

# POPULATION CHARACTERISTICS OF THE ISLAND SECTOR AND ITS ROLE IN DAILY TRIPS IN THE HOLY CITY OF KARBALA

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## Abstract

This research dealt with the study of the population characteristics of the island sector in the holy city of Karbala, where the study showed the existence of a discrepancy in these characteristics, for example, there are neighborhoods in which the number of males is higher than the number of females, and there are other neighborhoods in which the number of females is higher than the number of males, and so on. Characteristics, as it dealt with in detail shows the characteristics of the population of each neighborhood of the island sector, as these characteristics showed their role in the generation of daily trips.

## INTRODUCTION

This research deals with the study of the population characteristics of the island sector, which included (the size of individuals, the gender structure, the age structure, the occupational structure and the economic structure (family income), where each factor was studied, as the age structure of the population and their size were known as well as the professions they practiced, as well About knowing the family income and its statement in generating the daily trips of the population. As for the problem of the research, it was represented by the following questions:

1. Is there a discrepancy between the population of the island sector in terms of demographic characteristics?
2. Do I affect the demographic characteristics of the island sector in daily trips?  
The research has developed hypotheses as follows:

There is a discrepancy in the population characteristics of the island sector. Population characteristics have an impact on generating daily trips to the island sector.

### The research aims to:

1. To identify the distribution of the population characteristics of the island sector and the extent of their variation from one neighborhood to another.
2. Knowing the role of population characteristics in the movement of daily trips and the extent of their variation from one neighborhood to another.

### First: the age structure of the population

It means the distribution of the population into different age groups, and its purpose is to know the percentage of young people who are considered among the non-productive group of the population, as well as knowing the percentage of the labor force and finally knowing the elderly

The age groups have a significant role and impact on the daily trips of the population, and this is evident through the percentages of the age groups of the population, as table (1) and chart (1) showed, as the age group (adults) ranked first with (68.95%) of the total percentages Residents of the island sector, and this means an increase in

the movement of daily trips for education, work, health, shopping, entertainment and visiting, followed by the age group (15 and less) in the second place with a rate of (29.14%), and this means an increase in daily trips for the internal and external education trip, and finally the category (elderly) ranked Third, with a rate of (1.91%) of the total population of the island sector. It is known that this group does not make daily trips.

**Table 1: Percentages of age groups for Aljazeera sector for the year 2021**

Percentage %	Age Group
68.95	Adults
29.14	Less 15 years
1.91	Old people
100	Total

**Source:** From the researcher's work based on the questionnaire.

Chart (1) Percentages of age groups for the Al-Jazeera sector for the year 2021. Source: from the researcher's work based on the data of Table (2).

due to advanced age. The age structure is one of the main factors affecting the daily trips made by the population, so these categories will be dealt with for the purpose of knowing their impact on the daily trips of the island sector.

### 1) Young age group (children and adolescents) under 15 years old

It is a group of young people that is characterized as being unproductive in societies, and it is the group most affected by the factors of births and deaths, because deaths are high among young people, especially at early ages (2)

It is clear from Table (2) for the age group of young people (less than 15) that the spatial variance of the distribution of

This age group in the neighborhoods of the island sector was as follows:

**Table 2: Percentages of age groups for the neighborhoods of the island's districts for the year 2021**

Total %	and 65 Class over %	Adults class %	Class less than 15 %	District
100		59.09	40.91	Alislah
100		85.72	14.28	Alatbaa
100	1.38	70.64	27.98	Imam Ali
100		61.53	38.47	Alintisar
100		100	0	Albaladiya
100	1.47	71.6	26.93	Albahadiliya
100		66.96	33.04	Altahadi
100		79.06	20.94	Altaawin
100		85.71	14.29	Altaaleeb
100		53.03	46.97	Aljamaya and Alolimaa
100	3.17	63.5	33.33	Alhussain
100	2.8	60.33	36.87	Alrisala
100		100		Alsaadiya
100		67.77	32.23	Alsalam
100		59.09	40.91	Alfaris
100		53.34	46.66	Almodaraa
100		58.75	41.25	Almamelchi
100	1	64.85	34.15	Almohandiseen

100	12.75	72.46	14.79	Almodhafeen
100		63.3	36.70	Alnasar
100		72.23	27.77	Alnaqeeb
100		75	25	Alwafaa
100		92.43	7.57	Ramadan
100		64.82	35.18	Dhobat Alosra
100	2.75	66.97	30.28	Fareeha

Source: From the researcher's work based on the questionnaire.

The first category (38.48%-46.97%). This category was represented in the neighborhoods (Al-Islah, Al-Jami'yyah wa'l-Ulama, Al-Faris, Al-Madara' and Al-Ma'malji), as the Al-Jami'yyah and Al-Ulama district ranked first with a percentage of (46.97%), while the Al-Islah neighborhood came And Al-Faris ranked last with a percentage of (40.91%) for each of them, which means that these neighborhoods have a high percentage of young people, and this means that they are neighborhoods characterized by a broad population base.

