subthemes of independence, strong support system, disrespect, and an unsafe environment.

Several participants mentioned the importance of independence in their daily lives. The participants reiterate that, although they face challenges in their everyday lives, their impairments will never prevent them from achieving their goals. They believe they can do as much as anyone else and still perform their duties independently, including going outside and running errands. Some participants have their own personal vehicles, and a few can still drive themselves. Ultimately, they maintain that little to no assistance is required because they do not want their family members and loved ones to be burdened with the prospect of having to care for them indefinitely. Thus, they seek assistance from others only when it is truly necessary and when they cannot do it themselves.

This is clearly expressed by Elizabeth Navasero (pseudonym) several times during the interview.

“Kasama ko ang mga pinsan ko sa bahay pero sinasanay ko ‘yung sarili ko na lahat ay ma-handle ko at hindi ko kailanganin lagi ng katulong. Sinasabi ko sa sarili ko na kaya ko ‘to.” (“I live with my cousins but I try to handle everything by myself so that I do not always ask for help from others. I tell myself that I can do it.”)

“Ako po is lifetime ‘yung gamot ko, kung saan-saan po ako nakakarating na ayoko po na sinasamahan ako ng pamilya kasi ayoko pong iparamdam sa kanila na habambuhay nila ako [alagain].” (“I am on a lifelong medication. I don’t want my family to accompany me wherever I go because I don’t want them to feel like they have to take care of me for the rest of their lives.”)

This sense of independence adheres to the principles of RA 7277, the Magna Carta for PWDs in the Philippines, otherwise known as an act providing for the rehabilitation, self-development, and self-reliance of PWDs and their integration into the mainstream of society, and for other purposes. The policy states that PWDs have the same rights as other people, that they should be able to live freely and independently, and that they must never be perceived as recipients of government welfare [31].

Strong support systems were also identified as a sub-theme. This is evident in family members' consistent availability and in their receiving support from community members and friends. Although the participants reported requiring little to no assistance during their trips, their family members consistently made them feel supported. Moreover, they receive support from their friends and neighbors in various ways, such as words of encouragement and thoughtful gestures. Through these, the participants brave through their trips without feeling alone.

Emily Razal explained:

“Simula noong naging PWD ako ay hindi na ako masyadong lumalabas, kaya ang ginawa ng mga dati kong kaklase ay lagi nila akong pinupuntahan at inaaya sa bahay nila para libangin ako.” (“When I became a PWD, I do not go out as much. Hence, my former classmates would always visit me and invite me to go to their houses just to keep me entertained.”)

Outside the support system, the participants noted experiencing discriminatory attitudes and an unsafe environment. The participants, in consensus, report having encountered an undisciplined driver at least once during their journey using public transportation. Some drivers do not show consideration, dropping passengers off at the wrong unloading stations and just stopping in the middle of the road. Some drivers do not accept PWDs as passengers when they recognize that they are PWDs, because they do not want to assist them in entering or exiting the vehicle. Even worse, some participants share that some drivers will still accept passengers even when they are already intoxicated. However, drivers are not the only ill-mannered individuals on the road. Some co-passengers are inconsiderate toward PWDs, especially in the observance of priority seating for PWDs. Participants report that some passengers, especially in jeepneys, do not scoot over even when it is apparent they are having difficulty entering. As a result, they end up in the vehicle's innermost section, which is difficult for them. Some drivers and co-passengers would even tell them that they are better off staying at home rather than going out and being an inconvenience to others.

Jade Mich Buno (pseudonym), a student, recounts encounters with co-passengers displaying lewd behavior in public.

“Sa jeep, may mga pasahero talaga na walang galang gano'n, tapos mayroon pa po akong na-encounter na namimiktyur ng mga estudyanteng naka-uniform.” (“When riding a jeepney, there are really passengers that do not show respect for others. I also encountered a co-passenger that took pictures of students in their uniforms.”)

