



## Plan and space performance preference analysis of Suburban East and South Terminals of Tehran

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**Abstract.** Today despite development of various transportation networks, the rural terminals as displacement systems have special importance. So that increase in need for rural transportation in large scale, has established the background for many investigations, and identifying problems of the passengers and the rate of their satisfaction, will enhance the efficiency of this system. This research has the overall objective of recognizing the preferences related to the elements and plan of Tehran (East and South) terminals. The research is a descriptive – analytical one and is regarded as an applied research. The statistical universe of this research included all people who for the purpose of rural travelling had gone to the terminal, of which 201 individuals were selected randomly based on the Morgan table. The results showed that users of Tehran rural terminals were compliant of the spaces both in terms of plan and their surroundings and the main complaint was the air pollution issue.

**Keywords:** Suburban Terminals, preference, plan and spatial performance, Tehran, East Terminal, South Terminal

### 1. INTRODUCTION

Travel has long been achieved by humans, because it has been the indispensable part of human life and one of its foundations. The solemn movement of man from birth to death is a reason for this. Movement and displacement in short or long terms, to supply or gain experience has found its place in human life and travel by earth is the commonest way. Today despite significant progress in human life and especially in transportation industry, the earth travel is the most important way of displacement. In this process, the terminals like joints join travels together, considering that these places are located where roads (cities) connect to each other, so perhaps it could be stated that terminals are the first linking joint with the city or the entrance of the city. Naturally the spatial quality of them reveals the features of that city. The Past methods of transportation were through different livestock such as horses, mules, etc. covered carriers being carried by livestock were other means of travelling. A large caravan in long travels would move in groups of hundreds of people and so would be in safety from danger of the bandits. It was not possible to gather and establish a caravan within cities or neighborhoods because of thin and dark spaces of alleys, so the best place for gathering a caravan was outside the cities and because of that, caravansaries were constructed outside the cities. Among the traditional works of architecture in neighboring terminals one could mention the caravansaries and Robats. The word caravan means a number of people who travel together in groups. And 'Gafele' or 'Sarai' means the home or a location. Caravansaries were the xenodochiums (guest – houses) in between roads in Iran for long centuries and were constructed on the main routes between cities in a distance of one day travel of a caravan (Housing, road and urban development ministry).

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These places were for rest, welfare and support of caravan also they had social importance. After import of automobiles and spread of their use in consequence of rapid revolutions in urban communities in Iran in the last century, the “caravansaries” were replaced by “garages”

Garages were places where people would get on buses or mini – buses of travel agencies, these garages were often built in the center or near populated neighborhoods of the cities, but with passing of time it was required for larger spaces to respond the needs. So terminals came into existence. Hence authorities thought of regularizing passenger transportation in the cities. The idea concerning establishment of terminals in the form of European terminals was first introduced, but it took time that the first terminals be constructed. In the year 1353, Tehran municipality first discussed the scheme of constructing a large bus station around Toopkhaneh square. At last, the construction of the lands of first passenger terminal began in the Khazaneh district of Tehran and it was completed in the year 1358. After the victory of Revolution the "draft bill of construction of passenger terminals and the interdict of rural passenger automobiles traffic within city of Tehran" was approved by the Islamic Revolution Council in the month of Ordibehesht 1359, This bill would oblige Tehran municipality to construct new and appropriate terminals to cope with the requirements of various districts of Tehran, in addition to operation of existing terminal (The south Terminal), and by utilizing the fund provided by the then Planning and Budgeting organization. In the month of Tir 1359, the first passenger terminal called (Jonob=South) khazaneh Terminal began its formal work. And gradually during, later years the west Terminal (temporarily) and after that the East Terminal and Beihagghi Terminal in Tehran were constructed. Simultaneously in other large cities of the county also the construction of rural passenger terminals were in focus, so terminals as an indispensable part of rural passenger fleet were introduced. After construction of these terminals problems such as difficulty in getting of tickets, and missing a bus and difference in the price of tickets and dispersion of busses because of dispersion of garages were considerably cancelled (koleini, Mohammad Reza,2010).