The second category (30.29%-38.47%). This category was represented in the neighborhoods of (Al-Intisar, Al-Taahdi, Al-Hussein, Al-Risala, AlSalam, Al-Mohandessin, Al-Nasr and Dobat Al-Osra), as the Al-Intisar neighborhood ranked first with a rate of (38.47%), while Al-Salam neighborhood came last, with a rate of (32.23%).

The third category (14.80%-30.28%) This category was represented in the neighborhoods of (Imam Ali (PBUH), Al-Bahadliya, Al-Taawon, Al-

Naqeeb, Al-Wafa' and Fariha), as the Fariha neighborhood ranked first with a percentage of (30.28%), while Al-Taawun neighborhood came last, with a rate of (20.94%).

The fourth category (0-14.79%). This category was represented in the neighborhoods of (Doctors, Al-Baladia, Al-Ta'beeh, Al-Saadiya, Al-Mazaffeen and Ramadan), as the Al-Mazaffen neighborhood came in the first place with a rate of (14.79%), while the Al-Baladiyah and Al-Saadiya neighborhoods came in the last rank with a percentage (zero), that is, there are no young people in these neighborhoods, and this means that the neighborhoods of this category are the least size of the young people's groups in the island sector. - Population category (15-60) years:

It is the middle-aged group (young people and adults), which bears the burdens of supporting the first and third groups (the young and the elderly), and thus can compensate for what society loses in terms of deaths (3), that is, it is the productive group in society that contributes to the growth and prosperity of the population because it includes the young elements of males and females (4).

It is clear from Table (2) for the age group of the middle-aged (youth and adults) that the spatial variation of the distribution of this age group in the neighborhoods of the island sector was as follows:

The first category (79.07%-100%) This category was represented in the neighborhoods of (Doctors, Municipal, Packaging, Saadia and Ramadan), as the municipality and Saadia neighborhoods ranked first with a rate of (100%), while the packaging neighborhood ranked last with a rate of (85.71%), which means that this category in it concentrates for the productive category at the level of the island sector.

The second category (67.78%-79.06%). This category represented the neighborhoods of (Imam Ali (PBUH), Al-Ta'awun, the employees, AlNaqeeb and Al-Wafa'), as Al-Taawun neighborhood came first with a rate of (79.06%), while The neighborhood of Imam Ali (PBUH) came last with a rate of (70.64%), and this category comes in the second place in possession of the productive category of the population, and this leads to an increase in the size of families in it.

The third category (60.34%-67.77%) This category was represented by the neighborhoods of each of (Al-Intisar, Al-Tahdi, Al-Hussein, AlSalam, Al-Mohandessin, Al-Nasr, Dhubat Al-Usra and Fariha), Al-Salam neighborhood came first with a rate of (67.77%) ), while Al-Intisar neighborhood came last with a percentage of (61.53%).

The fourth category (53.03%-60.33%). This category was represented by the neighborhoods of each of (Al-Islah, Al-Jamiya wa'l-Ulama, AlRisala, Al-Faris, Al-Madaraji and Al-Ma'malji), as Al-Risala neighborhood came first with a rate of (60.33%), while it came Al-Jamiya and Al-Ulama neighborhood ranked last with a rate of (53.03%), and here we notice a decrease in the adult population compared to the previous neighborhoods of this category.

## **2) The elderly category (61 years and over).**

This category represents the elderly population (males and females) who have played their role in production and the process of building society, and it is a non-productive category.

It is clear from Table (2) that the age group of the elderly formed three categories according to the total number of the elderly within the neighborhoods of the study area.

The first category (12.75%) represents this category in the (staff) neighborhood only, as this neighborhood came with the largest number of elderly people, and this means that the number of elderly people in this category is greater than the other categories, as the employees neighborhood emerged through it as one of the most It is more stable in which the elderly are concentrated, which means that families are going through the aging process more than in other neighborhoods.

The second category (1.48%-3.17%). This category represented the neighborhoods of (Al-Hussein, Al-Risala and Fareeha), as Al-Hussein neighborhood came in the first place with a rate of (3.17%), while AlRisala neighborhood came in the last place with a rate of (2.8%) %).

The third category (0.01%-1.47%). This category was represented in the neighborhoods of (Imam Ali (PBUH), Al-Bahadiliyya and AlMohandeseen). 1%), and here we notice a decrease in the number of elderly people in the neighborhoods of this category.

The fourth category: The percentage of the elderly within the fourth category was (zero), meaning that there were no elderly within this category, which included the neighborhoods of each of (Al-Islah, AlAtibaa, Al-Intisar, Al-Baladiya, Al-Tahadi, Al-Taawun, Al-Ta'leeb, Al-Jamiya wa'l-Ulama, Al-Saadiya, Al-Salam, Al-Faris , managers, al- Ma'alji, al-Nasr, al-Naqeeb, al-Wafa', Ramadan and family officers), and therefore there are no daily trips for this category within the neighborhoods of the island sector.

