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Transport in Arab Society – Characteristics and Trends

Fifth report in a series

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This document is part of a series of reports by the Arab Economic Forum. As part of the Forum's work to strengthen the socio-economic situation of the Arab population in Israel, quarterly reports will be published on macro-economic topics which are of crucial importance to Arab society. A short report will be published every quarter, focused around the central developments in a defined field, with broad ramifications on standards of living.

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Transport in Arab Society - Characteristics and Trends

1. Abstract

- In the last decade, a sharp increase has been registered in the motorization level and in the rate of possession of drivers' licenses in Arab society, following the rise in the standard of living and the increase in the number of those going out to work and to study.
- The mileage of vehicles in Arab cities has expanded rapidly, and the average mileage of a vehicle in Arab cities is higher compared with Jewish cities in the same geographical regions.
- Arab employees use private vehicles at higher rates than Jewish employees as a means of getting to work, and in this period the gap between populations has even widened.
- A rise has been noted in expenditures on vehicles by Arab households, and the gap has closed compared with expenditures by Jewish households.
- Investment in public transport in Arab communities have not been enough to bring about an increase in the rate of Arabs using public transport, or an improvement in the satisfaction of the users themselves.
- These developments are expected, ultimately, to increase congestion on the roads, especially in concentrations of Arab populations, to increase the time taken to reach work and to limit Arabs' ability to integrate into employment outside their region of abode.
- The sharp cut in five-year plans for Arab society for 2022-2026 is expected to impact the development of transportation infrastructures, and to pose great difficulties in the efforts to address the problem.
- Decision-makers must find a way to continue developing public transportation in and around Arab communities, while at the same time decreasing the demand for mileage in Arab society by establishing quality places of employment close to Arab population centers.

2. Ownership of Private Vehicles

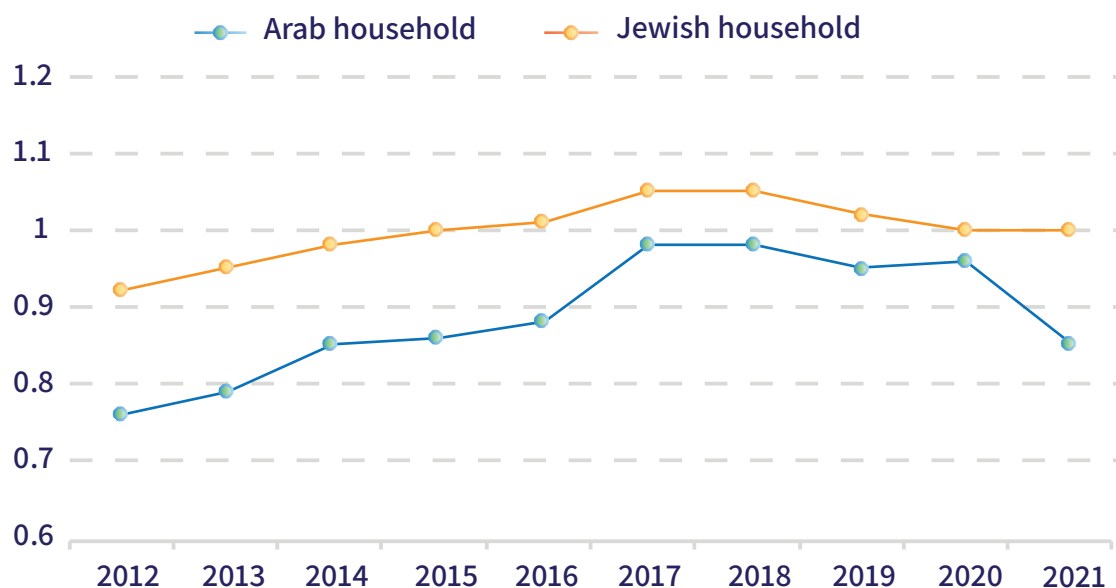
A special report by the Research Division of the Bank of Israel dated 2019¹ on the subject of raising the standard of living in Israel stressed the importance of transportation to work productivity and described the gravity of the situation: “The current state of affairs in Israel indicates that in the last years the burden on transportation infrastructures has increased. The number of people driving to work has increased greatly following a natural increase in population, its increased spatial distribution and the impressive rise in employment rate. Therefore, the burden on infrastructures has increased, crowding has risen, and congestion in Israel is exceptionally high compared with OECD countries”.