In our country, the passenger terminals were not defined as are today, the their only task was displacement and carriage of what was before scattered within the city, itself being the cause of time – friction, urban traffic, taking safety and comfort of citizens, scattering of drivers, slowness and lack of efficiency of the system. As city of Tehran has 4 main passenger terminals the concentration of rural travels in these four points has caused many problem in terms of traffic congestion in peripheral passages, increase in air pollution in these areas, increase in noise pollution, increase in spent time, and rates of financial costs by citizens for reaching out these terminals, (Tehran Integrated traffic and transportation studies company, Tehran 2005) also accelerated population growth and increase in the rate of immigration to the cities together with expansion of urban services, have caused improper growth of Iran’s cities. These growing cities face numerous problems and losses, such as high expenses, shortcomings and inadequacies related to the transportation issues.

In order to overcome the above mentioned problems and accessing a rapid passenger transportation system , The law of establishment of private joint stock companies of public Terminals of passenger vehicles was drafted and approved in 68/10/25 by the Islamic consultative Assembly (Majlis). In most countries, the unplanned growth is closely associated with the expansion of urban limits and growth in industrial and business activities. So in an organized, social, urban system that attempts to coordinate various economic, social and political aspects, access to a regularized and extended transportation system with appropriate efficiency is among the primary needs. This is realized when urban planners are to find proper solutions for the issue of transportation and regional communications and passenger and goods transportation system. Passenger terminals were established that in addition to reduce traffic of rural vehicles within cities and providing traffic safety for the citizens also reduces the air and noise pollutions. Also they provide welfare services to the drivers in many respects such as the

rest places, restaurants, shops, parking lots and cultural and sport facilities, post, communication, emergency, sanitary services, repair shops and .... Terminals should also be a proper and reliable place for drivers and passengers (Rostam, Afsaneh, 2010). This is while that by increasing the number of such terminals, in addition to reducing the above mentioned problems of current terminals and peripheral areas around them, increases the parameter of access to terminal facilities and decreases the time and costs of access to them. This also reduces the parameter of vehicle – kilometer travelled in all urban networks and consequently increases the overall efficiency. Among other positive outcomes is reduction in consumed fuel rates and as a result significant reduction in pollutant rates (Afandi – Zadeh, shahriar and et al.,2005) .The increase of population in cities and immigration to Tehran have resulted in increase of rural travels. As, according to the statistical information, more than 70% of rural travels in Iran are done by buses, planning for rural bus terminals is of great importance (Road maintenance and transportation organization, 2004). Today it is demonstrated that the past expensive solutions like construction of highways, bridges,..... in themselves could not solve problems and issues related to transportation and traffic systems. But in case of availability of a reliable public transportation system the problem would be solved significantly (Road maintenance and transportation organization, 2014). The rural passenger terminals as centers of transforming rural travels to urban ones and vice versa, have fundamental role in transportation within Tehran province, so that millions of people are displaced annually through main terminals of Tehran province. As the growth of rural travels of the province is indispensable and tasked policies such as the law of public transportation development and management of fuel consumption have obliged government to invest in this sector, It seems necessary to pay special attention to the terminals in terms of providing proper services and reduction of costs imposed on the system (Shojaat, Siavosh et al. 2013)

## **2. PROBLEM PRESENTATION AND INTRODUCING SCOPE OF RESEARCH**

City of Tehran is located on the southern mountainside of Alborz Mountains and margins of the central desert of Iran in a rather flat plain, which slopes from north to south. Its population is about 13 millions spread in an area of 15000 square kilometers which has limited aerial and railway communication facilities and main displacement of passengers takes place by buses. The communication roads of Tehran are from the east, west and south.