**Second:** the qualitative composition of the population

It is the division of the population into males and females, meaning the number of males per 100 or 1000 females, or it may be calculated on the basis of the percentage of the total number of males or females out of the total population (6).

As for the study area, the qualitative composition of the population has a significant impact on the daily trips of the population, and this is evident through the number of males and females of the age of education, work, etc., and this in turn increases the movement that generates trips. This will be clarified whether this percentage is close or not, and thus its impact In the movement of daily trips carried out by the population.

The impact of the gender structure on the movement of daily trips to the island sector is evident through Table (3) and chart (2), as it showed the percentages of each type in the island sector, as the percentage of males came in the first place with a rate of (77.62%), out of the total population of the island sector As for females, they came in second place with a rate of (22.37%), and this means an increase in the movement of daily internal and external trips, because males have a higher percentage, and this means an increase in the movement of trips to work and other trips, especially since there are some females who do not work but are housewives. a house.

**Table 3: Gender percentages for the Gezira sector for the year 2021.**

Percentage %	Kind
77.62	Male
22.37	Female
%100	Total

Source: From the researcher's work based on the questionnaire.

Graph (2) Gender percentages for the Gezira sector for the year 2021.

Source: from the researcher's work based on the data of Table (4).

Table (4) shows that there is a discrepancy between the numbers of males and females on daily trips in the island sector, as the total percentages of males have been distributed into four categories according to the percentage of males living in the island sector, and the same is the case for females, and this will be explained in the following:-

**Table 4: Percentages of males and females in the Jazira sector for the year 2021**

%Total	Female % proportions	Male % proportions	Neighborhood name
100	20	80	Alislah
100	30	70	Alatibaa
100	21,85	78,15	Imam Ali
100	38,88	61,12	Alintisar
100	27,27	72,73	Albaladiya
100	21,75	78,25	Albahadiliya
100	22,7	77,30	Altahadi
100	23,34	76,66	Altaawin
100	20	80	Altaalib
100	20,46	79,54	Aljamaya and Alolimaa
100	29,27	70,73	Alhussain
100	18,94	81,06	Alrisala
100	20	80	Alsaadiya

100	21,74	78,26	Alsalam
100	23,34	76,66	Alfaris
100	22,23	77,77	Almodaraa
100	24,08	75,92	Almaamalchi
100	23,26	76,74	Almohandiseen
100	22,75	77,25	Almodhafeen
100	25,92	74,08	Alnasir
100	20,93	79,07	Alnaqeeb
100	21,87	78,13	Alwafaa
100	19,60	8,4	Ramadan
100	26,32	73,68	Dhobat Alosra
100	22,66	77,34	Fareeha

Source: From the researcher's work based on the questionnaire.

The first category (78.27%-81.06%) This category included the neighborhoods of (Al-Islah, Al-Ta'lib, Al-Jamiya wa'l-Ulama, Al-Risala, Al-Sa'diya, Al-Naqeeb and Ramadan), as Al-Risala neighborhood came in the first place with the percentage of males for the neighborhoods of this category and it amounted to (81, 06%, while Al-Naqeeb neighborhood came last with a rate of (79.07%). Here, we notice that there are differences between the proportions of males and females in terms of number and distribution, and this, in turn, has a significant impact on the movement of daily trips carried out by both sexes.

The second category (74.09%-78.26%) This category included the neighborhoods of (Imam Ali (PBUH), Al-Bahadliya, Al-Tahaddi, Al-Ta'awon, Al-Salam, Al-Faris, Managers, Al-Ma'alji, Al-Mohandeseen, Employees, Al-Wafa' and Fareeha). Al-Salam neighborhood ranked first with a rate of (78.26%), while Al-Ma'malji neighborhood came last with a rate of (75.92%). As for females, the percentage of this category reached (24.09%-30%). This category included the neighborhoods of each of (Doctors, the municipality, Al-Hussein, Al-Nasr and family officers), as the doctors came in the first rank with a percentage of (30%), while Al-Nasr neighborhood came in the last rank with a percentage of (25.92%), and here we notice that the number of females is less than the number of males for the neighborhoods of this category.

The third category (61.13%-74.08%) This category included the neighborhoods of (Doctors, Municipality, Al-Hussein, Al-Nasr and

Family Officers), as Al-Nasr neighborhood came first with a rate of (74.08%), while the Doctors' neighborhood came in the rank The latter, with a rate of (70%). As for females, the percentage of this category was (20.94%-24.08%). Al-Ma'amaliji, Al-Muhandisin, Al-Muzafeen, Al-Wafa' and Fariha), as Al-Ma'amaliji neighborhood came in the first place with a rate of (24.08%), while Al-Salam neighborhood came in the last place with a rate of (21.74%), and here we also notice a decrease in the number of females compared to the number of males in these neighborhoods class.

The fourth category (61.12%) included this category (Al-Intisar) neighborhood only, and the percentage of males reached (61.12%), and this means that the lowest number of males is in Al-Intisar neighborhood for this category. %-20.