All this was true for Israeli society in general in 2019, and especially true for Arab society in 2024, only more strongly. The rise in standards of living and the increase in the number of those going out to work and study occurred all the more strongly in Arab society, especially among women, and caused an increase in the use of private vehicles.

2.1 Level of Motorization

A central measure which makes it possible to evaluate the demand for road infrastructures and the danger of traffic jams and congestion on the roads is the level of motorization. It is accepted to define level of motorization as the number of private vehicles per 1,000 inhabitants, but such a comparison between Arab and Israeli societies may be misleading, since the demand for vehicles depends on the number of households, and Arab households are considerably larger, on average.² Thus, Figure 1 presents the average number of cars at the disposal of Jewish and Arab households.

Figure 1: The Average Number of Cars for Jewish and Arab Households



• In 2019 the method of estimation was changed in the survey of household expenditures so there is a break in the data series.

Source: The Arab Israeli Forum, based on the Central Bureau of Statistics’ processing of driver registration data at the Ministry of Transport.

[1] Bank of Israel (2019), special report by the Research Division: Raising the Standard of Living in Israel through Increasing Work Productivity.

[2] According to a survey of household expenditures for 2021, an Arab household comprised 4.2 individuals, compared to 3.0 individuals in a Jewish household.

We can see that in 2012, an Arab household owned an average of 0.76 cars, around 17% fewer than the number of cars in a Jewish household. Following a rise in the standard of living and accelerated integration in the job market, the number of cars per Arab household rose swiftly and reached almost 1, and the gap with the Jewish household decreased to only about 7% just before COVID. At that time there was a rise in the rate of Arab households who owned at least one car, from about 63% to about 75%, which even passed the parallel data among Jewish households, about 70% of which owned at least one car.

The COVID crisis had a particularly powerful impact on employment in Arab society, and this influence was also expressed, among other things, in the number of cars per household, which dropped sharply to 0.85, so that the gap with a Jewish household increased sharply to about 75%. Nevertheless, employment in Arab society recovered well from the COVID crisis and this is also expected to be expressed in vehicle ownership, and an upward trend in the number of cars per household will continue.