Narratives have the capacity to foster more coordinated functioning in society through a more personal approach, thereby enabling individuals to better understand their community [32]. PWDs' narratives of their needs are essential for designing and planning appropriate interventions. Previous studies have similar findings, particularly regarding the themes of the right to habitat (use of public spaces) and the right to individuation and socialization (sense of self and social inclusion). Concerns of persons with physical impairments primarily center on the inaccessibility of public transport vehicles and stations, as well as insufficient transport supply [33]. The underrepresentation of the PWD sector in integrated development planning was not solely due to physical impediments but also to negative social attitudes toward PWDs held by other stakeholders [34]. Discrimination negatively affects the well-being and transportation usage of PWDs [10]. On the other hand, there are a few studies supporting the right to inhabit (being able to survive and live). Most studies focus on physical or social space separately, rarely on their integration.

3.2 Travel Barriers

Based on the interview, seven travel barriers were identified across Pulilan, Bulacan, as listed in Table 4. Six of seven barriers were identified as affecting participants with orthopedic impairments. These barriers include impediments in pathways and infrastructures. The identified barriers include bumpy and unpaved roads, steep stairs, the absence of elevators and wheelchair ramps, dysfunctional handrails, a lack of terminals, and even constant traffic congestion. On the other hand, the sole barrier identified by a visually impaired participant is the lack of street lights, which heavily affects her trips. Lastly, participants with hearing impairments reported no identified barriers. Although these impairments fall within the same category of physical impairments, their mobility-related challenges and needs differ.

Table 4. Matrix of Identified Travel Barriers

Location	Identified Barriers	Type of Physical Impairment Affected
Rice Retailer in Poblacion, Pulilan, Bulacan	<ul style="list-style-type: none"> • Bumpy road 	Orthopedic Impairment
San Francisco St., Poblacion, Pulilan, Bulacan	<ul style="list-style-type: none"> • Bumpy road • Constant traffic congestion 	Orthopedic Impairment
Pulilan Municipal Hall, Poblacion, Pulilan, Bulacan	<ul style="list-style-type: none"> • Steep stairs • Absence of elevators 	Orthopedic Impairment
Mobile Phone Supplier in Poblacion, Pulilan, Bulacan	<ul style="list-style-type: none"> • Absence of wheelchair ramp • Absence of handrails 	Orthopedic Impairment
Department Store in Cutcot, Pulilan, Bulacan	<ul style="list-style-type: none"> • Steep stairs • Dysfunctional handrails • Absence of elevators 	Orthopedic Impairment
Parokya ng Pag-akyat sa Langit ni Hesukristo, Sto. Cristo, Pulilan, Bulacan	<ul style="list-style-type: none"> • Unpaved road • No terminals nearby 	Orthopedic Impairment
Alley leading to Participant 9's house	<ul style="list-style-type: none"> • Lack of street lights 	Visual Impairment

The literature provides a more varied range of examples of barriers experienced by persons with physical impairments. Those with an impaired ability to walk, like those with lower limb amputation, mostly encounter difficulties in moving outside public and private buildings [35]. For wheelchair users, the inaccessibility of buildings and public transportation is of prime concern, especially when compounded by other factors such as outdated wheelchair models, the absence of support or assistive features, and unsolicited stigma from the general public [36]. In the context of the Philippines, wheelchair users and individuals with an impaired ability to walk are often merged into the same category. Individuals with visual impairments encounter a range of travel-related complications, including the absence of protective barriers and markings, uneven pavement, and improper placement of features in vehicles and stations [37]. Meanwhile, the challenges faced by people with hearing impairments regarding public transport mainly include unclear announcements and insufficient tactile information in vehicles and stations [38]. In this study, the identification of barriers was limited, indicating that participants get used to the problem, treating the situation as the norm.

Although barriers experienced by PWDs are a key concern for planners, the literature indicates that planners still do not devote sufficient attention to issues surrounding PWDs, nor do they take appropriate measures to address them [39]. Several laws protect the rights of PWDs in the country,

including RA 7277 or the Magna Carta for PWDs in the Philippines and Batasang Pambansa 344, or an act to enhance the mobility of disabled persons by requiring certain buildings, institutions, establishments, and public utilities to install facilities and other devices [40]. The findings indicate poor implementation of policies and standards crucial to the rightful inclusion of PWDs in liveable communities and cities, thereby hindering the achievement of SDG 11.

