

3rd Conference on Sustainable Urban Mobility, 3rd CSUM 2016, 26 – 27 May 2016, Volos, Greece

The urban project of HafenCity. Today's Urban and Traffic profile of the area. Executive summary of methodology and traffic research conducted in the region

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Abstract

HafenCity is the largest, ongoing, urban regeneration program in Europe. The old port area of Hamburg is fully reconstructed with a series of urban planning, traffic and building interventions, in the context of sustainable development (middle road back, "smart" renewable energy buildings like "Greenpeace", "Unilever", etc., "smart" historical proofing in infrastructure and new infrastructure from phenomena of natural disasters like floods, promotion policies of "sustainable mobility". The northern part of the port is relocated (as a result of the gradual relocation trend and technological upgrading which had already begun in the 1960s throughout Europe) and Hamburg is first associated with the water element and the River Elbe along with a program of its fully environmental restoration. Also the Elbe is still used for a number of "smart travel" people and goods to and from Hamburg. The old "logistic" used buildings are totally replaced by new buildings with mixed uses.

Hamburg is flipping its face at the liquid element. It also introduces and seeks the full protection of the wider area of HafenCity phenomena of floods and tides which proved fatal in the past through implementation of the project "Warft solution". All new buildings and traffic infrastructure is now built at a height of 4.5-8.3 meters higher than the initial level and in old level created a regenerated track of "historical" walks a total length of 10.5 kilometers, creating in this way an additional network of public urban space, in the context of sustainable mobility. Also the new line of traffic means (U-4) gives new chances in the way of Sustainable mobility for the whole city

Which is the current planning, traffic and environmental image of the region of HafenCity 15 years after the beginning of the program and on completion of 70% of the planned interventions? How this occurs by utilizing a set of indicators in the direction of Sustainable Development and Sustainable Mobility and what is its contribution to the "modulation" of total microclimate of the greater Hamburg region by removing a perfectly disturbing use of the "center" of the city? Which parameters and practices must be taken into account from now on for the Planning, Traffic and environmental shielding of HafenCity, on the basis of original objectives as they possibly today redefined? Pilot presentation of the results of research with use of indicators of "European Local Transport Information Service (ELTIS)"

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Peer-review under responsibility of the organizing committee of the 3rd CSUM 2016.

Keywords: HafenCity, Urban Planning, Smart Development, Transport, Indicators

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1. Introduction- Structure

This article is a summary of a six month research work carried out in the period 10 / 2015- 03/2016 by the first author and supervised by the second, who also was responsible for the research program. The scope of the research was to research the urban and especially the traffic profile of the, New Urban Area of HafenCity, a few years after the completion of the first parts of the Urban project and the most important traffic parts that making up the profile Urban Mobility of that, and its integration in the whole of Hamburg city

Also, in this article, essentially seeks to summarize the methodology and objectives of traffic and urban research, carried out in the HafenCity area compared with the corresponding natural pursuits of the overall urban regeneration program. But for understanding better, initially is also attempted a summary of the overall history of Hamburg city, so they better understand the conditions under which the entire region arrived in the end of the 20th century when it was decided the beginning of this program.

Given the recent completion of the research project, the results; conclusions are not available on the one hand, on the other, it is not the target of this article.

2. The history of Hamburg and of the harbor

To really understand the history of HafenCity (and not only), it is essential to know about the picture of the history, how was created, expanded and finally closed the circle as a port area.

The first social, population and commercial signs in the area, located on the 9th AD c. The presence of water is still outside the city limits, however early indications for the role it can play if the region is given. Over the years it becomes more clear with the first utilization of the infrastructures, the liquid component and the possibilities that gives. Crucial historical fact is the granting of tax exemption regime in the late 12th century (1189) by Friedrich Barbarossa, Emperor of the region regime that partially preserved until today, and a little later the first building walls on the city shield. These facts lead to the corresponding population growth in the region. Throughout this period, the water element shows its another profile, with its contribution to the spread of major and fatal epidemics which resulted in only population of the city decreases, from then until the mid-20th century. In the 14th century founded the Hanseatic Union in order to control the trade in the North Sea. At the end of the century, the "Union" has more than 70 cities, while Hamburg's population reaches 16,000 inhabitants. In 1620 AD population ejected in 50,000 inhabitants, which leads to the need to build new walls which are now including the whole harbor area. After the final decline of the Hanseatic Union, new trade opportunities for the region given by the discovery of America and its independence in 1873.