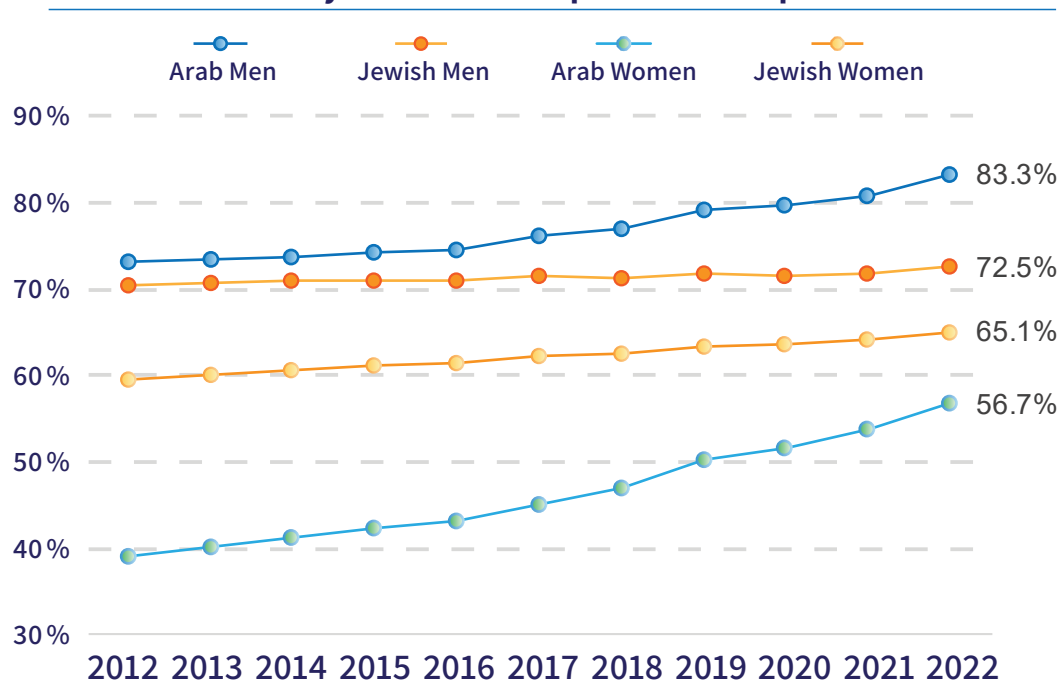
2.2 Driver's License

In the past decade, the percentage of those licensed to drive³ in Arab society has grown at a fast pace.

In 2012-2022 the percentage of those licensed to drive rose by about 10 percentage points among Arab men compared with about 2 percent among Jewish men. As a result, the rate of those licensed to drive in 2022 among Arab men reached 83.3% and was noticeably higher compared with Jewish men (72.5%), while in 2012 there was hardly any difference between the groups.

At the same time, an even sharper increase of about 17.5 percentage points was registered in the rate of Arab women licensed to drive, compared with a rise of about 5.5 percentage points among Jewish women. This development led to the percentage of women licensed to drive in Arab society reaching 56.7%, as opposed to 65.1% among women in Jewish society, so that the gap between the groups decreased greatly, but did not close.

Figure 2: Percentage of those Licensed to Drive aged 15 and over, by Gender and Population Group



Source: The Arab Economic Forum, based on the Central Bureau of Statistics' processing of driver registration data at the Ministry of Transport.

[3] The data presented above relate to those licensed to drive all kinds of vehicles. Focusing on private vehicles will present a similar picture.

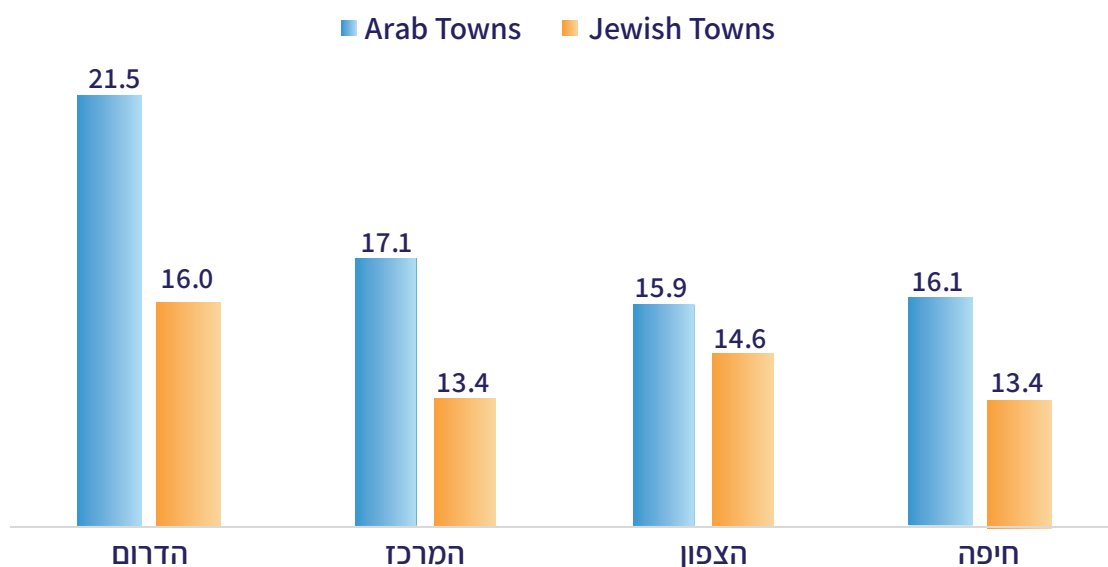
3. Use of Private Vehicles

Since owning a vehicle does not necessarily attest to its use in practice, we shall now present a supplementary analysis of trends in the use of private vehicles. The central measure for the use of private vehicles is called mileage, defined as the number of kilometers each vehicle has travelled during a given period.