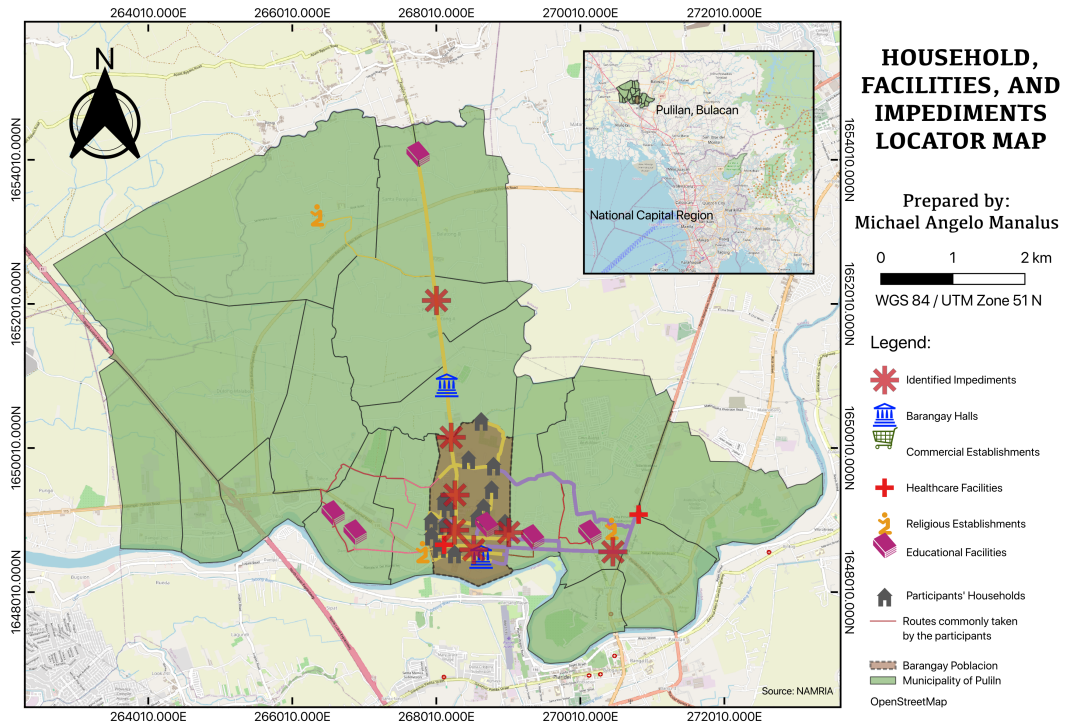


Figure 2.
Identified Travel Barriers

The specific barriers were mapped as shown in Figure 2. Most of the facilities being visited by the participants are located within the same barangay or adjacent to it. These facilities provide essential services or deliver social services, thereby generating foot traffic in these areas. Thus, the participants' identified impediments are primarily concentrated in these areas as well. Although not fully accessible to participants, these areas are considered more accessible because they are near participants' households. The farther the distance to be traveled, the less accessible it is for persons with physical impairments and the less likely they are to continue their trip [41]. It can then be assumed that the places not visited by the participants are inaccessible to them and that they would prefer not to put themselves in a situation that would be highly inconvenient, in terms of physical effort and resource allocation. Moreover, these areas may not even have the features and services that the participants seek in the first place. Given this, mobility remains a challenge due to the lack of appropriate facilities and infrastructure.

3.3 Travel Considerations

When planning trips, individuals with physical impairments should take several factors into account to facilitate their journey. After sharing their experiences and the barriers they encountered, the participants were also asked to state their needs and provide recommendations. These recommendations were grouped by intended recipient, including jeepneys, tricycles, PUV drivers and operators, co-passengers, and the local government unit and other relevant government agencies.

For overlapping recommendations, they were assigned to more appropriate recipients.

