International Journal of Transport Development and Integration
https://www.acadlore.com/journals/IJTDI

Mobility Justice and Everyday Transport Practices in Chlef, Algeria: A Neighborhood-Scale Analysis of Inequality and Sustainable Mobility

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Received: 12-03-2025 **Revised:** 01-22-2026 **Accepted:** 01-28-2026

Citation: A. S. Benzamia, K. Dahmani, and A. Talbi, "Mobility justice and everyday transport practices in Chlef, Algeria: A neighborhood-scale analysis of inequality and sustainable mobility," *Int. J. Transp. Dev. Integr.*, vol. 10, no. 1, pp. 64–75, 2026. https://doi.org/10.56578/ijtdi100105.

Abstract: Urban mobility and spatial planning policies are intrinsically linked and jointly contribute to social equity as part of an integrated urban system. Developing urban mobility therefore requires careful consideration of residents' everyday practices and perceptions, alongside the integration of emerging transport modes and technologies. While research on mobility in Algeria has largely focused on traffic engineering and motorization, the social dimensions of everyday transport practices remain insufficiently explored. This study addresses this gap by analyzing neighborhood-scale mobility patterns in Zeboudj, a district of Chlef (194 ha), using a Household Travel Survey (HTS) conducted with 100 households. The results reveal marked inequalities in access to mobility. Students and salaried workers benefit from higher levels of motility, mainly through private cars and collective taxis, whereas women, retirees, and low-income groups remain constrained by limited, costly, and poor-quality public transport. Urban form and planning deficits—including narrow streets, unplanned urban expansion, and the absence of pedestrian and cycling infrastructure—further reinforce car dependence and congestion. At the same time, residents demonstrate strong environmental awareness and express support for alternative and more sustainable mobility options, although these aspirations remain largely unrealized in everyday practice. By adopting a neighborhood-scale perspective, this article contributes to debates on mobility justice and spatial inequality in medium-sized cities of the Global South. It shows how everyday mobility practices reflect broader challenges of sustainable and inclusive urban development and offers practical insights for planners and policymakers seeking to promote more equitable mobility in Algerian cities.

Keywords: Urban mobility; Social inequality; Algeria; Sustainable mobility; Household Travel Survey

1 Introduction

Urban mobility has emerged as a central challenge for contemporary cities, influencing not only circulation efficiency but also environmental sustainability, social equity, and overall quality of urban life. Since the late nineteenth century, urban transport systems have expanded significantly with the introduction of tramways and metropolitan rail networks. However, technical progress alone has proven insufficient. A persistent challenge lies in adapting the urban fabric to evolving patterns of movement for people and goods [1].

Within this context, Banister [2] conceptualizes urban mobility through the "sustainable mobility paradigm," which recognizes transport choices as key drivers of long-term environmental and social outcomes. This perspective builds on the Brundtland Commission's definition of sustainable development [3]. Beyond technical considerations, mobility is increasingly understood as a social process [4]. Kaufmann [5] introduced the concept of motility to describe the capacity of individuals and groups to appropriate available mobility opportunities, while Lucas [6] highlighted how unequal access to transport can reinforce processes of social exclusion. More recently, Sheller [7] has framed these debates within the broader project of mobility justice, drawing attention to the fairness with which mobility opportunities and burdens are distributed.

High traffic density can fragment urban neighborhoods into isolated blocks. To mitigate these negative effects, cities have implemented various traffic management measures, such as impermeable traffic loops that limit through-traffic in central areas and the regulation of on-street parking. Such approaches have been observed in cities including Basel, Bern, and Zurich [8–10].

Classic urbanist perspectives emphasize that mobility is inseparable from urban form. Jacobs [11], in The Death and Life of Great American Cities, argued that walkable streets and mixed land uses are fundamental to vibrant and equitable urban life. However, in many Global South cities, including those in Algeria, these conditions are undermined by car dependence, unplanned urban expansion, and the neglect of pedestrian infrastructure. Jacobs [12] further stressed the importance of integrating environmental assessment into urban planning in order to align mobility systems with sustainability objectives. These arguments resonate with Da-Cunha's analysis of governance challenges in sustainable urban development and with Bonnet and Aubertel's notion of "mobility limits," whereby further infrastructural expansion fails to resolve congestion or inequality [13, 14]. Bassand et al. [15] likewise argue that motility is deeply embedded in urban sociology, reinforcing the need to interpret mobility data through a social, rather than purely technical lens.