From east it is through Haraz and Firooz – kooch roads, from west it is through Karadj road and from the south it is by khorasan, Ghom and saveh roads. Tehran currently has four main rural terminals. These are the South, East, West and Beihaghi terminals. In this research focus is on the East and South terminals. By increase of country's population, congestion of population in the in urban texture, appearance of traffic and growth of rural travels, resulted in the construction of first terminal of Tehran, the South Terminal made by Tehran municipality and is now the first equipped rural bus terminal facility, having a land area of 17 hectares and infrastructure of 1700 square meters. This terminal is built in the south of Tehran and on the left side of Khazaneh Street and on the northern side of Besaat Highway in a land area of 16400 square meters. After completion of the project it would contain 750 buses and 17850 passengers. Passengers would enter from the southern side, in the surroundings work and ticket-sale offices are located. Offices are separated from each other. In the central portion of the hall, the sanitary facilities, central control room – and Information, stairs and lifts and welfare services are located. Construction of South Terminal helped preventing scattering of the garages and passenger agencies in various parts of the central part of Tehran and also responded to many problems such as passenger wandering to get tickets, missing buses because of unfamiliarity with the location of garages, and presence of discrimination between large and small garages also resulted in reduction of crashes, environmental pollution, and delay in the hours of departure and time of the passengers. East terminal is located in Tehran pars and near Afsariye highway, in a distance of 6 km from the future East of Tehran Terminal and includes about 20 corporates and mini – bus terminals. Now travels to the north, east and north east, takes place

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from this terminal. Its buildings include a number of corporates, which having about 100 to 200 square meters area, are comprised of ticket- sale, waiting, administrative, and depository sections. The passenger entrance is from the north and platforms are located on the southern side. Aside from the corporates, this small terminal contains fast food, hand- made industries and baggage sale sections, administration and security buildings are located in the eastern part. In future, lands of this terminal will be delivered to the electrical bus station.

There are no lateral and service spaces allocated to the Terminal. Business and administrative sections are scattered on the northern side in the form of kiosks. Passengers to reach bus platforms should pass through the bus routes, there are no platform for disembark of the passengers. The peak hours of this Terminal starts Wednesdays from 6 P.M to 9:30 PM and Thursdays from 2.00PM to 5.00PM .from Saturday up to Tuesday are considered unfrequented days of the week. In this terminal there are common parking lots for both taxis and comionet and embarking platforms are opposite each other. Access to this terminal is through Afsariye highway, Damavand Street and continuation of Resalat highway. As a whole this terminal is insufficient for passenger needs during rush hours and seasons. There are some inadequacies for this terminal in the following order: The outline of the Terminal as an indispensable urban element if it is to have proper performance should observe corresponding standards. Lack of main urban linking networks has caused traffic accumulation in the streets leading to this terminal. it seems that inadequate parking lots within the terminal and human congestion around the site have created problems that are due to inappropriate location of the present terminals of Tehran also are related to the inappropriate area and buildings that are in use now, which causes inadequate security in the halls, increase in the air and noise pollutions which is considerable.

The current facilities are not used in a proper way. It seems that impossibility of extending the terminal because of being surrounded by adjacent main streets, is another difficulty which by short – term, and long term calculations one can design and plan for a better terminal with a good performance.



**Figure 1.** location of “East Terminal” on the satellite image of Google Map 2014.



**Figure 2.** Location of “South Terminal” on the satellite image of Google Map 2014.

### **3. THEORETICAL BASIS**

#### **3.1. Importance and necessity of terminal construction in urban networks**

Road networks because of their expansion, easy application, low costs and public usage especially for intermediate and low income people and also extension to the borders are of great efficiency. The start and end points of earth travels are the most important and critical options in decision – making and implementation of economic and social programs of the communities. Specifying and determination of these locations in every city and region are among the important strategies of urban and regional development, despite extension of various transportation networks in the country in terms of displacement of passengers (road – rail road, naval and aerial), more that 90% is by the roads. On this basis, the necessity for surveillance of services offered in this sector (Road transportation) becomes obvious. Finding an appropriate location for construction of a terminal also is of great importance. That should be located where there is access to it by people and cover their needs in terms of transportation issues (Nazemian, 2011). The terminal is a kind of transportation facility located at the beginning or end of public passenger or goods transportation service routes, and is used for staying, embarking or disembarking of passengers or goods (Dad far, Rostami, 1999)

#### **3.2. Kinds of Terminals and their classification**

Terminals are divided in to two main categories: passenger terminals and goods terminals (Shamsi,shahrabadi,2002), classification of various terminals is done according to the operational domain, ownership, applicable systems in the design, performance extent, different kinds of transportation, also local concentration of the components. Terminals are divided according to operational domain into internal passenger terminals (passenger terminals with limited operational domain) and border passenger terminals, terminals according to the kind of ownership are divided in to private and governmental passenger terminals (Bazazian, saman, 2011) terminals, according to the kind of performance, are divided in to two groups: rural single – purpose terminals and rural multi – purpose terminals and according to the rate of local concentration of components in to concentrated ,semi – concentrated, and non – concentrated terminals (karimi, paria, 2010)