In 2022 the average annual mileage of each privately-owned vehicle in Arab cities was about 16.7 thousand km, almost 20% higher than the mileage of vehicles in Jewish cities. Although the average mileage of vehicles in Arab cities is about 4% lower compared with 2012, given the rapid growth in the number of vehicles, the total mileage in Arab cities has increased during this period by about 40%.⁴ In contrast, at the same time the average annual mileage in Jewish cities has remained almost unchanged.

Note that the gaps in mileage between Arab and Jewish cities also reflect differences between periphery and center. As a rule, the mileage of vehicles in cities in the southern and northern regions is higher compared to the mileage of vehicles in the regions Central, Haifa and Tel Aviv. However, the mileage of vehicles in Arab cities is higher throughout the country, and it is higher in all regions compared with Jewish cities in the same region (Figure 3).

Figure 3: Annual Mileage of Vehicles Registered in Arab and Jewish Cities, by Regions (thousands of km ,2022)



• Privately owned vehicles. Data classified by community (address) registered to vehicle owner in vehicle registration.

Source: The Arab Economic Forum, based on the Central Bureau of Statistics' processing of driver registration data at the Ministry of Transport.

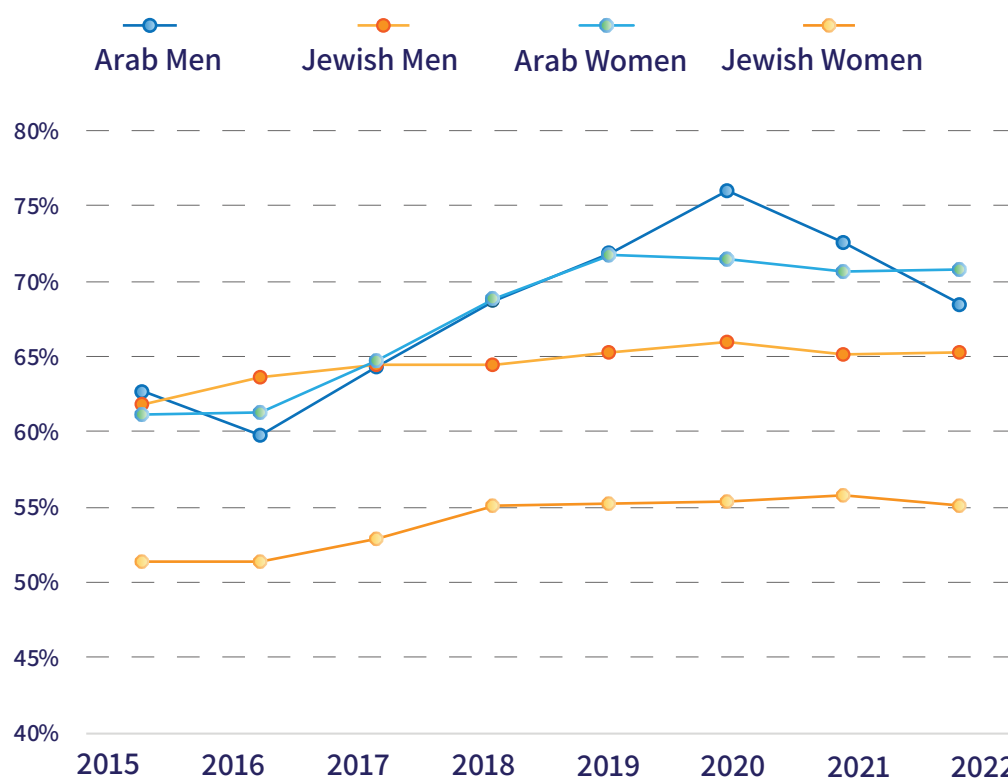
[4] Total mileage equals the average mileage of a vehicle multiplied by the number of vehicles.