In an emerging era of the decadence, the discovery of crude rubber and the role it can play (and ultimately plays) the port of Hamburg in the transfer of material from the Amazon and Asia, once again demonstrate the role of the port and the influence of and in the modern configuration of the urban profile of the city. Before that, a significant role played and the barrier of the Elbe, with construction of the corresponding infrastructure (bridges, etc.) a fact which anymore enable dispersion of freight products throughout the continental South. Long before the end of the century (1871 a.Ch.), the city's population reaches 375.000 inhabitants. It is the period during which a decision on the final demolition of the walls since the reasons that led to their erection ceased to exist, but also because of the fact that the need for urban expansion of the city is constantly increasing¹. At the beginning of the next century (1913) Hamburg numbers one million residents.

Reverse the, until then, development of the port is the influence which affect in the two World Wars and the role of Germany in them. During the First World War the port was destroyed by 90% and reconstructed with the participation resources of big shipping business worldwide. Despite the immediate restoration, the Second World War and the discovery of the container exercise again decisive influence on the development of the port, with the emerging needs of geographical crowding. The port, much more strongly now, continues to relocating the Southern Shores of

¹ The use and character of new land that resulted mainly from the demolition of the territories since then have item "Design" and "confrontation" between designers. Even in the HafenCity Masterplan convert those included in the redevelopment area, and link them to other uses preoccupied pretty all stakeholders

the Elbe and the traditional site activity is increasingly decreasing. . In terms of urban and residential development in the city formed a profile which largely retains even until today, between 1949-1973 built 12,6 million new homes in a period which was named as a period of economic boom. Since then until today, other areas of the city urban renewal projects undertaken, other more but with less success as the area of City Nord and Steilshoop. It is true that cases of unsuccessful implementation in whole or part in these programs seriously taken into account in the HafenCity planning to avoid such conditions.

So Arriving in the early 90s, the old port area is now composed mostly of empty former port, hulls, or uses which are indirectly related to the role of the port and can be easily relocated. At the beginning of that decade actually performed by Egbert Kossak, head of City Planning, a "hidden" study, so as to investigate the possibility of inclusion of aggregates of the port sections in the base in the city. The results were substantially and the green light for the redevelopment of the old port, namely the creation of HafenCity. Crucial is the decision to redevelop the harbor that was picked up by the Senate of Hamburg in August 1997. In the same year established and the forerunner of today's HafenCity Hamburg GmbH (2004), the company GHS Gesellschaft für Hafen- und Standortentwicklung mbH which is still under full control all the activities and the licensing of the entire region. Three years later, in 2000, the first version of the Development Plan (Masterplan) after a public tender, decided on the base of an informal project which had existed since 1996 and had been published in 1997. Since then effectively starts the regeneration of the old port and the construction of HafenCity, with important dates in 2001 and the construction of the first building in 2009 and the completion of the first block (Dalmankai). During the meantime a series of specific changes were made on the region with the most significant of which the traffic image and the corresponding proposed interventions that concern the proposal and construction of a separate line instrument Constant Path which connects the HafenCity with the city and the entire metropolitan area. Finally in 2011 accorded the first stop of this line (U-4) located in the central square and of course bears his name (Überseequartier) while continuing its association with the University of the area which he granted in 2014, creating new data to achieve the goals in total from the beginning sets the Masterplan as for residents, workers and the daily visitors. Since then several blocks allocated for use as a whole, while the completion of the program, on the base and initial goals projected for 2025.

3. The Master Plan of HafenCity. Executive Summary

The "emergence" of HafenCity as a city within a city has for years, as process started. The old port area of Hamburg taking shape and from disturbing and polluting use transformed into town. Naturally in no way not ignoring the value and the need to provide appropriate, port, uses. In this case, however, not considered it. This is being examined is the need siting of port uses, in areas distant from the main urban fabric of a city but rather the value and necessity of a port that throughout this first, other than with the urban renewal program of HafenCity.

Hamburg then grows up at a rate of 40%, while a number of new uses and activities sited in downtown. At the same time attempting to strengthen the downward trend of the population, a phenomenon began to occur after the start of gradual siting of port uses north and further away, but also the simultaneous tertiarisation a series of operations of the port itself which transferred them further afield often not the internationalized. In the west side then almost complete, the center has more than half of the constructed and enters into orbit integration and the eastern part starting constructed, the HafenCity with a range of uses, functions and jobs and activities has begun to take shape, the logic of "from west to east and from north to south" denote the Masterplan of its origin. With urbanization and traffic data also held the research presented in this article.