In the Global South, these debates acquire particular urgency. Secondary cities in Africa, Asia, and Latin America face significant constraints in providing equitable and sustainable mobility systems. In cities such as Lagos and Nairobi, informal minibuses and motorcycle taxis compensate for weak formal transport provision, yet they also reproduce social inequalities and expose commuters to heightened risks [16]. In Bogotá and Medellín, Bus Rapid Transit (BRT) schemes have been widely promoted as models of sustainable transport; however, critics note that fare structures and uneven accessibility continue to exclude poorer populations [17, 18]. Similarly, in Dhaka and Delhi, gendered risks associated with public transport limit women's autonomy and restrict their mobility opportunities [19]. Taken together, these examples illustrate how rapid motorization, informality, and social inequality coexist across many Global South contexts. These dynamics are particularly pronounced in Algeria, where medium-sized cities face comparable structural and institutional challenges.

Despite these international insights, North African cities remain underrepresented in global mobility debates. In Algeria, research on urban transport has largely been dominated by engineering and traffic-based approaches that focus on congestion, road capacity, and motorization rates [20, 21]. While such studies provide valuable technical insights, they tend to overlook the social dimensions of everyday mobility, including how gender, age, and socio-professional status shape access to urban opportunities. As a result, issues of inequality, environmental concern, and lived experience remain insufficiently explored—constituting a key gap that this study seeks to address.

Previous research on medium-sized cities further suggests the importance of offering residents a diverse range of transport options adapted to their evolving needs. Chanut emphasizes that mobility choice is a central condition for everyday accessibility in such urban contexts. Experiences from cities such as La Rochelle illustrate how integrated approaches combining urban design, parking management, and the enhancement of public space can support more balanced and sustainable mobility systems [22].

Medium-sized cities are particularly relevant to the research gap identified in this study. Fédération Nationale des Associations d'Usagers des Transports [23] emphasizes that while megacities receive most scholarly attention, transport crises are often more acute in medium-sized cities, where sustainable solutions are also most urgently needed. Robinson's concept of "ordinary cities" similarly encourages scholars to move beyond global capitals and examine diverse urban contexts that reveal shared dynamics of inequality and mobility transformation [24].

In Algeria, these dynamics are closely linked to changes in the country's administrative and territorial structure following independence in 1962. The number of wilayas (administrative departments) increased progressively from 31 in 1984 to 48 in 2021, and further to 58 and 69 in subsequent administrative reforms. This evolution has contributed to the growth and strategic importance of medium-sized cities, as most wilaya capitals are located in urban centers of this scale.

Chlef exemplifies these processes. As a medium-sized Algerian city shaped by post-earthquake reconstruction in 1954 and 1980, it has experienced rapid and partly unplanned urban expansion, resulting in a fragmented urban fabric that poses significant challenges for mobility planning. The 1980 earthquake alone caused more than 5,000 fatalities and thousands of injuries, rendering over 80% of the city's buildings uninhabitable and triggering long-term transformations in urban form.

In the aftermath of post-earthquake reconstruction, the city experienced rapid and poorly coordinated urbanization, resulting in fragmented neighborhoods with limited spatial coherence, particularly in relation to mobility planning. The Zeboudj neighborhood exemplifies these conditions. Characterized by narrow streets, high residential density, and limited formal transport provision, it presents significant everyday challenges for mobility.

In this context, collective taxis and private cars dominate circulation, while public bus services are widely perceived as inefficient and unreliable. Walking and cycling remain marginal modes of travel, not because their benefits are unrecognized, but due to structural barriers such as inadequate infrastructure, safety concerns, and prevailing cultural perceptions. This gap between aspiration and practice is not specific to Chlef. Similar dynamics

have been documented across many Global South contexts, where residents express support for sustainable mobility options yet face structural and cultural constraints that limit their adoption [25, 26].

This study is theoretically grounded in the concepts of motility and mobility justice. Motility draws attention to the ways in which individuals' mobility capacities are shaped not only by available infrastructure, but also by personal skills, access to resources, and cultural meanings [5]. Mobility justice, by contrast, foregrounds questions of fairness and equity in the distribution of mobility opportunities and burdens within transport systems [6, 7].

Applying these analytical lenses to the case of Zeboudj makes it possible to examine how different social groups—including youth, women, retirees, and salaried employees—possess unequal capacities to participate in everyday urban mobility.

This study adopts a methodological approach based on the Household Travel Survey (HTS), adapted to the neighborhood scale. Although the HTS has been widely used in Algerian planning practice to model travel demand and support infrastructure planning, its potential as a sociological diagnostic tool remains underexplored.

In this study, the HTS is applied in the Zeboudj neighborhood not only to collect empirical data on socio-demographic characteristics, modal choices, perceptions, and policy preferences, but also to interpret everyday mobility practices through the lens of inequality. This approach builds on the French experience with HTS, which established the foundations for diagnostic uses of mobility data and is here adapted to the Algerian context [27, 28].