Foremost, jeepneys were given 10 recommendations to modify their design and structure to accommodate passengers, especially PWDs better. These recommendations include adding more safety handrails, making the flooring material less slippery, lowering the height of the rear door, providing safety cushions for seats, providing seat belts, installing both a button and a cord that will be used when getting off, and installing a device that will say aloud the current location and upcoming unloading stations. In addition to these, guidelines such as ensuring the maximum passenger capacity and designating additional priority seats for PWDs were also recommended.

The other available mode of public transportation in the municipality is a tricycle, which received five recommendations. The central recommendation is to alter its design and structure to promote passenger safety and comfort. Similar to jeepneys, tricycles were also recommended to have additional safety handrails, less slippery flooring material, safety cushions for seats, and seatbelts. In addition, a participant suggested that the tricycle door be modified to include a wheelchair ramp. In this way, passengers in wheelchairs can enter and exit the tricycle without assistance.

In addition to the vehicles, PUV drivers and operators were advised to be more accommodating to ensure continued patronage. Several participants have reported exhibiting unruly and inconsiderate behavior while on duty. Thus, they were advised to be more mindful when driving, to show initiative in assisting PWDs when entering and exiting transportation, and to follow the stipulated fare matrix. Moreover, they were required to adhere to guidelines, such as prioritizing PWDs and dropping off passengers at designated unloading stations. Lastly, they were also asked to improve their services by immediately fixing broken parts and replacing worn-out materials, and, if possible, to accommodate more passengers by increasing the number of available jeepneys and tricycles in the municipality.

The recommendations were not limited to service providers but also to those who use them, namely passengers. The participants have listed five recommendations for co-passengers, particularly able-bodied passengers, to make their travel experience more enjoyable and less stressful. These recommendations include prioritizing PWDs and being more kind and considerate. Moreover, some recommendations were advisory, such as staying safe and vigilant and paying the correct amount. On the other hand, a considerable number have recommended riding private vehicles instead, discouraging co-passengers from using public transportation.

The last set of recommendations was for the local government unit and other relevant government agencies, as they have the capacity and resources to improve mobility in Pulilan, Bulacan. These recommendations include prioritizing PWDs, adopting effective traffic management strategies, requiring elevators in all municipal infrastructure, and designating additional areas for public transportation terminals. Moreover, participants also ask law-enforcement officials, such as traffic enforcers, to maintain fairness in their duties. Programs such as providing electric bicycles and electric tricycles for PWDs, as well as negotiations on PWD fare, were also proposed. The diversity of these recommendations may yield solutions to various facets of transportation.

The participants provided experience-based recommendations based on their daily activities. Consistent with these considerations, Stanley & Stanley [42] listed specific sub-solutions, such as reducing physical barriers to travel, making public transportation more affordable and accessible, bringing essential services closer to people, and widening travel horizons, that would, in turn, change commuters' negative perceptions of public transportation. However, it will still lack support without the involvement of relevant stakeholders, such as planners and policymakers. Moreover, public participation would be essential to ensuring that more inclusive mobility is realized.

4 Conclusions and Recommendations

4.1 Conclusions

This study examined the lived mobility experiences of persons with physical impairments in the peri-urban municipality of Pulilan, Bulacan, revealing how a complex interplay of physical conditions, social interactions, and personal coping strategies shapes everyday travel. Participants' narratives showed that mobility is rarely a seamless activity; instead, it involves constant negotiation of safety, efficiency, and dignity across different stages of a trip. Daily travel decisions were influenced by poorly maintained public utility vehicles, uneven and obstructed walkways, unreliable services, and socially mediated encounters with drivers, conductors, and other commuters. While some participants described moments of convenience and accommodation, these were the exception rather than the norm. The normalization of barriers—where inaccessible conditions are accepted as unavoidable—emerged as a critical insight, highlighting how prolonged exposure to exclusionary environments reshapes expectations and limits claims to mobility as a right rather than a privilege.