#### **3.3. The objectives of terminal design**

The ultimate objective of rural passenger terminal construction is to provide the passengers (both inward and outward of the city) with services. Therefore selection of a proper system means taking a decision about the way of combining networks of movement of humans, goods and vehicles that respecting all available and influencing factors respond to the current and operation periods.

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As a whole, kinds of terminals with respect to applicable patterns in design are divided into single – building and multi – building terminals. And single building terminals are divided into three concentrated, radial and linear terminals and multi – building terminals also are divided into three concentrated, radial and linear multi – building terminals. (Abadi quarterly) .which their design is often dictated by the number of buses and passengers (Beihaghi). According to the overall form of the site and applicable patterns in the passenger building, principally it has an extended form and follows after the site form (Rahim- Toroghi, Mahdie, 2011), in design of building also, like design of the site, the question of fluidity and transparency is the main principle of station design. In terms of spatial organization, the terminal space includes the following parts (thesis) 1- main waiting space 2- service and ticket sale 3- control and secondary waiting 4- outward space for embarking of buses (platforms) and ultimately the urban transportation is considered (shamsi, shahrabadi, 2000) in spatial relations of terminal plan and regularizing the way the passenger moves from urban transportation section, through different terminal spaces upto reaching the bus and access to urban vehicles, to have correct and logical links between existing elements within the passenger terminal ,The following issues should be considered:

No encounter between passenger and bus movement up to the moment of embarking, no encounter between departing and coming in passengers, no encounter between vehicles departing and vehicles coming in, no encounter between urban transportation system and transportation within the terminal (or traffic in and out of the terminal) and providing single course movement for the vehicle and possibly passengers.

**Table 1.** Summary of accomplished studies on the rural terminals.

Researcher	Subject	Results
shojaat et al (2011)	Performance analysis of rural passenger terminals of Tehran province	Investigation of Tehran terminals performance and estimating the number of displaced passengers per year are done and annual growth factor for necessary space for construction of building was estimated and with regard to inadequate terminal spaces some suggestions are offered
Rostami (2009)	Investigation of south Terminal as an urban space	South Terminal, in the past was the habitat of low – income emigrants and the site selection of the terminal was good and had qualitative components, but today due to expansion of the city, it has not the previous qualities and has caused some problems
Afandizadeh et al (2006 )	locating new rural bus terminals with the aim of reducing access time of users	In this research 15 proposed locations for construction of new rural bus terminals are presented that accordingly the passenger would travel less distance to reach the terminal
Afandizadeh et al (2007)	Feasibility studies of multi-purpose passenger terminal construction in Iran	Passenger terminals are among the most important parts of transportation systems and have significant role in the traffic of the cities, but authorities have not considered the benefits of multi-purpose terminals. this article evaluates the importance and feasibility of these terminals
Mousavi et al (2013)	Investigation, definition and basic features of terminals and presenting methods of locating terminals based on the deviation rate estimation from normal statistical universe	Large cities have wide spread and complex transportation systems the main part of Transportation system design depends on the improvement of transportation routes, while one cannot forget the proper distribution of terminals in this system. The aim of this article is to investigate definition and basic performance of terminals and identifying optimum points or areas for the location of terminals
Laetitia Dablanc et al (2010)	Locating urban transportation terminals for better energy utilization, case study: city of Paris	By relocating the terminal to the surroundings of the city the air pollution which amounts to 15000 ton per year of co2, gets better and reduces population concentration in the city
Akira Morita et al (2014 )	Urban transportation and the way of its administration in developing countries of Asia (to find	Due to expansion of urbanism, the most significant environmental reason in Asia is urban transportation, because of lack of facilities in road networks and



	transportation policy)	infrastructures, by a survey done, most of passengers required better road transportation services which, social, economical, organizational factors are keys for improvement of this problem.
H.A Sikkel (2003)	An underground Bus terminal in Amsterdam with respect to legal and political issues	Due to increase in the rate of travels and transportation and lack of adequate space, an innovative solution bus been resulted in establishment of an underground bus terminal