This article addresses the following research question: how do everyday mobility practices in the Zeboudj neighborhood reflect and reproduce social and spatial inequalities, and in what ways does the absence of sustainable mobility options constrain equitable urban development?

The paper is structured as follows. Section 2 presents the case study of Chlef and outlines the HTS methodology. Section 3 reports the survey results, focusing on socio-demographic characteristics, modal split, perceptions of public transport, environmental concerns, and policy preferences. Section 4 discusses these findings in relation to the concepts of motility and mobility justice, situating the case within broader debates on mobility in the Global South. Section 5 concludes by summarizing the main contributions of the study and outlining policy implications for sustainable mobility in medium-sized cities.

2 Case Study and Methodology

2.1 Case Study: Zeboudj-Chlef

Chlef is a medium-sized city in northern Algeria, with an estimated population of approximately 200,000 inhabitants. It has undergone rapid and partly unplanned urban expansion following major reconstruction phases after the earthquakes of 1954 and 1980. These periods were marked by accelerated and poorly controlled urban development, implemented in response to the extensive damage caused by the 1980 earthquake.

Within this context, the Zeboudj neighborhood represents one of the densest and most congested areas of Chlef. Characterized by narrow streets, mixed residential and commercial functions, and a heavy reliance on informal collective taxis, it illustrates the structural mobility challenges commonly faced by Algerian secondary cities. The neighborhood was selected as a case study because its spatial configuration, socio-economic diversity, and mobility constraints make it highly representative of broader issues observed in medium-sized Algerian cities (Figure 1).

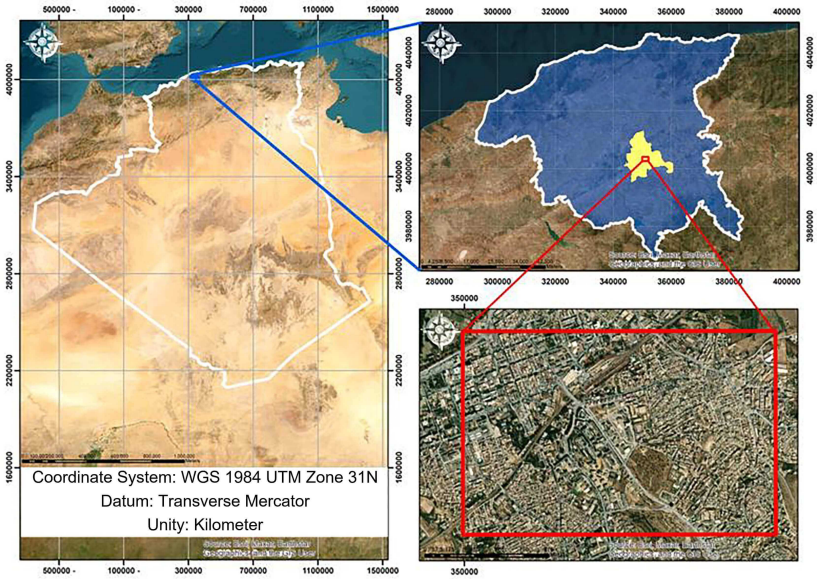

Figure 1. Location of Chlef and the neighborhood of Zeboudj, Algeria

Zeboudj covers approximately 194 hectares and features a mixed urban fabric combining residential, commercial, administrative, and cultural functions, with an estimated population density of about 64 inhabitants per hectare. The street network is organized around two main arterial roads, approximately 13–14 meters wide, complemented by secondary and narrow tertiary streets. This configuration significantly limits the availability of space for active mobility modes and public transport prioritization.

In terms of public transport provision, the neighborhood is served by only two bus routes, with irregular service frequencies that can exceed 30 minutes and operations ending relatively early in the evening. While bus fares remain affordable, at around 20 Algerian dinars per trip, limited reliability and spatial coverage lead many residents to rely on collective taxis. These services offer greater flexibility but at a substantially higher cost, typically ranging between 250 and 300 dinars per trip (Figure 2).

Figure 2. Photographs illustrating daily traffic congestion in the Zeboudj neighborhood

2.2 Survey Design

The research employed a HTS adapted to the neighborhood scale. Originally developed in France as the Enquête Ménages Déplacements (EMD), the HTS is a well-established instrument for diagnosing travel demand and informing transport and infrastructure planning. It has been widely applied in both European and Global South contexts [27, 28].

In this study, the questionnaire was inspired by the standard HTS framework but tailored to local conditions and practices. The information collected enables the analysis of urban mobility patterns and travel behavior, thereby supporting the assessment of transport policy choices and infrastructure investments. Beyond its conventional predictive use, the HTS is here mobilized as a diagnostic tool to capture social differentiation and inequality in everyday mobility.