Inductive thematic analysis of these narratives revealed three interrelated themes that articulate how mobility is lived and experienced in peri-urban space: the right to inhabit, the right to habitat, and the right to individuation and socialization. The right to inhabit captures how participants strive to survive and function in the city by prioritizing safety, conserving energy, and adjusting their routines, often at the expense of comfort and choice. The right to habitat exposes how poor design, inadequate maintenance, and unreliable transport services constrain the use of public spaces, restricting independent movement and reinforcing dependence on specific modes or assistance. Meanwhile, the right to individuation and socialization highlights how mobility barriers affect participants' sense of self, autonomy, and belonging, with independence viewed as both a personal goal and a measure of dignity. Experiences of support and solidarity coexist with accounts of disrespect and unsafe environments, demonstrating how mobility is deeply embedded in social relations. Taken together, these themes—emerging directly from participants' accounts—underscore the inseparability of physical access, social inclusion, and self-determination in everyday urban life.

By interpreting these emergent themes through the Right to the City framework, the study extends urban planning and mobility discourse beyond technical accessibility to include the experiential and relational dimensions of movement. The findings reveal a persistent disconnect between disability-inclusive policies and the realities of implementation in peri-urban contexts in the Philippines, where accessibility remains uneven and largely dependent on individual resilience rather than systemic support. Addressing these challenges requires a shift toward rights-based, participatory planning that meaningfully includes PWDs in decision-making processes. Interventions must be impairment-specific, context-sensitive, and grounded in lived experience, supported by stronger enforcement of existing laws and broader societal engagement. Ultimately, inclusive mobility is central to enabling PWDs not only to move through the city but also to inhabit it fully, use its spaces equitably, and participate in social life as equal urban citizens—thereby advancing the realization of the Right to the City and more inclusive pathways toward SDG 11.

4.2 Recommendations

The primary objective of this study was to examine the lived mobility experiences of persons with physical impairments in Pulilan, Bulacan. Grounded in participants' narratives, the following recommendations aim to advance more inclusive and equitable mobility in the municipality by addressing both structural and experiential barriers.

First, the local government unit (LGU) is urged to strengthen the enforcement of existing accessibility laws and regulations, including the Magna Carta for Persons with Disabilities (RA 7277) and Batasang Pambansa Blg. 344, while developing complementary local policies that explicitly

prioritize inclusive mobility. In line with the Philippine New Urban Agenda, the LGU should take a leading role in improving the accessibility of public spaces and transport infrastructure, including sidewalks, curb ramps, pedestrian crossings, terminals, and public buildings. Beyond physical infrastructure, collaboration with relevant national agencies, as well as public utility vehicle (PUV) drivers and operators, is essential to ensure the provision of disability-friendly services in jeepneys and tricycles. Initiatives such as designated and accessible terminals, incentives for public transport use, improved service reliability, and strengthened traffic management strategies can help promote safer, more accessible mobility. Importantly, the suitability and effectiveness of these interventions should be guided by systematic, participatory needs assessments—such as workshops or consultations—that meaningfully involve PWDs in planning and decision-making. The aspiration to the Right to the City should intentionally consider inclusive mobility that accounts for persons with physical impairments and other marginalized groups.

Second, future research and planning efforts are encouraged to examine areas with more diverse transportation options to generate comparative insights and identify context-specific mobility challenges beyond those observed in Pulilan. Expanding the scope of transport modes to include emerging alternatives a more comprehensive understanding of inclusive mobility in peri-urban settings. Detailed assessments of transport facilities and infrastructure should be conducted, including evaluations of compliance with existing accessibility standards and policies. Future studies may also benefit from expanding the range of disability types considered and increasing the number of participants to capture a broader range of experiences. Developing more comprehensive and context-sensitive data collection instruments—potentially through a mixed-methods approach—would enable deeper analysis and the triangulation of findings.

Statements and Declarations

Funding Information

M.A.D.M. received a support from the College of Human Ecology Alumni Association (CHEAA) Thesis Grant.

Acknowledgment

The authors would like to thank the Persons with Disability Affairs Office (PDAO) of Pulilan, Bulacan, specifically persons with disabilities President Princess Alvaro, and the Municipal Planning and Development Office (MPDO) of Pulilan, Bulacan for their active participation and generous assistance during the data collection phase.

Competing Interest

The authors declare no competing interests.