93% This category included the neighborhoods of (Al-Islah, Al-Ta'leeb, Al-Jamiya wa'l-Ulama, Al-Risalah, Al-Sa'adiya, Al-Naqeeb and Ramadan), as the Al-Jam'iyah and Al-Ulama neighborhood came first with a percentage of (20.46%), while Al-Risala neighborhood came in the last rank At a rate of (18.94%), and we note from the



foregoing that there is a large difference between the proportions of males and females for the neighborhoods of the island sector, i.e. there is no equality or convergence between the ratios of males and females in terms of size or distribution, and this in turn has an impact on the daily trips that males and females take within Reviving the study population, as it is the responsibility of males to support their families more than females, and this means an increase in business trips, shopping and treatment, as well as females have a role in increasing the movement of daily trips, especially visiting trips, as these trips increase with an increase in the number of females, because females do visiting trips more than males, as well as treatment And for entertainment, they are trips made by both sexes.

### Third: Family size

The family is a human social institution consisting of a husband, wife and their children, and the number of family members varies from one family to another (7), so there is a direct relationship between the size of the family and the number of trips it makes. It is clear from Table (5) that the number of family members varies from Neighborhood to neighborhood and with great differences, and therefore it was divided into four categories according to the total number of individuals in each neighborhood:

The first category (4.82%-13.30%). This category included the revival of (Imam Ali (PBUH), Al-Bahadeliyah, Al-Tahaddiyah, Al-Risala, AlMuhandisin and Employees), as Al-Bahadaliya neighborhood came first with a rate of (13.30%) , While the Mohandessin neighborhood came last, with a rate of (7.88%). The percentage of families in the neighborhoods of this category increases compared to the neighborhoods of other categories.

**Table 5: Percentages of household members in the Jazira sector for the year 2021**

Families Numbers %	District Name
0.85	Alislah
0.61	Alattibaa
9,25	Imam Ali
1,60	Alintisar
0,80	Albaladiya
13,30	Albahadiliya
9,44	Altahadi
1,93	Altaawin
0,61	Altaalib
2,59	Aljamaya and Alolimaa
2,59	Alhussain
9,21	Alrisala
2,03	Alsaadiya
3,30	Alsalam
1,80	Alfaris
0,61	Almodaraa
3,30	Almaamalchi
7,88	Almohandiseen
8,45	Almodhafeen
3,30	Alnasir
2,55	Alnaqeeb
3,90	Alwafaa
3,02	Ramadan

2,17	Dhobat Alosra
4,81	Fareeha
%100	Total

Source: From the researcher's work based on the questionnaire.

The second category (2.70 - 4.81%). These neighborhoods included the neighborhoods of (Al-Salam, Al-Ma'malji, Al-Nasr, Al-Wafa', Ramadan and Fariha), as the Fariha neighborhood came in the first place with a rate of (4.81%), while it came Ramadan neighborhood ranked last, with a rate of (3.02%).

The third category (0.86%-2.69%) This category included the neighborhoods of (Al-Intisar, Al-Ta'awun, Al-Jamiya wa'l-Ulama, AlHussein, Al-Sa'diya, Al-Faris, Al-Naqib and the Family Officers), as the Al-Jam'iyah, Al-Ulama and Al-Hussein neighborhoods ranked first with a rate of (2.59%) , while Al-Intisar neighborhood came last with a rate of (1.60%), and here the number of families decreased for the neighborhoods of this category.

The fourth category (0.61%-0.85%). This category included the neighborhoods of (Al-Islah, Doctors, Municipality, Packaging and Managers), as Al-Islah neighborhood ranked first with a rate of (0.85%), while the neighborhoods of Doctors, Packaging and Managers came in the last rank With a rate of (0.61%), as these neighborhoods recorded the least number of family members in the island sector.

It is clear from the foregoing that the proportions of household members differ from one neighborhood to another, and perhaps this is due to the difference in the number of residents in the neighborhoods of the Gezira sector, so a discrepancy appeared in the number of families.

**Fourth: professional installation**

The occupation is one of the patterns of the economic composition of the labor force, which is divided into three patterns, the economic activity, the vocational composition and the practical condition. Occupational composition is a set of social, economic, demographic and other factors, whether they are agricultural or industrial societies (8).

The occupations of the inhabitants of the island sector vary from one neighborhood to another, as table (6) and chart (3) show the percentages of these professions in the island sector, where state employees came in the first place with a rate of (43.36)%, out of the total number of occupations in the island sector, followed by Housewives ranked second with a rate of (30.15)%, and finally employees in the private sector ranked third with a percentage of (26.49)%, and this has a role in the movement of daily internal and external trips, as the higher the percentage of employees in both sectors means an increase in the movement of trips daily.

**Table 6: Percentages of the occupations of residents of the island sector for the year 2021**

Percentage %	Job
43,36	Government Employees
26,49	workers in the private sector
30,15	Housewives
%100	Total

Source: From the researcher's work based on the questionnaire.



It is clear from Table (7) of the occupations in the study area, according to the number of professionals from one neighborhood to another, as the professions varied between (employees, workers in the private sector, and housewives), as they were formed into four categories depending on the number of professionals in each neighborhood for each profession.