The HafenCity therefore, apart from the largest urban renewal program underway in Europe, at this time, also serving as the largest parydatino (or riparian) urban development project, the largest project in this respect and the person with water otherwise, which has been applied anywhere. With significant influence on the whole, both the basic fabric of the city of Hamburg of 1.8 million residents, and the metropolitan area of about 5 million, an attempt to display as a "model of development for the city of the 21st century" and for housing developments, despite the fact that the construction and regeneration is projected to continue at least until 2025, with the standards and objectives of the Masterplan, which for the moment as regards the aspect of timing is kept almost completely.

This Masterplan in the form in which it occurs and the overall profile who wanted to give the city (some small changes which have been and continue to be in no way affect its import) was approved by the Senate of Hamburg on

February 29 2000. the main changes and additions which were focused on the uses, mainly in the number and not the quality, of the eastern division, which increased the total residential area of 5,500 originally planned, to over 6,500 since and also to transport links with public transport and in particular by replacing the tram to Metro (U-bahn). Changes and additions are made to the original plan, made following a series of consultation activities since then but gave the final profile area which is going to get.

The original guidance was anyway clear. Development from west to east and from north to south although, but also to the uses which were those which mainly affect this orientation, the Western "neighborhoods" would have more uses tertiary sector mainly businesses, offices, restaurants, hotels and less housing in turn just mentioned. This series is differs in the central areas of recreation and trade to become more visible presence, both now, and in the end (especially at the completion of the southern part of Uberseequartier) in the eastern neighborhoods (Oberhafen, Baakenhafen, Elbbrucken) the presence of housing is almost exclusive to the construction, about 3.000 homes in a set for the area, as noted above 6.500. Basic "disadvantage" of these areas is their proximity to main traffic routes, both road (Versmanstrasse) and railway (main national railway network), which the crosses almost therethrough, which determines indeed the entire traffic profile of the area , which of course taken into account in the overall design, the construction and orientation of view. The free spaces are many and scattered throughout the area at a reasonable 60/40, structured / unstructured space, which totally characterize the Masterplan. The total area of free green areas reaches 40 hectares with most characteristic of them, for the entire region the "Am Lohsepark" and "Baakenhafen park". Particular attention is given and to link these sites together, especially with a number of alternative modes of transport. In this direction, particularly auxiliary works exploiting the river surfaces, old quays, which first kept for this reason, partly because of the region need protection from flood and tidal phenomena, it is raised from 8.5 to 10 meters from the Middle level of the Elbe water, about 4 meters above the original, old level of said surfaces.

Apart from 6.500- 7.000 new homes, which aims to build and be used by more than 12,000 new residents in the region, other are under construction and others have already been built, proposed and pursued the creation 40-45000 new jobs which among other things will create new traffic data for the region which have already established and emerging. At the same time the quality and the method of diffusion of uses throughout the region create conditions of "compact city". Transportation in HafenCity is linked both to Public Transportation and any other selected tool movements with the rest of the city. Two bus lines, 6 and 111 connect the region to the southeast and northwest, respectively, parts of the city. At the same time after many consultations as, after the final removal of the contingent to be re-entered to traffic identity and character of the city, Tram as a mean of public transport and Fixed Track, at the same time also wrecked the initial proposal and intention that the average Fixed Track mean will be the one that will connect the city center with the HafenCity. So it was decided HafenCity to be connected with the other parts of the city with Average Fixed Trajectory U-Bahn type, with the investigation of traffic conditions created, addressed the majority of the described research. .

Given the close proximity of the area to the historic city center as well as with their respective existing stations of the U-Bahn (Messberg, Steinstrasse, Baumwall, Landugsbrucke), apart from the fact that their existence is a key element of disagreement dissidents who remained and still consider it unnecessary to additionally connect the region, discussions since then consumed in the technical part, with regard to the best technical solution could be for the new stations. Eventually it was decided to create a separate, functionally, line with recovery on it's biggest part, of the existing infrastructure and by differentiation from that, only at it's one end. Specifically, the U-4 line, which is that which enters the HafenCity, utilizes the greater part of the infrastructure of the U-2 line from which is separated after the Town Hall and enters the HafenCity with two, already in operation, stations, the one of Uberseequartier (12.2012) and the other of HafenCity Universitat (08.2013). At the same time with the construction of the eastern region of squares constructed and the connection of the existing line with the line of the suburban railway (S-Bahn) with the construction of U-Bahn's third station the one of Elbbrucken, which will overall differentiate the Urban and Traffic profile of the region. Purely as regards to the aspect of urban planning, the board of squares which is crossed by the main road, which also crosses the region, the Versmanstrasse, which is intended to be manufactured and delivered into service very close to the corresponding construction and delivery of new terminal of the U-Bahn, are proposed to have uses other, different from residence to protect, this vulnerable, use of effects of noise pollution, noise etc.