The survey instrument comprised four main sections:

a. socio-demographic characteristics, including age, gender, socio-professional category, and household size;

b. mobility practices, such as main transport modes, trip frequency, purposes, and peak travel periods;

c. perceptions of the mobility system, including satisfaction with public transport, perceived benefits of walking and cycling, and concerns related to congestion, safety, and pollution;

d. policy preferences and aspirations, including willingness to adopt new modes and support for measures such as car restrictions, tramways, cycling infrastructure, or car-sharing.

In total, the questionnaire included 30 items, combining closed-ended questions with multiple-choice responses and a limited number of open-ended questions. Data were collected through face-to-face interviews conducted in Arabic during autumn 2020 by trained researchers. This approach was chosen to ensure inclusiveness, as online surveys have limited reach among working-class households in Chlef. The HTS also allows travel behavior to be monitored over time, which is essential for understanding underlying mobility dynamics and supporting evidence-based decision-making. In this way, the survey results can inform local transport policy and, ultimately, shape urban mobility outcomes.

2.3 Sampling Strategy

A total of 100 households participated in the survey. They were selected from different streets within the Zeboudj neighborhood in order to reflect its socio-demographic diversity. The modest sample size was chosen to balance analytical depth with logistical feasibility during the 2020 fieldwork period, which was constrained by the COVID-19 pandemic. While the survey does not claim statistical representativeness at the city scale, it provides a diagnostic portrait of mobility practices at the neighborhood scale that is well suited to exploratory analyses of inequality. The sample exhibits a moderate gender imbalance, with 62% male and 38% female respondents, and a strong concentration of young adults (48% aged 18–24 and 30% aged 25–35). Students and salaried employees constitute the most represented socio-professional categories.

This gender distribution reflects both fieldwork conditions and prevailing socio-cultural norms in medium-sized cities in Algeria and North Africa. In smaller urban contexts, public and outdoor spaces tend to be more strongly male-dominated, whereas in larger metropolitan areas gender-related constraints are generally less pronounced. Medium-sized cities occupy an intermediate position between these two extremes, where traditional norms coexist with gradual shifts toward greater female participation in public space.

Overall, the relatively small sample size reflects the exploratory nature of the study. This approach aligns with calls to treat HTSs not only as predictive instruments, but also as sociological diagnostic tools capable of capturing patterns of inequality and exclusion [14, 15].

To further characterize the sample, chi-square goodness-of-fit tests were conducted, as detailed below:

a. Chi-square Test for Gender Distribution (Table 1)

Table 1. Observed data (gender distribution)

Gender	Observed (O)
Men	62
Women	38
Total	100

Expected data (E): Equal distribution: 50 men/50 women

Chi-square test formula:

$$X^2 = \Sigma \frac{(O-E)^2}{E} \quad \text{calculation}$$
$$X^2 = \frac{(62-50)^2}{50} + \frac{(38-50)^3}{50} = \frac{144}{50} + \frac{144}{50} = 2.88 + 2.88 = 5.76 \tag{1}$$

where, Degree of freedom = 2 - 1 = 1 and Critical value ($\propto$ = 0.05, ddl = 1) = 3.84.

b. Chi-square Test for Age Group Distribution (Table 2)

Table 2. Observed data (gender distribution)

Age Group	Observed (O)
18–24 years	48
25–35 years	30
Other age groups	22
Total	100

Expected data (E): Equal distribution: 100/3 $\approx$ 3.33 per age group.

Chi-square test formula:

$$\begin{aligned} X^2 &= \Sigma \frac{(O-E)^2}{E} \quad \text{calculation} \\ X^2 &= \frac{(48-33.3)^2}{33.3} + \frac{(30-33.3)^2}{33.3} + \frac{(22-33.3)^2}{33.3} \\ X^2 &= 6.49 + 2.07 + 3.84 = 10.66 \end{aligned} \tag{2}$$

where, Degree of freedom = 3 - 1 = 1, Critical value (α = 0.05, ddl = 2) = 5.99 and Result: X^2 = 10.66 $>$ 5.99 $\Rightarrow$ statistically significant imbalance.

c. Chi-square Test for Socio-professional Status Distribution (Table 3)

Table 3. Observed data (gender distribution)

Socio-Professional Category	Observed (O)
Students	45
Salaried employees	25
Retirees and homemakers	30
Total	100

Expected data (E): Equal distribution: 100/3 $\approx$ 3.33.