**4. RESEARCH METHODOLOGY**

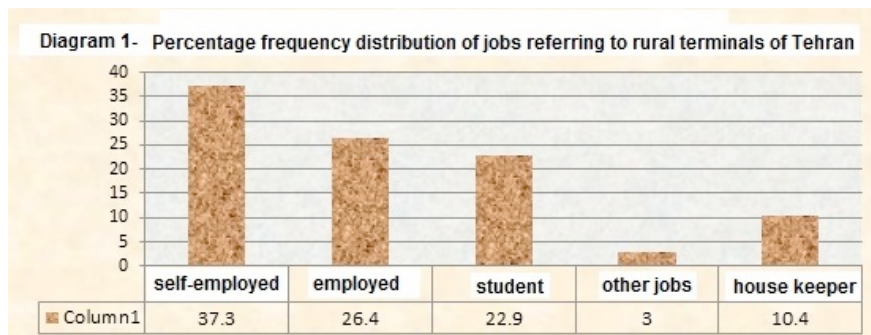
This research concerning the nature, subject and objectives defined for it, is among applied Research works and of descriptive – analytical kind. As in this research, query and negotiation tools have been used for information gathering, so from another point of view it could be regarded as a survey research. In this research the required information has been gathered in two ways:

- A- Desk surveying method- in which information is gathered by referring to the books, articles and archives of related systems.
- B- Field method -This method utilizes such tools as: eye- witnessing, interview, query and field data gathering to gather required data. The statistical universe of this research was all people who used the east and south terminals, from which 201 random samples were selected through Morgan and Jersy Tables and they were questioned directly.

The variables of this research were: “traffic of streets leading into the terminal, human congestion around the terminal, current location of the terminal, the area of existing buildings in use, proper security within halls, possibility of extending the terminal, air and noise pollution around the terminals and the situation of facilities located within the terminal" that their impact on the performance preference Of current terminals within Tehran City are evaluated. Data gathered were tested using SPSS software and binomial non-parametric test for detection of relations between the parameters.

**4.1. Description of the research findings**

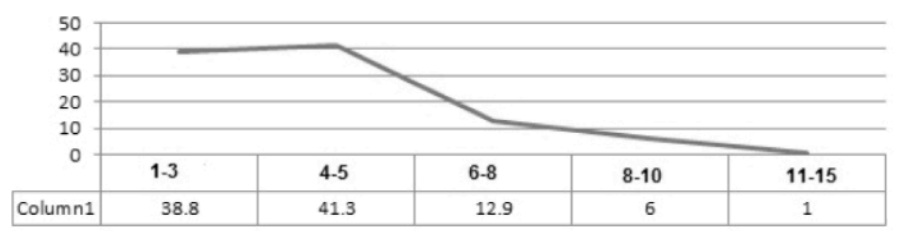
- 1- Based on the results found from extracted queries of a total number of 201 statistical samples being questioned, the largest frequency was 50.2% which belonged to men and 49.8% to women, also the ages of respondents show that 74.7% of them were in the range of 20-40 years old.
- 2- Investigation of research findings revealed that 13.9% of the respondents had M sc. and PHD degrees and most of the participants (33.8 %) had B.S degree. While 13.4% were over-diploma and 28.9% had diploma and 10% were under-diploma.



**Diagram 1.** Percentage frequency distribution of jobs referring to rural terminals of tehran.

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- 3- The extracted information out of queries showed that most respondents were self-employed and after them were employed ones (26.4%), students (22.9%) house-keepers (10.4%) and other jobs (3%).
- 4- In this research, 41.3% of participants had the household dimension of 4-5 individuals and more than one third (38.8%) had 1-3 individuals and 19.9% had 6 or more individuals in the family.