The first category (66.68%-100%) This category included the neighborhoods of each of (the association, the scholars and the directors), as the municipality district came first with a rate of (100%), while the association and the scholars came

Graph (3) the percentage of occupations for the population of the island sector for the year 2021.

Source: from the researcher's work based on the data of Table (7).

It ranked second with a rate of (66.68%), which means the highest number of state employees within the neighborhoods of this category.

The second category (46.02%-66.67%) This category included the neighborhoods of (Al-Tahaddi, Al-Ta'leeb, Al-Faris, Al-Modaraa', Al-Ma'malji, Al-Mazafif, Al-Naqeeb, Al-Wafa', and Fariha), as Al-Faris came in the first place with a rate of (61.54%), while the neighborhood came The challenge ranked last with a rate of (48.55%), and here the number of employees in the state to revive this category decreased from the first category.

The third category (33.91%-46.01%) This category included the neighborhoods of (Al-Bahadalia, Al-Taawon, Al-Hussein, Al-Risala, AlSaadiya, Al-Mohandessin, Al-Nasr and Family Officers), as the AlMohandessin neighborhood came in the first place with a rate of (46.01%), while the Al-Bahadalia neighborhood came in the last place And by (40.38%).

The fourth category (20.68%-33.90%) This category included the neighborhoods of (Al-Islah, Al-Atibaa, Imam Ali (PBUH), Al-Intisar, AlSalam and Ramadan), as the Ramadan neighborhood came in the first place with a rate of (33.90%), while the Al-Intisar neighborhood came in the last rank With a rate of (20.68%), as these neighborhoods recorded the lowest number of state employees for this category.

It is clear from the foregoing that there is a discrepancy in the proportions of employees in the neighborhoods of the study area, and this difference may be due to the variation in the number of residents in the neighborhoods between rise and fall, or the difference in the number of males and females. For workers in the private sector, they were distributed among four categories as follows:

**Table 7: Distribution of percentages of occupations of residents of the Island sector for the year 2021**

Total %	Housewives	workers in the private sector	Employees	District Name
100	46.15	30.78	23.07	Alislah
100	46.15	30.78	23.07	Alatibaa
100	37.25	35.30	27.45	Imam Ali
100	41.37	37.95	20.68	Alintisar
100		Z	100	Albaladiya
100	32.56	27.06	40.38	Albahadiya
100	27.53	23.92	48.55	Altahadi
100	35.29	23.54	41.17	Altaawin

100	50	Z	50	Altaalib
100	20	13.33	66.67	Aljamaya and Alolimaa
100	36	20	44	Alhussain
100	33.79	25	41.21	Alrisala
	21.73	36.95	41.30	Alsaadiya
100	34.93	33.33	31.77	Alsalam
100	38.46	Z	61.54	Alfaris
100	50	Z	50	Almodaraa
100	23.53	21.56	54.91	Almaamalchi
100	29.20	24.78	46.01	Almohandiseen
100	21.27	24.82	53.91	Almodhafeen
100	33.93	21.42	44.65	Alnasir
100	28.57	22.86	48.57	Alnaqeeb
100	20.33	28.82	50.85	Alwafaa
100	27.11	38.99	33.90	Ramadan
100	30.77	25.65	43.58	Dhobot Alosra
100	21.21	28.79	50	Fareeha

Source: From the researcher's work based on the questionnaire, appendices (1) and (7).

The first category (30.79%-38.99%). This category included the revival of (Imam Ali (PBUH), Al-Intisar, Al-Saadiya, Al-Salam and Ramadan), as the Ramadan neighborhood came in the first place with a percentage of (38.99%), while the Al-Salam neighborhood came in the last place with a percentage (33.33%), as these neighborhoods recorded the highest rates of the number of workers in the private sector.

The second category (25.01%-30.78%) This category included the neighborhoods of (Al-Islah, Al-Atibaa, Al-Bahadliyya, Al-Wafa', Dhubat Al-Usra and Fariha), as the Al-Islah and Al-Atbaa neighborhoods ranked first with a rate of (30.78%), while the Al-Islah and Al-Usra district came in the last rank with a percentage (25.65%).

The third category (0.01%-25%) This category included the neighborhoods of each of (Al-Tahaddi, Al-Ta'awun, Al-Jami'yah wa'Ulama, Al-Hussein, Al-Risala, Al-Ma'malji, Al-Muhandisin, Al-Mazafif, Al-Nasr and Al-Naqeeb), as Al-Risala neighborhood came first with a

rate of (25%) , While Al-Jamiya and Al-Ulama neighborhood came last with a rate of (13.33%), and in these neighborhoods the number of workers in the private sector decreased compared to the neighborhoods of the previous categories of the Al-Jazeera sector.

The fourth category: The percentage of this category was (zero) and it included the neighborhoods of (Al-Baladiyah, Al-Ta'leeb, Al-Fares and Al-Modaraa), meaning that these neighborhoods do not have workers in the private sector. It is clear from the foregoing that the number of workers in the private sector is low in the neighborhoods of the study community, and this in turn has an impact on the daily trips made by the population.