Chi-square test formula:

$$\begin{aligned} X^2 &= \Sigma \frac{(O-E)^2}{E} \quad \text{calculation} \\ X^2 &= \frac{(45-33.3)^2}{33.3} + \frac{(25-33.3)^2}{33.3} + \frac{(30-33.3)^2}{33.3} \\ X^2 &= 4.10 + 0.33 + 0.33 = 6.50 \end{aligned} \tag{3}$$

where, Degree of freedom = 3 - 1 = 1, Critical value ($\propto$ = 0.05, ddl = 2) = 5.99 and Result: X^2 = 6.50 $>$ 5.99 $\Rightarrow$ statistically significant difference.

The chi-square tests indicate a statistically significant imbalance in the sample composition. The gender distribution differs from an equal split (χ^2 = 5.76, $p < 0.05$), with men being overrepresented. The age distribution is also significantly skewed toward younger respondents (χ^2 = 10.66, $p < 0.01$), which is consistent with the youthful profile observed in the study area. Similarly, the socio-professional structure shows asignificant predominance of students and salaried employees (χ^2 = 6.50, $p < 0.05$), in line with the residential and educational functions of the Zeboudj neighborhood.

2.4 Data Analysis

Survey responses were coded and entered into a database for analysis. The analysis relied primarily on descriptive statistical techniques, including frequency distributions and cross-tabulations, supported by graphical visualizations such as bar charts and summary figures. This approach provides a clear and accessible overview of patterns of inequality, perceptions, and mobility-related aspirations.

More advanced statistical modeling was not applied, as the primary objective of the study is diagnostic rather than predictive, and the relatively small sample size limits the scope for statistical inference. To ensure transparency and reproducibility, all descriptive statistics derived from the survey are reported. In the main text, however, only figures that directly support the analytical focus of the paper—namely mobility inequalities and their spatial and social drivers—are presented.

2.5 Ethical Considerations

Participation in the survey was entirely voluntary, and all respondents were informed about the purpose of the study prior to their involvement. No personally identifiable information was collected, and all responses were treated anonymously.

In Algeria, formal ethics approval is not required for non-interventional social research of this type. Nevertheless, the study adhered to general ethical principles, including informed consent, confidentiality, and respect for participants, in line with standard institutional guidelines.

2.6 Limitations

The sample size is relatively small and limited to a single neighborhood, which restricts the broader generalizability of the findings. In addition, as a cross-sectional and self-reported survey, the study captures mobility practices at a single point in time and may be subject to reporting bias. Nevertheless, the results provide valuable insight into neighborhood-scale mobility inequalities and offer a sound basis for future comparative or longitudinal research across Algerian cities.

The authors confirm that there are no conflicts of interest associated with this publication. All participants provided informed consent, and anonymity and data confidentiality were ensured throughout the research process.

3 Results

3.1 Socio-Demographic Characteristics of Respondents

Figure 3 presents the socio-demographic profile of the respondents. Men account for 62% of the sample, while women represent 38%. The age profile is strongly skewed toward younger cohorts, with 48% of respondents aged 18–24 and 30% aged 25–35. This distribution is broadly consistent with the demographic structure of Chlef.

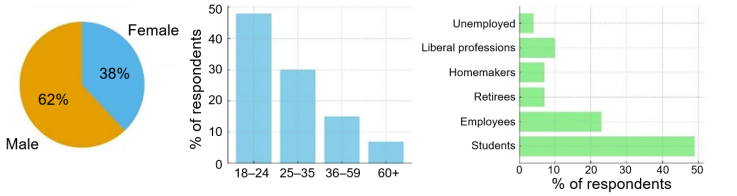

Figure 3. Socio-demographic characteristics of respondents in Zeboudj (N = 100)

The observed gender imbalance partly reflects both prevailing cultural norms and the greater presence of men in public spaces, a pattern also reported in other Algerian mobility surveys. In Algeria, women's presence in public space tends to decrease as settlements become smaller and more rural, while it generally increases in larger urban contexts. These patterns are shaped by social traditions as well as by ongoing processes of social change associated with modernization, including the gradual expansion of women's participation in everyday activities such as employment outside the home.

The socio-professional structure of the sample is dominated by students (45%) and salaried employees (25%), whereas retirees and homemakers are underrepresented. This distribution is consistent with Zeboudj's mixed character as both a residential and educational neighborhood. In addition, the neighborhood hosts a range of commercial activities and services, including cafés, restaurants, shops, and small retail outlets.

Overall, the sample reflects the youthful and socio-economically mixed character of Zeboudj, with clear implications for local mobility needs and practices (Figure 3).