**Diagram 2.** Percentage frequency distribution of average size households in the study participants.

## 5. TEST OF ASSUMPTIONS AND ANALYSIS OF THE RESEARCH FINDINGS:

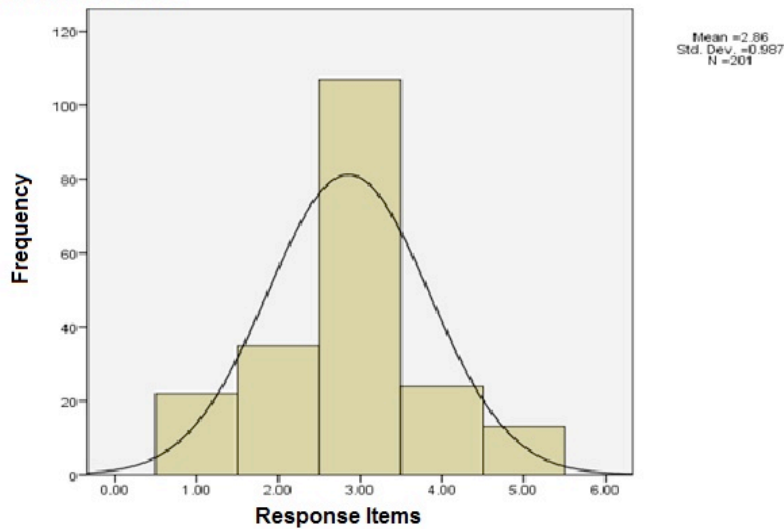
### 5.1. Investigation of normality of the research variables

**Table 2.** Resultsof Kolmogrov-Smirnov for investigation of normality of data distribution.

Assumptions	dependent variable	Independent variables									
		Traffic of streets leading to the terminal	Inadequate Terminal parking lot space	Human congestion around the terminal	Current inappropriate location of terminals	Inadequate area and improper buildings now in use	Inability to provide security for the halls	Impossible expansion of terminals	Increase in the air pollution rate of the city	Increase in the noise pollution rate of the city	Reduced use of facilities
N	201	201	201	201	201	201	201	201	201	201	201
Normal Mean	2.8557	3.5174	3.2587	3.4378	2.7910	2.7910	2.9403	3.4229	3.9751	3.9353	3.3483
Parameters std. Deviation	98695	1.1004	1.2580	1.01851	1.0982	1.09823	1.37347	1.13370	1.13771	1.01034	1.02377
Most Extreme Absolute	275	187	169	197	192	192	169	192	255	262	230
Differences Positive	258	163	169	179	191	191	159	148	184	151	230
Negative	-275	-187	-145	-197	-192	-192	169	-192	-255	-262	-203
Koimogorov - Smimov Z	3.892	2650	2.389	2.794	2.727	2.727	2.397	2.724	3.615	3.712	3.263
Asymp. Sig. (2-tailed)	000	000	000	000	000	000	000	000	000	000	000



**Diagram 3- Explanation of frequency percentage of repnses to satisfaction with plan and space of rural terminals**



**Diagram 3.** Explanation of frtequency percentage of repnses to satisfaction whit plan and space of rural terminals.

As the results of Table 2 show, the, z, value in Kolmogorov-smirnov test for the variable corresponding to the main assumption of the research is smaller than the z value of the table and the significance level is more than the allowable (0.05), so the difference in data distribution in this variable became significant with normal distribution, Therefore data distribution could not be assumed to be normal. For this reason the binomial non-parametric test is used for the test of main assumption of this research.

**5.2. Research assumption**

- It seems that people are not satisfied with the plan and spaces of Tehran passenger terminals, H1
- It seems that people are satisfied with the plan and spaces of Tehran passenger terminals, H0

**Table 3.** Results of binomial test for comparison of average and higher response frequencies with lower than average response frequencies concerning performance preference of plan and spaces of existing rural terminals of Tehran.

Binomial Test

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
To what extent you are satisfied with Tehran’s terminals performances	Group 1	<= 3	164	.82	.50	.000
	Group 2	> 3	37	.18		
	Total		201	1.00		

As data distribution in this assumption was not normal so to test this assumption also the binomial non-parametric test is used. The results of Table 2, show that the frequency of responses smaller than the average is 37 (18%) and the frequency of responses greater than the average is 164 (83%) . Considering that the significance level is smaller than 0.05, so the difference in frequencies of the two groups became significant at the level 99%. Therefore the assumption Zero, which states “people are satisfied with the plan and spaces of Tehran terminals” is rejected and the opposite assumption (the researcher assumption) is accepted.The main point in this research is the passengers’ priorities for not being satisfied with terminal’s performance. Table 4 shows that among 10 considered factors , the highest dissatisfaction is the parameter of air pollution of the city, with an average of 7.19 and the least important reason is

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the “inappropriate location of the current terminals of Tehran”, with an average rank of 4.08. This issue reveals that terminals of Tehran have not adequate preference and have many problems that some of them are mentioned in this article.