Ethical Considerations

The study adheres to the Declaration of Helsinki for research involving human participants. Informed consent was sought from the respondents, involving the explanation of the purpose of the study, their right to withdraw from the study at any time, how the collected data would be used, and their voluntary participation. The results of the study are also validated with the participants.

Data Availability

The data in this study are available upon request from the authors.

This article belongs to JHES Special Issue: [2025 DCERP Research Conference on Human Settlement Planning](#).

Disclosure of the Use of Artificial Intelligence

Generative AI tool was used for minor language editing.

Author Contributions

M.A.D.M.: conceptualization, methodology, formal analysis, investigation, writing – original draft preparation, writing – review and editing, visualization. **E.D.R.:** conceptualization, formal analysis, writing – original draft preparation, writing – review and editing. **A.G.L.dM.:** conceptualization, methodology, supervision, formal analysis, writing – original draft preparation, writing – review and editing.

References

- [1] Thibault, G., de Clerq, M., Brandt, F., Nienhaus, A., & Bayen, A. (2023). *Urban mobility readiness report 2023*. Oliver Wyman Forum; University of California, Berkeley. <https://www.oliverwymanforum.com/mobility/urban-mobility-readiness-index/about.html>
- [2] Semanjski, I. C. (2023). Transport planning and big data. In *Smart urban mobility* (pp. 171–204). Elsevier. <https://doi.org/10.1016/b978-0-12-820717-8.00001-4>
- [3] Ascher, F. (2007). Section 2: Landscapes of capital-multimobility, multispeed cities. *Places*, 19(1), 36–41. <https://escholarship.org/uc/item/80j6x3gt>
- [4] Ercetin, C. (2025). Reconceptualizing accessibility: From the right to the city to independent mobility for persons with reduced mobility. *Journal of Accessibility and Design for All*, 15(2), 97–116. <https://doi.org/10.17411/jaccess.v15i2.607>
- [5] King, L. (2019). Henri lefebvre and the right to the city. In *The routledge handbook of philosophy of the city* (pp. 76–86). Routledge. <https://doi.org/10.4324/9781315681597-7>
- [6] Tan, J., Gu, K., & Zheng, Y. (2024). Peri-urban planning: A landscape perspective. *Planning Theory*, 23(1), 42–63. <https://doi.org/10.1177/14730952231178203>
- [7] Naami, A. (2019). Access barriers encountered by persons with mobility disabilities in accra, ghana. *Journal of Social Inclusion*, 10(2), 69. <https://doi.org/10.36251/josi149>
- [8] Kett, M., Cole, E., & Turner, J. (2020). Disability, mobility and transport in low-and middle-income countries: A thematic review. *Sustainability*, 12(2), 589. <https://doi.org/10.3390/su12020589>
- [9] Poltimäe, H., Rehema, M., Raun, J., & Poom, A. (2022). In search of sustainable and inclusive mobility solutions for rural areas. *European transport research review*, 14(1), 13. <https://doi.org/10.1186/s12544-022-00536-3>
- [10] Alimo, P. K., Agyeman, S., Agen-Davis, L., Hisseine, M. A., & Sarfo, I. (2024). Lived transportation barriers for persons with disabilities: Contextualizing the ghana disability law through the lenses of giddens' theory of structuration. *Journal of Transport Geography*, 118, 103924. <https://doi.org/10.1016/j.jtrangeo.2024.103924>
- [11] Pinilla-Roncancio, M., Cedeño-Ocampo, G., Ch, A. M. M., Cortés-García, C. M., & Muñoz-Veira, B. (2024). Changing levels of income and multidimensional poverty among persons with disabilities in colombia: A pseudo panel analysis. *SSM-Population Health*, 25, 101571. <https://doi.org/10.1016/j.ssmph.2023.101571>
- [12] Park, G.-R., Parikh, M., & Patel, J. (2025). Unequal impact of housing, food, and healthcare hardships on depression among persons with disabilities: A quantile regression approach. *Disability and Health Journal*, 101932. <https://doi.org/10.1016/j.dhjo.2025.101932>
- [13] Coggin, T., & Pieterse, M. (2015). A right to transport? moving towards a rights-based approach to mobility in the city. *South African Journal on Human Rights*, 31(2), 294–314. <https://doi.org/10.1080/19962126.2015.11865248>