3.2 Modal Split and Mobility Practices

Based on field observations and interviews conducted with officials from the local transport authority, and as illustrated in Figure 4, collective taxis (38%) and private cars (28%) account for the majority of daily trips, followed by buses (12%). Walking represents 15% of trips, while cycling remains marginal at 2%. In this study, collective taxis refer to shared vehicles operating along regular routes but without fixed timetables, constituting an intermediate mode between public and private transport.

Modal use varies across socio-demographic groups. Women report a higher reliance on collective taxis, a pattern associated with the limited availability and perceived shortcomings of formal public transport services, including delays, overcrowding, and a lack of comfort. Men, by contrast, more frequently rely on private cars. Students tend to walk more often than other groups, reflecting both financial constraints and proximity to educational facilities, whereas salaried employees depend more heavily on car use.

Overall, mobility practices in Zeboudj are dominated by informal and individual modes, with walking and cycling remaining marginal. Variations by gender and occupation point to stratified access to mobility options (Figure 4).

3.3 Trip Purposes and Temporal Patterns

Figure 5 illustrates the distribution of trips by purpose and time of day. Work- and study-related trips account for the majority of daily travel, while shopping and leisure trips play a secondary role. Peak travel periods occur between 7:30–8:30 and 16:00–18:00, corresponding closely to school and work schedules. These patterns indicate that mobility demand in Zeboudj is largely driven by education and employment activities, highlighting the dependence of students and workers on predictable yet limited transport options.

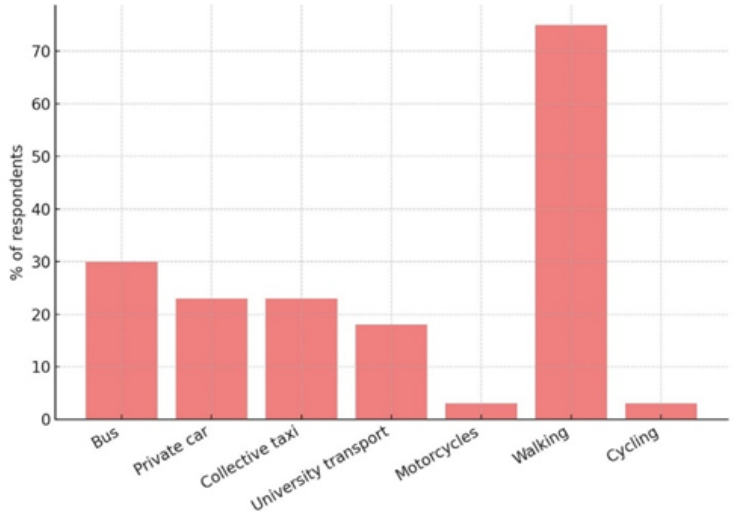

Figure 4. Modal split in Zeboudj

Modal choices vary according to trip purpose and socio-demographic characteristics. Students tend to walk more frequently for study-related trips, whereas salaried employees rely more heavily on cars and collective taxis for commuting. Women more often combine multiple trip purposes, such as shopping and school-related travel, with household responsibilities, resulting in more complex trip chains. Overall, variations in trip purpose and timing illustrate how everyday mobility is structured by daily routines, with notable gender differences in trip chaining (Figure 5).

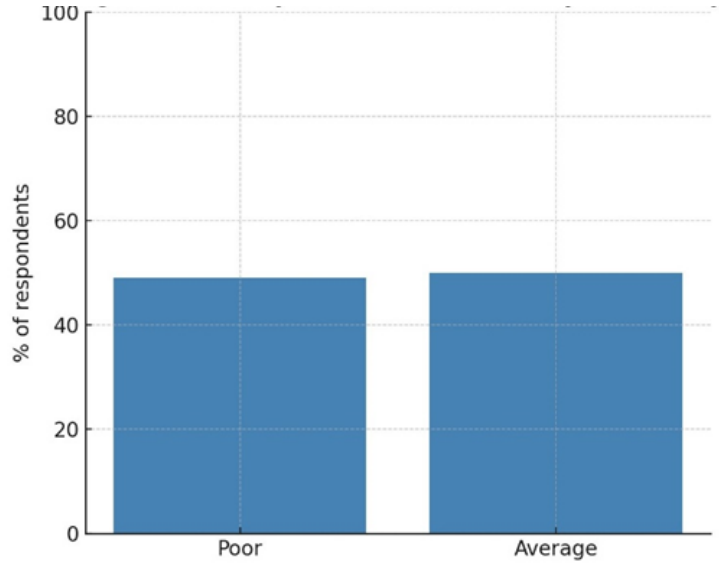

Figure 5. Perceptions of public transport quality

3.4 Perceptions of Public Transport

Figure 6 summarizes respondents' perceptions of public transport. Most respondents' express dissatisfaction with bus services, citing delays, overcrowding, and a lack of comfort. Collective taxis are generally valued for their speed and flexibility but are also criticized for their cost and safety, particularly by women. As a result, public transport in Zeboudj appears to be both indispensable and widely distrusted.