The proportions of housewives in the neighborhoods of the Gezira sector were also arranged in four categories as follows:

The first category (26.77%-37.50%) This category included the neighborhoods of (Al-Islah, Al-Atibiya and Al-Intisar), as the Al-Atibiya neighborhood came first with a rate

of (37.76%), while the Al-Islah and Al-Intisar neighborhoods came with a rate of (30%) For each of them, the neighborhoods of this category recorded the highest rates of housewives in the Gezira Strip, which means that they represent the most concentrated neighborhoods for housewives.

The second category (19.28%-26.76%) This category included the revival of (Imam Ali (PBUH), Al-Bahadliyya, Al-Ta'awun, Al-Ta'leeb, AlHussein, Al-Risala, Al-Salam, Al-Faris, Managers, Al-Nasr and family officers), as the neighborhood of Imam Ali came (A) ranked first with a rate of (26.76%), while Al-Taawun neighborhood came last with a rate of (22.07%).

The third category (0.01%-19.27%). This category included the neighborhoods of (Al-Tahaddi, Al-Jamiya wa'l-Ulama, Al-Saadiya, Al-Ma'malji, Al-Mohandeseen, Al-Muzaffen, Al-Naqeeb, Al-Wafa', Ramadan and Farha), as the Ramadan neighborhood came in first place with a percentage of (19). 27%, while Al-Jamiya and Al-Ulama neighborhood came last with a rate of (12%).

The fourth category: This category included the (municipality) neighborhood only, with a percentage of (zero), meaning that there are no housewives in this neighborhood.

**Fifth:** the educational structure

The study of the educational composition is of great importance, as the educational attainment of the population affects their lives and their social and economic positions (9). Education is one of the developmental, social and economic indicators of the population and its impact appears on other aspects of the population such as marital status, economic activity, type of occupation and family size (10).

Education is one of the factors affecting the movement of daily trips for the population of the island sector, as the increase in the number of learners leads to an increase in the movement of daily trips for the study community, and this is evident through the questionnaires distributed to the population, so it is clear from Table (8) that the number of students has been arranged within four Categories as follows:-

The first category (7.87%-11.15%) This category included the neighborhoods of (Al-Bahadalia, Al-Tahadiyyah, Al-Risalah, and AlMohandeseen), as Al-Bahadalia neighborhood came in the first place with a rate of (11.15%), while the Al-Mohandeseen neighborhood came in the last place with a rate of (9.50%), which It means that the highest percentage of students recorded in the neighborhoods of this category in the Gezira sector.

**Table 8: Percentages of students in the island sector for the year 2021**

Students %	District Name
0.82	Alislah
0.35	Alattabaa
7.04	Imam Ali
1.29	Alintisar
1.29	Albaladiya
11.15	Albahadilya
9.97	Altahadi
2.23	Altaawin
0.93	Altaalib
2.34	Aljamaya and Alolimaa
2.11	Alhussain
9.74	Alrisala

3.52	Alsadiya
4.10	Alsalam
1.52	Alfaris
0.93	Almodaraa
2.69	Almaamalchi
9.50	Almohandiseen
7.86	Almodhafeen
3.16	Alnasir
3.16	Alnaqeeb
4.10	Alwafaa
2.81	Ramadan
1.64	Dhobat Alosra
5.63	Fareeha
%100	Total

Source: From the researcher's work, based on the questionnaire, appendices (1) and (9).

The second category (4.11%-7.86%) This category included the neighborhoods of (the employees and Freiha), as the employees neighborhood came in the first place with a rate of (7.86%), while the Freiha neighborhood came in the last rank with a rate of (5.63%).

The third category (1.65%-4.10%) This category included the neighborhoods of (Al-Ta'awun, Al-Hussein, Al-Jami'yah wa'l-Ulama, Al-Sa'diya, Al-Salam, Al-Ma'malji, Al-Nasr, Al-Naqeeb, Ramadan and

Al-Wafa'). ), while Al-Hussein neighborhood came last with a rate of (2.11%).

The fourth category (0.35-1.64%) This category included the neighborhoods of (Al-Islah, Al-Atibaa, Al-Intisar, Al-Baladiah, Al-Ta'beeh, Al-Faris, Managers and Family Officers), as the Family Officers neighborhood came in the first place with a rate of (1.64%), while the

Doctors' neighborhood came in the last place At a rate of (0.35%), which means that the lowest number of students in the district is in the island sector.

It is clear from the foregoing that there are differences in the number of students between the neighborhoods of the island sector according to the number of residents for each neighborhood, and this difference may be due to the difference in cultural awareness of the necessity of education among the residents of these neighborhoods and other reasons. the students.

### **Sixth: Family workers**

The size of the labor force in society depends on demographic and social factors, and there is no doubt that this is related to the size of the population as a whole, but the age structure is one of the most important demographic factors affecting the labor force (11).

It is clear from Table (9) that the number of workers in the families of the island sector has been divided into four categories according to the number of workers in these families.