3.1 Means of Getting to Work

The private vehicle is the principal means by which employees in Arab society get to their place of work. The rate of Arabs getting to work in private vehicles is high in comparison to the past as well as in comparison to Jewish society. The rate of those getting to work by private vehicle has risen compared with 2015 among women and men, both in Arab society and in Jewish society (Figure 4).⁵

The sharpest increase in the rate of those using private vehicles was among Arab women – the rate of those getting to work by private vehicle grew by about 9 percentage points and reached about 70%, much higher than the rate among Jewish women (about 55%). The rate of Arab men getting to work by private vehicle also rose sharply until the COVID crisis, although following the crisis and the particularly tough economic impact on Arab men, this rate has dropped since then, but has remained high compared with Jewish men.

Figure 4: Rate of those Getting to Work by Private Vehicle, by Gender and Population Group (Moving Average, two years back)



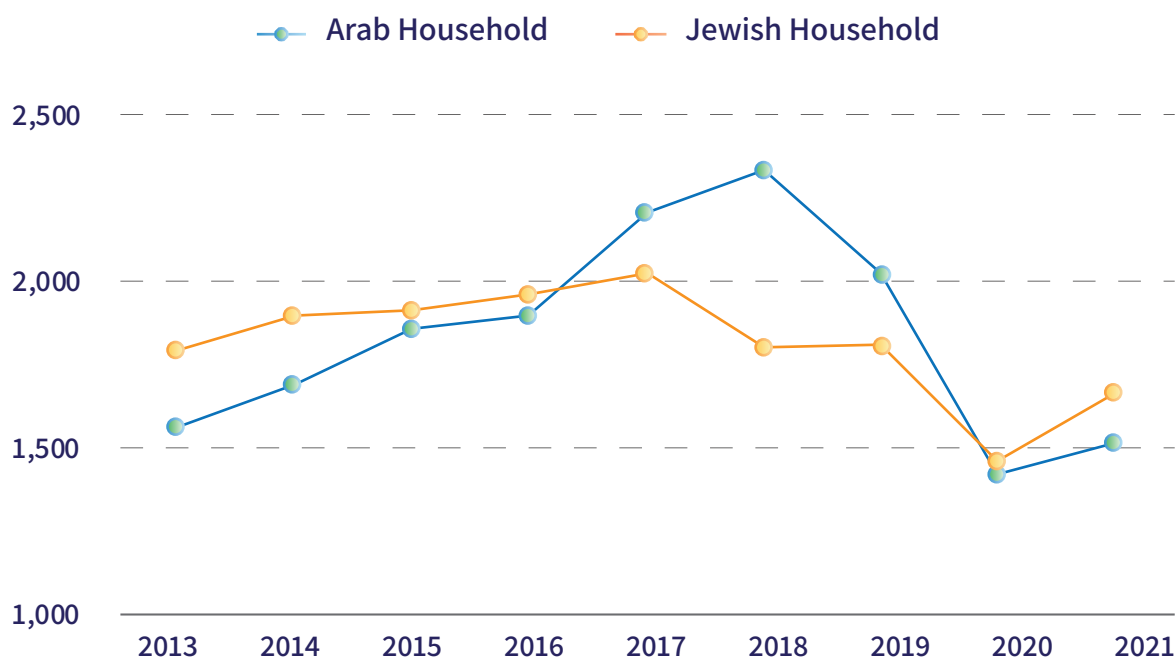
Source: The Arab Economic Forum, according to data from the Central Bureau of Statistics' social survey.

[5] Clearly there is importance in this aspect to geographical differences, but we have no data which would enable combined segmentation by population group as well as by region. However, a separate examination of the concentration of Arab employees living in the Galilee (North and Haifa region) shows that the rate of those getting to work by private vehicle among them is similar to the general national average.