Similar forms of ambivalence toward informal or semi-formal transport systems have been reported in other North African cities, such as Tunis and Casablanca, suggesting that these issues reflect broader regional governance challenges rather than an isolated local problem (Figure 6) [29, 30].

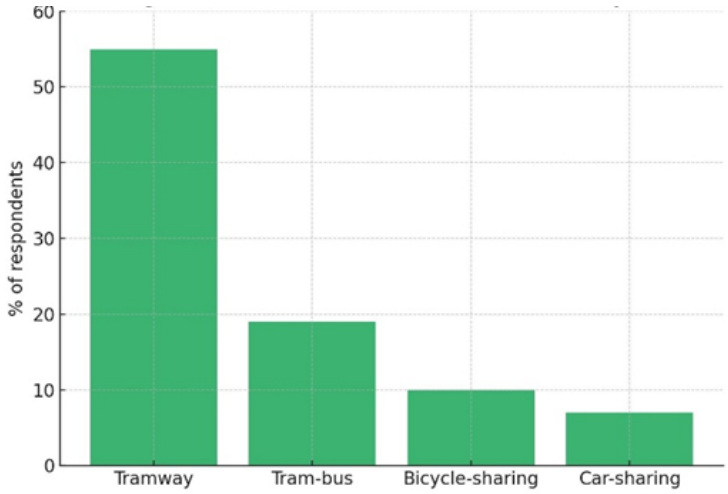

Figure 6. Preferred future modes of transport

3.5 Environmental Awareness and Soft Mobility

Figure 7 illustrates respondents' perceptions of environmental issues related to urban mobility. Air pollution, noise, and traffic congestion are identified as the most pressing problems. Awareness of the environmental and health benefits associated with walking and cycling is relatively high; however, actual engagement in these modes remains limited due to infrastructural deficits and cultural barriers.

In particular, the lack of continuous sidewalks and safe pedestrian crossings constrains walking, while cycling remains marginal across all socio-demographic groups. Students express a greater willingness to walk compared to other respondents, but this does not translate into widespread adoption of active mobility modes. Overall, despite strong awareness of environmental and health concerns, soft mobility practices remain restricted by structural and cultural constraints (Figure 7).

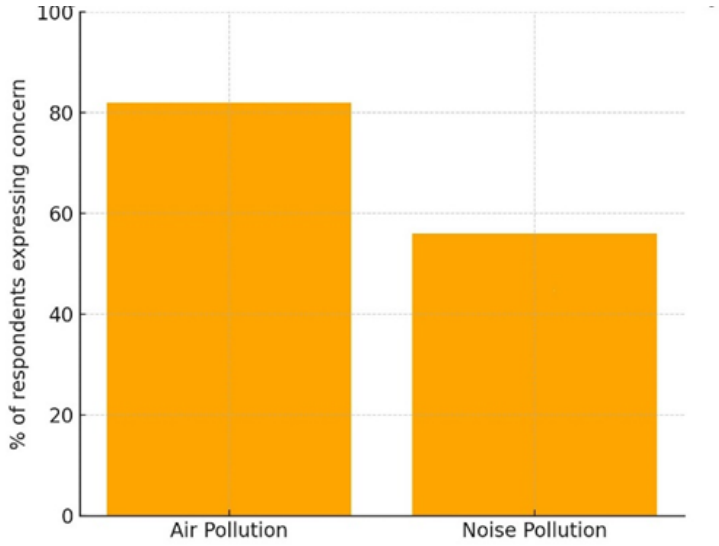

Figure 7. Environmental concerns linked to mobility

This gap between environmental awareness and everyday mobility behavior mirrors findings from other Global South contexts, where residents value soft mobility but lack the enabling conditions necessary for its adoption [25, 26].

3.6 Policy Preferences and Aspirations

Figure 8 presents respondents' policy preferences related to urban mobility. There is strong support for measures that restrict car use in dense areas, enforce parking regulations, and promote walking and public transport. Respondents also express substantial support for governance tools such as park-and-ride facilities and Carbon dioxide (CO_2) taxation. By contrast, enthusiasm for high-technology solutions, including electric or autonomous vehicles,

remains limited, reflecting skepticism toward technological fixes in a context where basic transport provision is perceived as inadequate. The most widely supported aspiration is the development of a tramway, which is viewed as a symbol of modern, collective, and more equitable mobility [23].