**Table 9: Percentages of working family members for the Jazira sector for the year 2021**

Percentage %	District Name
0,64	Alislah
0,97	Alatabaa
9,07	Imam Ali
1,90	Alintisar
0,97	Albaladiya
12,41	Albahadilya
9,93	Altahadi
1,51	Altaawin
0,43	Altaalib
1,83	Aljamaya and Alolimaa
2,69	Alhussain
10,25	Alrisala
2,48	Alsaadiya
2,91	Alsalam
1,94	Alfaris
0,43	Almodaraa
3,56	Almaamalchi
8,42	Almohandesin
7,01	Almodhafeen
3,60	Alnasir
2,80	Alnaqeeb
4,31	Alwafaa
2,15	Ramadan
2,5	Dhobat Alosra
5,29	Fareeha
%100	Total

Source: From the researcher's work based on the questionnaire, appendices (1) and (9).

The first category (7.02%-12.41%) This category included the neighborhoods of (Al-Bahadalia, Al-Tahadiyyah, Al-Risala and AlMohandessin), as Al-Bahadaliya neighborhood came in the first place with a rate of (12.41%), while the Al-Mohandeseen neighborhood came in the last rank with a percentage of ( 8.42%, which means that the highest number of workers per family is in these neighborhoods in the Gezira sector.

The second category (3.61%-7.01%) This category included the neighborhoods of (staff, Al-Wafa and Fareha), as the Al-Muzaffen neighborhood came first with a percentage of (7,015), while the AlWafaa neighborhood came in the last rank with a percentage of (4,315).

The third category (1.52%-3.60%) This category included the neighborhoods of each of (Al-Intisar, Al-Jamiya wa'l-Ulama, Al-Hussein, Al-Saadiya, Al-Salam, Al-Fares, Al-Ma'malji, Al-Nasr, Al-Naqeeb, Ramadan and family officers), as Al-Nasr neighborhood came first With a rate of (3.60%), while the Al-Jamiya and Al-Ulama neighborhood came last, with a rate of (1.83%).

The fourth category (0.43%-1.51%) This category included the neighborhoods of (Al-Islah, Doctors, Municipality, Al-Ta'awon,

Packaging and Managers), as Al-Ta'awun neighborhood came first with a rate of (1.51%), while the packaging neighborhoods came The managers are in the last rank with a rate of (0.43%) for each of them, and this means that the lowest number of workers in the family is in the neighborhoods of this category of the island sector. So it is clear from the foregoing that the number of workers within the same family varies from one neighborhood to another within the neighborhoods of the island sector, and this therefore has a role in the movement of the daily trips carried out by the workers.

**Seventh: family income**

The monthly income is one of the factors affecting the generation of daily trips, because the monthly income affects the increase in the standard of living of the family, as table (10) and chart (4) show the percentages of each income category in the island sector, which is determined within three categories, which are (500 dinars and less, 5000- 1,000,000 dinars, 1,000,000 dinars or more), as the category (501-1,000,000) million dinars ranked first with a rate of (44.53%) of the total percentages of income categories, followed by the category (500 dinars) and less in the second rank with a rate of (36.71%). Finally, the category (one million dinars) or more ranked third with a rate of (18.76%), and this discrepancy in the income categories has a role in the movement of daily trips.

**Table 10: Percentages of the monthly income groups for residents**

Percentage %	Category
44,53	1000000-501 Dinar
36,71	500 Dinar
18,76	1000000 Dinar
%100	Total

Source: From the researcher's work, based on the questionnaire, appendices (1) and (11).

Chart (4) Percentages of income groups for the population of the island sector for the year 2021.

Source: from the researcher's work based on the data of Table (11).

It is clear from Table (11) the variation in the monthly income volume of the population of the Gezira Strip, and this in turn arranged the income levels within four categories for the neighborhoods of the Gezira Strip, according to the number of families whose income is less than (500 thousand) ..... etc. for the rest of the income levels.

First: Income level (500 thousand dinars or less)

The first category (51.52%-66.70%) This category included the neighborhoods of each of (Doctors, the Society, the Scholars and Peace), as the Doctors' neighborhood came first with a rate of (66.7%), while the neighborhoods of the Society, the Scholars and the Peace came with a rate of (60.0%) %, which means that the highest percentages of the population whose income level is (500 or less) are within the neighborhoods of this category in the Gezira sector.

The second category (36.67%-51.51%) This category included the neighborhoods of (Imam Ali (PBUH), Al-Intisar, Al-Hussein, Al-Risala, Al-Faris, Al-Ma'malji and Al-Nasr), as the neighborhood of Imam Ali (PBUH) came first with a percentage of ( 51.51%, while Al-Intisar neighborhood came last with a rate of (42.85%).



The third category (14.29%-36.66%) This category included the neighborhoods of (Al-Islah, Al-Bahadiliyya, Al-Tahadiyyah, Al-Ta'awon, Al-Saadiya, Al-Mohandeseen, Al-Muzaffen, Al-Naqeeb and Ramadan), as the Al-Mohandessin neighborhood came first with a rate of (36.66%). While the Ramadan neighborhood came last, with a rate of (20%).