3.2 Expenditure on Vehicles

In 2013 the monthly expenditure of an Arab household on vehicles⁶ totalled NIS 1,560, and was equal to about 87% of a Jewish household's expenditure on vehicles in the same year (Figure 5). A few years later the situation was reversed and in 2017-2019 an Arab household spent on average about 17% more: about NIS 2,200 on average, compared with about NIS 1,900 by a Jewish household. With the outbreak of COVID, there was a sharp drop⁷ in expenditures on vehicles by the Arab household, but we can logically assume that this is only a temporary drop, and a recovery in employment in Arab society is expected to bring with it an increase in income and in expenditures by Arab households, particularly in expenditures on vehicles.⁸

Figure 5: Monthly Expenditures on Vehicles by Arab and Jewish Households



•In 2019 the method of estimation in the household expenditure survey was changed, therefore there is a break in the data sequences.

Source: The Arab Economic Forum, according to data from the Central Bureau of Statistics' survey on household expenditures.

[6] Expenditures on vehicles include ongoing expenditures (insurance, gasoline, repairs, maintenance etc.) and from 2013 this expenditure also includes purchasing cars and other vehicles.

[7] Barak and Miaari (2023), Employment Trends in Arab Society Before and Following the Swords of Iron War, the Arab Economic Forum.

[8] Note that an Arab household is bigger on average than a Jewish household, and expenditures on a private vehicle increase the larger the household. Thus, given the same number of people in a household, the expenditures of a Jewish household is higher. If the composition of an Arab household were similar to the composition of a Jewish household, the expenditure for an Arab household in 2021 would be expected to be lower by about 15%, which is about NIS 230 a month.

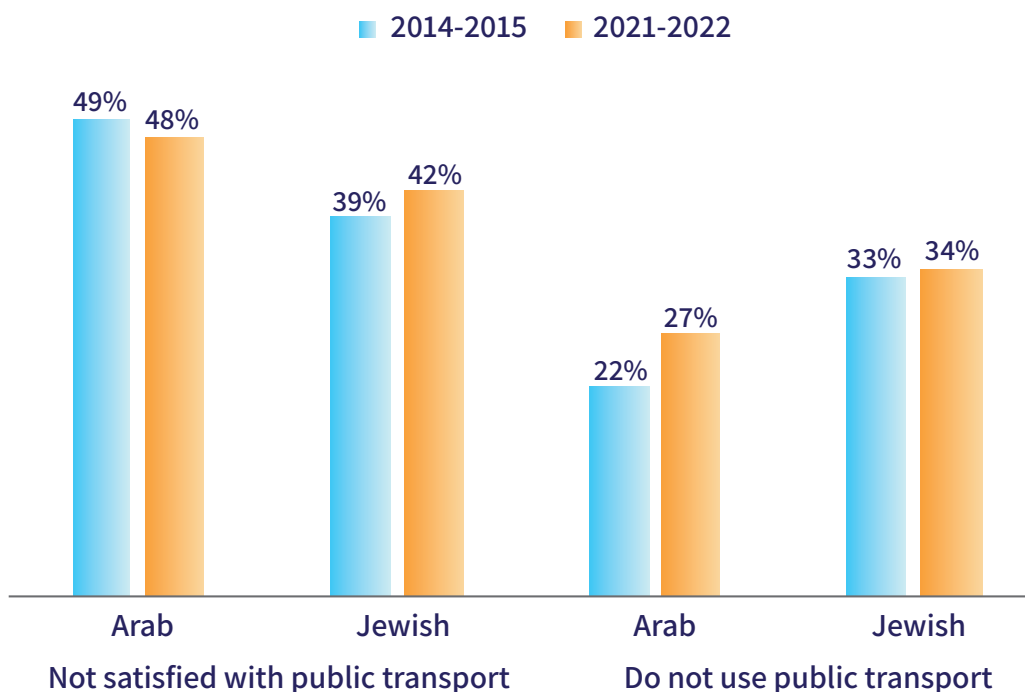
4. The Public Transport Alternative

The main alternative to the use of private vehicles is public transportation, which is why in the last decade the Ministry of Transport has invested greatly to improve the level of service, especially in the Arab communities.⁹ However, it seems that consumers of transportation prefer to use public transportation less and less compared with the use of private vehicles.