Finally, great emphasis is also given to the architectural and bioclimatic design of infrastructure in the region. The HafenCity, mainly through HafenCity Gmbh and a corresponding national carrier, has already established since 2007,

call for proposals and award the corresponding pre-consents and after construction, gold or silver awards through the awards process «Sustainable Construction in HafenCity».

The HafenCity, so both in design level, and part of, till now already developed, construction but also in the form that will take upon completion of the program, except from "development model for the city of the 21st century", can particularly easily be described as example «Smart Blue City», due to its relationship with the water element, and because of how it is utilized, both the liquid element, and their relationship, despite the fact that it is not purely marine water surface, but rivers, but its exploitation is different.

4. Primary research of traffic data

4.1 Structure, targets and methodology of the research

The research of traffic data and characteristics of the region, held in three different stages, the base and the guidelines set by the “European Local Transport Information Service (ELTIS)”, with particular emphasis on the “Fixed Tracked Means” of the research area, for the reasons described above but for the study and the burden of his choice, the first years of operation. Those 3 steps were:

- **Measurements of the U-Bahn volume- users simultaneously at two stations of HafenCity**
- **Sample survey by questionnaire method**
- **Traffic volume measurements, in a through-flow hub on the road network**

Methodology followed the following procedure: since the track means for the area is still in its early years of operation, without even having been completed and the entire construction since Sequential station pending the completion of construction of the third one, for the whole region which will connect with the urban train line (S-Bahn), but since even put into question the need to build such a network for the region, from scholars and residents a total of Hamburg, firstly attempted to be studied so far the appeal, along with the comparison with a number of other means of transport and on the aspirations of the Masterplan. For these purposes, unless these goals, also collected the corresponding data available from the operator of the city’s Public Transport network, HOCHBAHN. Overall acceptance and behaviors of movement of the Track Mean (U-Bahn) users included the basic volume of traffic research in the area, both because of the specificity of the instrument as a whole, and the individual peculiarities of the introduction of the region.

At the same time, given the road structure of the region and the objectives set by the traffic study that has been prepared for the region, complementing the Masterplan, have recorded by the method of videotaping the traffic flows and guidelines for each used transport instrument, in one of the most important traffic hubs in the region, in Überseeallee and Shangaiallee junction. The key feature of this section is the fact that this junction which matches the traffic east end of the area. This means that the vast majority of vehicles passing by that point, essentially operating through flow to the area, or even entering or leaving this to the vehicle which is registered as transit. In this way it is possible to record the traffic volume in one of the major hubs in the region, comparing it to their respective users of U-Bahn, during the same period of the day as well as the reduction of the total area given the corresponding existence of at least three more respective input- output points in the area, in each direction of the region.

Finally, the findings of these two first stages, attempted to be captured and the third in a series, method of questionnaire, along with a number of other elements were deliberately explored as the opinion of respondents on the road, the pedestrian and cycle path network and the public transport network in the region and the relationship of the current image of the region with the objectives of the Masterplan and the personal aspirations of each. The main objective of this process is the investigation of weaknesses regarding mainly the overall traffic network in the region alongside the possibility of partial or total response of some of them as some of the infrastructure is expected to be reconstructed after the completion of the urban renewal program.

4.2 Measurements of the U-Bahn volume- users simultaneously at both of HafenCity stations

The first part of the survey included volume- users measurements of U-Bahn for entering or leaving the HafenCity. The U-4 line of U-Bahn starts from the northeastern town district, named Billstedt and finishes at the second, at the