The fourth category (0%-14.28%). This category included the neighborhoods of (Al-Baladiya, Al-Ta'beeh, Al-Modaara', Al-Wafa' and Fareeha), as Al-Wafa' came in the first place with a rate of (14.28%), while the neighborhoods of Al-Baladiyah, Al-Ta'leeb, Al-Modaara' and Fareeha came with a percentage of (0). ), meaning that the monthly income of the residents of these neighborhoods is higher than the first level of income.

## 2) Income level (500-1000000)

The first category (70.60%-100%) This category included the (canning) neighborhood only, meaning that the highest percentage of the population whose income level is within the middle level is in the canning neighborhood, as the percentage for this neighborhood reached (100%).

**Table 11: Distribution of percentages of monthly income for residents of the Jazira sector for the year 2021**

Total %	1000000 more%	1000000%-500	500 less %	District Name
100	0	66,7	33,3	Alislah
100	0	33,3	66,7	Alatibaa
100	24,25	24,25	51,51	Imam Ali
100	14,3	42,85	42,85	Alintisar
100	100	0	0	Albaladiya
100	8,7	60,86	30,44	Albahadilya
100	21,62	48,64	29,74	Altahadi
100	14,28	57,15	28,57	Altaawin
100	0	100	0	Altaalib
100	0	40	60	Aljamaa and Alolimaa
100	8,34	41,66	50	Alhussain
100	7,69	43,6	48,71	Alrisala
100	12,5	62,5	25	Alsaadia
100	13,34	26,66	60	Alsalam
100	42,86	14,28	42,86	Alfaris
100	100	0	0	Almodaraa
100	7,7	46,15	46,15	Almaamalchi
100	10	53,34	36,66	Almohandesin
100	45,45	24,25	30,30	Almodhfeen
100	14,29	35,71	50	Almodhfeen
100	33,33	33,34	33,33	Alnaqeeb
100	28,57	57,15	14,28	Alwafaa
100	20	60	20	Ramadan
100	0	50	50	Dhobat Alosra
100	29,41	70,59	0	Fareeha

Source: From the researcher's work based on the questionnaire, Appendix (1) and (10).

The second category (50.01%-70.59%). This category included the neighborhoods of (Al-Islah, Al-Bahadliyya, Al-Taawon, Al-Saadiya, Al-

Mohandessin, Al-Wafa', Ramadan and Fariha), as the Fariha neighborhood came in the first place (70.59%), while the neighborhood came Engineers ranked last with (53.34%).

The third category (26.67%-50%) This category included the neighborhoods of (Doctors, Intisar, Al-Tahdi, Al-Jamiya wa'l-Ulama, AlHussein, Al-Risala, Al-Ma'malji, Al-Nasr, Al-Naqeeb and Family Officers), as the Family Officers neighborhood ranked first (50%) , while the doctors district came last with a rate of (33.3%).

The fourth category (0%-26.66%) This category included the neighborhoods of (Imam Ali (PBUH), the municipality, peace, the knight, managers and employees), as the peace neighborhood came in the first place (26.66%), while the municipality and managers neighborhoods came In the last place with a rate of (zero%), meaning that the monthly income of the residents of these neighborhoods is higher or lower than the average income level.

It is clear from the foregoing that there is a discrepancy in the distribution of the income group, (500-1000000) in the neighborhoods of the island sector, and this in turn has an impact on the generation of daily trips in the neighborhoods of the study community, as we note that the percentages of the income group (500-1000000) are higher than the percentage of the income group. Income (500 or less), and this has a role in increasing the generation of daily trips, because the higher the income, the more daily trips that the family makes, especially recreational trips.

### 3)Income level (1,000,000 or more)

The first category (45.46%-100%) This category included the neighborhoods (the municipality and the directors), as the percentage is (100%) for each of them, which means that all residents of these neighborhoods have income within the high level.

The second category (21.63%-45.45%) This category included the neighborhoods of (Imam Ali (PBUH), Al-Faris, the employees, AlNaqeeb, Al-Wafaa and Fariha), as the employees neighborhood came in the first place with a rate of (45.45%), while Imam Ali neighborhood (pbuh) came last with a rate of (24.25%).

The third category (0.01-21.62%) This category included the loss of the neighborhoods of (Al-Intisar, Al-Bahadiliyya, Al-Tahadiyyah, Al-Ta'awun, Al-Hussein, Al-Risala, Al-Saadiya, Al-Salam, Al-Ma'malji, AlMohandeseen, Al-Nasr, and Ramadan), as the Al-Tahadi neighborhood came in the rank The first is (21.62%), while Al-Ma'malji neighborhood came last with a rate of (7.7%).

The fourth category (zero) This category included the neighborhoods of (Al-Islah, Doctors, Canning, Al-Jamiya, Scholars and Family Officers) with a rate of (zero), meaning that these neighborhoods do not have families whose monthly income is within the third level of income.

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