Overall, residents express a clear readiness for systemic change toward more sustainable mobility, characterized by strong support for public transport solutions and comparatively limited enthusiasm for individual technological innovations (Figure 8).

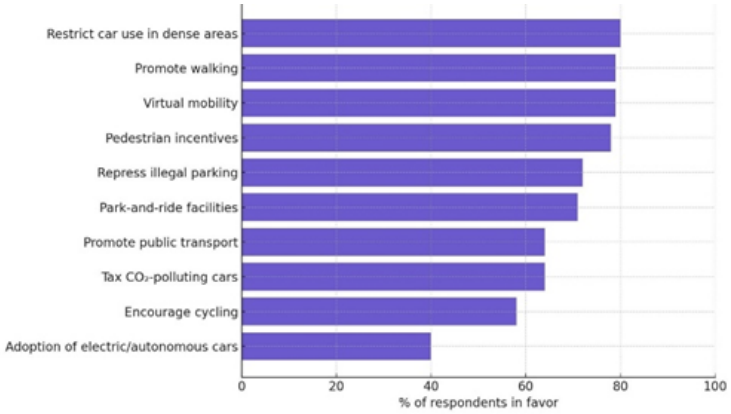

Figure 8. Policy measures supported by respondents

4 Conclusions

This study examined everyday mobility practices in Zeboudj, a dense neighborhood in the medium-sized Algerian city of Chlef, with the aim of understanding how socio-demographic characteristics, urban form, and governance structures shape mobility outcomes.

Residents living in neighborhoods farther from the city center tend to rely more heavily on private car use, a pattern that contributes to increased traffic congestion and higher levels of pollution. This reliance also shapes mobility behaviors across gender, social class, and socio-professional groups, and is reflected in broader patterns of population movement. Understanding these dynamics and informing the future urban development of the study area therefore requires careful consideration of residents' perspectives.

The findings indicate that mobility in this context is strongly stratified. Youth and salaried employees exhibit higher levels of motility, while women, retirees, and homemakers face a combination of structural and cultural constraints. The dominance of semi-formal and individual transport modes, together with widespread dissatisfaction with public transport provision, highlights the persistence of systemic mobility inequalities.

These findings underscore that mobility injustice in medium-sized cities of the Global South is not solely an infrastructural issue, but also an institutional and cultural one. Residents' strong support for tramway development and other sustainable mobility options points to an emerging awareness of environmental and social equity concerns. However, the lack of reliable transport alternatives, inadequate pedestrian environments, and fragmented governance arrangements continue to limit the scope for meaningful change. This persistent "aspiration–practice gap" mirrors broader patterns of mobility injustice identified in other developing urban contexts.

From a policy perspective, the findings suggest that efforts to promote more equitable and sustainable mobility in medium-sized cities must extend beyond infrastructure provision alone. Governance reform, integrated planning approaches, and more inclusive decision-making processes appear essential for translating residents' mobility aspirations into tangible outcomes. In this regard, strengthening local transport institutions and aligning them with established sustainability frameworks—such as those promoted by the International Association of Public Transport (UITP) and the European Commission—may help bridge the gap between policy objectives and everyday mobility practices.

The study also highlights the value of adapting the HTS as a diagnostic tool, not only for modeling travel demand but also for identifying social inequalities and informing locally grounded transport strategies.

Future research could extend this analytical approach to other Algerian and North African cities in order to capture regional variation and assess the transferability of these findings. By foregrounding everyday mobility practices in an ordinary urban context, this study contributes to ongoing debates on mobility justice and sustainable urbanism in the Global South, offering insights that are relevant for both research and policy beyond the Algerian case. More broadly, the findings underscore the importance of approaching urban mobility not solely as a technical challenge, but as a social issue closely linked to equity, access, and quality of life. For urban managers in Algerian secondary cities, this perspective highlights the need to integrate social equity and environmental considerations into

local transport strategies. Strengthening participatory planning processes and aligning neighborhood-scale mobility interventions with broader sustainability objectives may help translate residents' aspirations into more inclusive and actionable policy outcomes.

Author Contributions

Conceptualization, A.S.B. and K.D.; methodology, A.S.B.; validation, A.S.B., K.D., and A.T.; formal analysis, A.S.B.; investigation, A.S.B., K.D., and A.T.; resources, A.S.B.; data curation, A.S.B., K.D., and A.T.; writing—original draft preparation, A.S.B.; writing—review and editing, A.S.B., K.D., and A.T.; visualization, A.S.B., K.D. and A.T.; supervision, K.D.; project administration, A.S.B.; funding acquisition, A.S.B. All authors have read and agreed to the published version of the manuscript.

Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

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