**Table 4.** Results of Freidman’s rank test in comparing reasons for dissatisfaction with present plan and space performance of rural terminals of Tehran City.

Dissatisfaction factors	Average	Freidman’s average rank	Chi square	Degree of Freedom	Significance Level
Increase in city’s air pollution	7.19	1	262.669	9	0.000
Increase in city’s noise pollution	7.00	2			
Traffic in streets leading to the terminal	5.88	3			
Human congestion around the terminal	5.73	4			
Impossible expansion of terminal due to being bounded by main city streets	5.72	5			
Reduced facility use	5.44	6			
Inadequate car park spaces	5.24	7			
Inability in maintaining proper security for the halls	4.41	8			
Inadequate area and buildings in use	4.31	9			
Inappropriate location of Tehran terminals	4.08	10			

### 6. DISCUSSION AND COMMENTS:

With respect to the achieved investigations in scientific resources and applying them to the article’s subject, concerning satisfaction of passengers regarding the performance of plan and spaces of existing terminals of Tehran, this result has been obtained that according to the statistical universe of the queried people, most of them are dissatisfied with the present conditions of terminals due to reasons such as : air pollution(highest rate of dissatisfaction), existing traffic in the streets around, which also have noise pollution, lack of parking lot space and human congestion around the sites which makes it impossible to expand terminals, and itself a reason for inappropriate location of them, lack of facilities and inability to maintain security for the halls are among other dilemma of rural terminals. Inadequate area and inappropriate buildings that are in use which are not responding to the volume of passengers. the above mentioned results are in line with the results obtained by Shojaat et al. (1392), who have analyzed the performance of rural passenger terminals of Tehran province and have concluded that with respect to short-term, mid-term and long-term planning and high rates of displacement of passengers, current terminals do not have enough space to be expanded and having better performance against problems referred to, many districts have been proposed for establishment and expansion of terminals. Afandi et al. (1385) in their research entitled” Locating new rural bus terminals with the aim of reducing access time of users" by which passengers would travel less distances to reach the terminals and findings of Rostami (1389) who has demonstrated that the site of South Terminal was good and performance of the components, empirical quality and aesthetics and environmental qualities ere all observed during design and locating activities of this terminal, but today due to the expansion of city and turning the surroundings into residential places, problems such as noise pollution, air pollution and insecurity have revealed themselves, which have brought with themselves dissatisfaction. Mousavi et al. (1392) who have investigated the definition and main performance of terminals and identified optimum points or districts for building terminals. Dadlans et al. (2010) have reported that by relocating terminal site to outside of the city, the amount of pollution which is about 15000 tons per year would be reduced, Also this act reduces human congestion of the city. Morita et al. (2014) concerning administration of transportation in Asia have concluded that due to expansion of urbanism, the most significant environmental reason in Asia is the

urban transportation, but due to the lack of facilities along the road networks and infrastructures, according to the surveys performed, most of the passengers had requested improvement of transportation services, hence with respect to the findings of this research and other researchers, some suggestions are offered here:

- Offering free transportation services for these complexes.
- Establishment of multi-story car parks around the terminals.
- Construction of buildings with aesthetics architecture in this complex.
- Utilizing vernacular features of the region and materials consistent with the site climate.
- Utilizing modern technologies.
- Creating temporary resting places around the prayer rooms.
- Establishing spaces for the care and playing of the children.
- Establishing proper service spaces like (restaurants, coffee shops, super markets, sports complex,..) using green architecture in buildings and surroundings of terminals.
- Establishing social services (Insurance agencies, travel agencies, taxi services, clinics, mosques, banks, corporate companies).
- Creating walking routs with beautiful landscapes around terminals.

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