- [14] Mayo, F. L., & Taboada, E. B. (2020). Ranking factors affecting public transport mode choice of commuters in an urban city of a developing country using analytic hierarchy process: The case of metro cebu, philippines. *Transportation Research Interdisciplinary Perspectives*, 4, 100078. <https://doi.org/10.1016/j.trip.2019.100078>
- [15] Petrović, Đ., Mijailović, R. M., & Pešić, D. (2022). Persons with physical disabilities and autonomous vehicles: The perspective of the driving status. *Transportation research part A: policy and practice*, 164, 98–110. <https://doi.org/10.1016/j.tra.2022.08.009>
- [16] Nanchen, B., Ramseyer, R., Grèzes, S., Wyer, M., Gervaix, A., Juon, D., & Fragnière, E. (2022). Perceptions of people with special needs regarding autonomous vehicles and implication on the design of mobility as a service to foster social inclusion. *Frontiers in human dynamics*, 3, 751258. <https://doi.org/10.3389/fhumd.2021.751258>
- [17] Lee, K., & Sener, I. N. (2023). E-bikes toward inclusive mobility: A literature review of perceptions, concerns, and barriers. *Transportation research interdisciplinary perspectives*, 22, 100940. <https://doi.org/10.1016/j.trip.2023.100940>
- [18] Park, K., Esfahani, H. N., Novack, V. L., Sheen, J., Hadayeghi, H., Song, Z., & Christensen, K. (2023). Impacts of disability on daily travel behaviour: A systematic review. *Transport reviews*, 43(2), 178–203. <https://doi.org/10.1080/01441647.2022.2060371>
- [19] Pereira, R. H., Schwanen, T., & Banister, D. (2017). Distributive justice and equity in transportation. *Transport reviews*, 37(2), 170–191. <https://doi.org/10.1080/01441647.2016.1257660>
- [20] Yu, Z., & Zhao, P. (2021). The factors in residents' mobility in rural towns of china: Car ownership, road infrastructure and public transport services. *Journal of Transport Geography*, 91, 102950. <https://doi.org/10.1016/j.jtrangeo.2021.102950>
- [21] Willis, R. K., & Harvey, S. (2025). Doing interpretative phenomenological analysis (ipa) in applied linguistics research: A field-specific guide. *Research Methods in Applied Linguistics*, 4(3), 100279. <https://doi.org/10.1016/j.rmal.2025.100279>
- [22] Emery, A., & Anderman, L. H. (2020). Using interpretive phenomenological analysis to advance theory and research in educational psychology. *Educational Psychologist*, 55(4), 220–231. <https://doi.org/10.1080/00461520.2020.1787170>
- [23] Mayoh, J., Colditz, J., & Frost, N. (2023). Intersecting mixed methods with phenomenology. In *International encyclopedia of education (fourth edition)* (pp. 550–557). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.11054-1>
- [24] Smith, J. A., & Fieldsend, M. (2021). Interpretative phenomenological analysis. In P. M. Camic (Ed.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (2nd ed., pp. 147–166). American Psychological Association. <https://doi.org/10.1037/0000252-008>
- [25] Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 1–18. <https://doi.org/10.1177/16094069231205789>
- [26] Haldar, S., Chatterjee, U., Bhattacharya, S., Paul, S., Bindajam, A. A., Mallick, J., & Abdo, H. G. (2024). Peri-urban dynamics: Assessing expansion patterns and influencing factors. *Ecological Processes*, 13(1), 58. <https://doi.org/10.1186/s13717-024-00533-5>
- [27] Purcell, M. (2002). Excavating lefebvre: The right to the city and its urban politics of the inhabitant. *GeoJournal*, 58(2), 99–108. <https://doi.org/10.1023/B:GEJO.0000010829.62237.8f>
- [28] Tsavdaroglou, C., & Kaika, M. (2022). The refugees' right to the centre of the city: City branding versus city commoning in athens. *Urban Studies*, 59(6), 1130–1147. <https://doi.org/10.1177/0042098021997009>
- [29] Malek, J. G. (2019). Silangan rising: Crafting the filipino self and the other in the diaspora. *Philippine Studies: Historical and Ethnographic Viewpoints*, 67(1), 31–58. <https://doi.org/10.13185/2244-1638.1002>