The increase in private vehicle use as a means of getting to work, as described in the previous section, came at the expense of the use of buses and service taxis, whether by public transport or by organized transport through the workplace. In addition, while expenditure on vehicles has risen, expenditure on public transport has dropped slightly, so that its share in the total expenditure on transport has decreased for Arab households, as well as for Jewish ones (Appendix 1).

This development is consistent with the findings according to which the improvement in the service level of public transport is hardly expressed in public satisfaction, especially in Arab society (Figure 6). The rate of the Arab users of public transport not satisfied with the service in their place of residence has remained almost unchanged at around 50%, and has remained high compared with that of Jewish users (which has risen slightly in the given period). Moreover, the rate in Arab society of those reporting that they do not use public transport has risen in this period by about 5 percentage points, and also in Jewish society this rate has not decreased.¹⁰

Figure 6: Satisfaction with Public Transport in Place of Residence, by Population Groups



- The differences in satisfaction between men and women are small and insignificant.
- Source: the Arab Economic Forum, according to data from the Central Bureau of Statistics' social survey.

[9] Bank of Israel (2019), Supply of Bus Services to Arab Communities. A selection of policy analyses and research issues, September 2019.

[10] Meaning the use of public transport in general and not only as a means of getting to work.

5. Summary

In the last decade there has been a continuing increase in the use of private vehicles at the expense of public transport in Arab society. It seems that the ramifications of this development have not yet manifested fully, as can be seen, for example, in the rate of employees who are unhappy with the time it takes them to get to work. This rate in Arab society has remained stable in the last decade, and is lower than the rate in Jewish society (Appendix 2). However, as long as the standard of living and the integration of Arab society into the work market continue to rise, the rate of motorization in Arab society is expected to continue rising, and to contribute to the congestion and crowding on already crowded roads.

An additional increase in traffic loads may significantly impair the Arabs' ability to integrate into employment outside their area of residence. This limitation is especially significant due to the shortage of quality places of employment in the vicinity of Arab concentrations, and given the fact that moving to another place of residence is not accepted in Arab society.

Past analyses based on administrative data by the Ministry of Transport have shown that the five-year plans for Arab society have caused a decrease in the gaps in the level of service, and that the Arab population uses public transportation.¹¹ However, gaps still exist, especially in large communities, and it is obvious that the level of service is not sufficient to rely on public transport as a means of getting to work. Therefore, there is grave concern that the sharp cut in five-year plans¹² for 2022-2026 will critically impair the efforts to improve transportation infrastructures and access to public transport in Arab society.

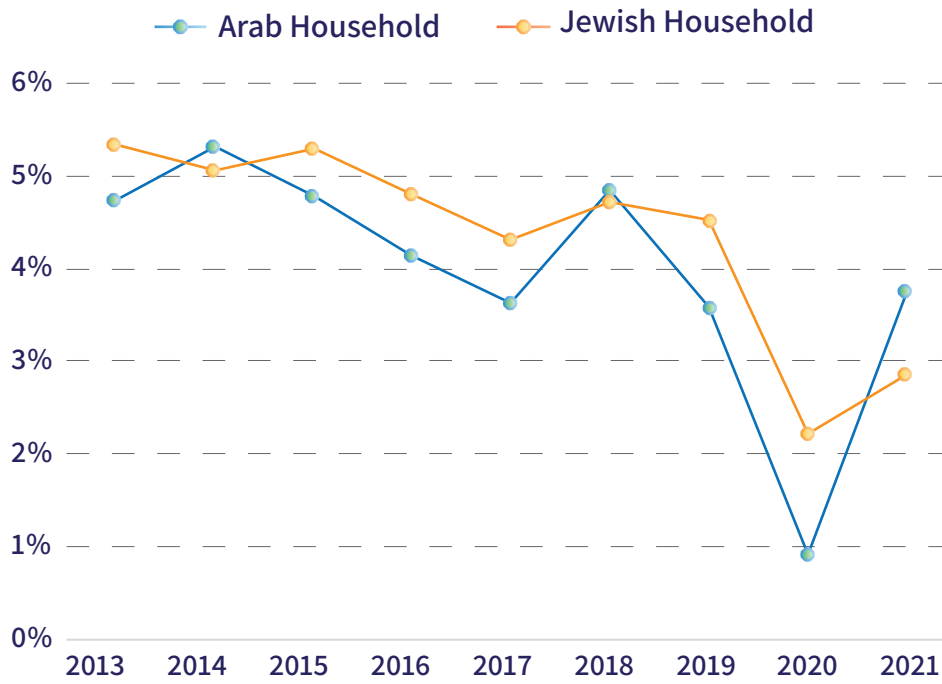
Thus, decision-makers must find a way to continue developing public transport in and around Arab communities, along with reducing the demand for mileage in Arab society by establishing quality places of employment near the centres of Arab population.