- [30] Bagnas, N. C., & Choy, A. H. C. (2025). “come what may”: An interpretative phenomenological analysis of disaster survivors’ resilience and meaning-making of fatalism. *BMC psychology*, 13(1), 1–16. <https://doi.org/10.1186/s40359-025-03423-3>
- [31] National Council on Disability Affairs. (1992). *An act providing for the rehabilitation, self-development and self-reliance of disabled person and their integration into the mainstream of society and for other purposes – ra 7277* [Accessed: Nov. 17, 2025]. <https://ncda.gov.ph/disability-laws/republic-acts/republic-act-7277/>
- [32] Jose, R. (2022). Life narratives of persons with disability in india: A critical discourse analysis. *Journal of Comparative Literature and Aesthetics*, 45(3), 33–40. http://jcla.in/wp-content/uploads/2022/09/JCLA-45.3_Reshma-Jose.pdf
- [33] Neven, A., & Ectors, W. (2023). “i am dependent on others to get there”: Mobility barriers and solutions for societal participation by persons with disabilities. *Travel behaviour and society*, 30, 302–311. <https://doi.org/10.1016/j.tbs.2022.10.009>
- [34] Marhulumba, T., & Nel, V. (2021). The neglect of people with disabilities in integrated development planning in ngangelizwe township, mthatha. In *Urban inclusivity in southern africa* (pp. 327–345). Springer. https://doi.org/10.1007/978-3-030-81511-0_16
- [35] Radhakrishnan, S., Kohler, F., Gutenbrunner, C., Jayaraman, A., Li, J., Pieber, K., & Schiappacasse, C. (2017). The use of the international classification of functioning, disability and health to classify the factors influencing mobility reported by persons with an amputation: An international study. *Prosthetics and orthotics international*, 41(4), 412–419. <https://doi.org/10.1177/0309364616652016>
- [36] Williams, E., Hurwitz, E., Obaga, I., Onguti, B., Rivera, A., Sy, T. R. L., Kirby, R. L., Noon, J., Tanuku, D., Gichangi, A., et al. (2017). Perspectives of basic wheelchair users on improving their access to wheelchair services in kenya and philippines: A qualitative study. *BMC international health and human rights*, 17(1), 22. <https://doi.org/10.1186/s12914-017-0130-6>
- [37] Šintáková, O., & Taiwo, T. L. (2020). Travel motivation and barriers to travel for people with visual impairments. *Czech Journal of Tourism*, 9(1), 54–67. <https://doi.org/10.2478/cjot-2020-0004>
- [38] Hersh, M. A. (2016). Improving deafblind travelers’ experiences: An international survey. *Journal of Travel Research*, 55(3), 380–394. <https://doi.org/10.1177/0047287514546225>
- [39] Terashima, M., & Clark, K. (2021). The precarious absence of disability perspectives in planning research. *Urban Planning*, 6(1), 120–132. <https://doi.org/10.17645/up.v6i1.3612>
- [40] National Council on Disability Affairs. (1983). *An act to enhance the mobility of disabled persons by requiring certain buildings, institutions, establishments and public utilities to install facilities and other devices – irr of bp 344* [Accessed: Nov. 17, 2025]. <https://ncda.gov.ph/disability-%20laws/implementing-rules-and-regulations-irr/irr-of-bp-344/>
- [41] Mwaka, C. R., Best, K. L., Cunningham, C., Gagnon, M., & Routhier, F. (2024). Barriers and facilitators of public transport use among people with disabilities: A scoping review. *Frontiers in Rehabilitation Sciences, Volume 4 - 2023*. <https://doi.org/10.3389/fresc.2023.1336514>
- [42] Stanley, J., & Stanley, J. (2017). The importance of transport for social inclusion. *Social Inclusion*, 5(4), 108–115. <https://doi.org/10.17645/si.v5i4.1289>