[11] Bank of Israel (2021), Is the low level of service in public transport a block to going out to work? Findings from a survey among Arab women, a collection of policy analyses and research issues, January 2021.

[12] Bank of Israel (2024), analysis of implementation of the five-year plan for economic development on the Arab population in the framework of Decision 922: achievements and blocks. Policy paper by the Research Division.

6. Appendices

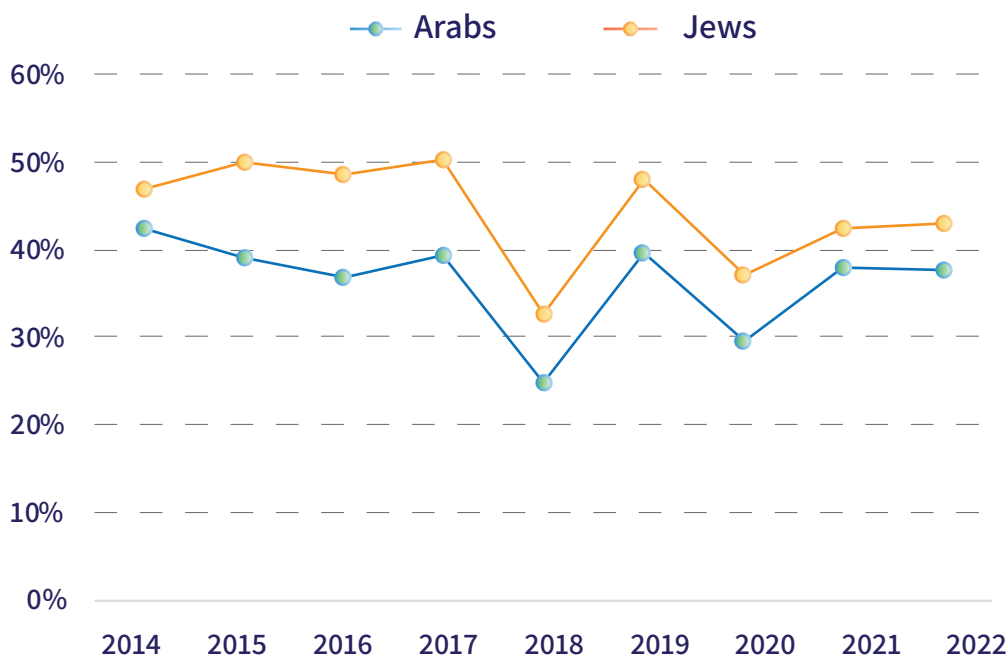
Appendix 1: Expenditures on Public Transport out of the total expenditure on Transport, by Population group



• In 2019 the method of estimation in the household expenditure survey was changed, therefore there is a break in the data sequences.

Source: The Arab Economic Forum, according to data from the Central Bureau of Statistics' survey on household expenditures.

Appendix 2: Dissatisfaction with Time Spent Getting to Work, by Population Group



• The rate of those reporting that the time spent getting to work hinders or greatly hinders them.
 Source: the Arab Economic Forum, according to data of the social survey by the Central Bureau of Statistics.