Station: HafenCity Universitat (HCU), Direction: Billstedt		Age														
Day	Disembarkations	Embarkations	0-18		18-25		25-40		40-60		60+		East Exit		West Exit	
Monday	1358	1257	25 (1,96%)	21 (1,71%)	590 (46,31%)	587 (47,88%)	493 (38,70%)	434 (35,40%)	99 (7,77%)	140 (11,42%)	67 (5,26%)	44 (3,59%)	38 (2,88%)	13 (1,15%)	1280 (97,12%)	1113 (98,85%)
Tuesday	1306	1150	36 (3,04%)	37 (3,43%)	458 (38,65%)	400 (37,04%)	407 (34,35%)	396 (36,67%)	169 (14,26%)	177 (16,39%)	115 (9,70%)	70 (6,48%)	46 (3,93%)	21 (1,98%)	1125 (96,07%)	1040 (98,02%)
Wednesday	1544	1392	55 (4,00%)	31 (2,35%)	585 (42,55%)	579 (43,96%)	390 (28,36%)	384 (29,16%)	226 (16,44%)	209 (15,87%)	119 (8,65%)	114 (8,66%)	51 (3,91%)	17 (1,68%)	1254 (96,09%)	994 (98,32%)
Thursday	1100	1066	77 (7,36%)	19 (1,93%)	297 (28,39%)	305 (30,90%)	417 (39,87%)	467 (47,32%)	164 (15,68%)	145 (14,69%)	91 (8,70%)	51 (5,17%)	33 (3,40%)	10 (1,19%)	937 (96,60%)	831 (98,81%)
Friday	1487	1439	55 (4,36%)	84 (6,46%)	488 (38,67%)	534 (41,05%)	519 (41,13%)	514 (39,51%)	134 (10,62%)	145 (11,15%)	66 (5,23%)	24 (1,84%)	48 (3,85%)	17 (1,29%)	1200 (96,15%)	1296 (98,71%)

input line, in the area of HafenCity Universitat stop. Specifically with parallel and simultaneous measurements in all directions, with the existence of two counters at both stations of HafenCity (Uberseequartier and HafenCity Universitat), attempted except from everyday users of this instrument and the time of their movement in each direction and destination, to be counted and a number of other quality elements related to both mobile and the purpose of their travel, just as the age category and the used, by themselves, entrance/exit of each station to determine the uses and the purpose of each of their movement and also comparing these measurements with the objectives of the Masterplan for the daily visitors to the region, an objective set in 35,000 visitors/ day, as well as the corresponding elements of HOCHBAHN, pursuant to which the embarkations and disembarkations in the stations of Uberseequartier and HafenCity Universitat, amount in 3000-3500 and 1000-1500 as boarding and disembarking 3500-4000 and 1500-2000 respectively.

The survey was conducted between 20.01.2016 and 27.02.2016 for all peak hours (8:00-20:00) and for all of the weekdays and indicative measurements were made for hours between 7:00-8:00 and 20:00 -22:00, which were also reduced for the remaining days. The reason of the scale of the time during which held such research was essential for objective reasons, preventing phenomenon of observer's fatigue, which may also affect the accuracy of measurements, but also to avoid a possible specificity of a day (holiday, non-working, network operations etc.) which will not

Station: Uberseequartier, Direction: Billstedt		Age														
Day	Disembarkations	Embarkations	0-18		18-25		25-40		40-60		60+		East Exit		West Exit	
Monday	4	3097	77 (2,87%)	1047 (39,08%)	906 (33,82%)	461 (17,21%)	188 (7,02%)					29,08%		70,92%		
Tuesday	28	3629	117 (3,31%)	1186 (33,53%)	1355 (38,31%)	608 (17,19%)	271 (7,66)					18,56%		81,44%		
Wednesday	38	3587	101 (3,63%)	1325 (47,64%)	663 (23,84%)	470 (16,90%)	222 (7,98%)					22,91%		77,09%		
Thursday	17	3335	127 (5,75%)	600 (27,19%)	884 (40,05%)	442 (20,03%)	154 (6,98%)					26,75%		73,25%		
Friday	21	3051	112 (3,90%)	1217 (42,80%)	888 (31,20%)	431 (15,20%)	196 (6,90%)					20,93%		79,07%		

pepefte to our attention and generally any uncertain factors which would cause non-representative measurements. In particular the results of these measurements were as follows:

Figure 1: the results of measurements on Uberseequartier station with direction to Billstedt

The percentage of users who choose the western exit of the station, just captures the degree of development in every part of the region, with the western part of HafenCity to be almost completed and the Eastern growing up. It is also important and the existence of massive land uses on the side, such as educational institutions (KLU, MSH), and the Unilever building. In this way is very typical the small number of disembarkation. But this is quite normal, given

Station: Uberseequartier, Direction: HCU		Age														
Day	Disembarkations	Embarkations	0-18		18-25		25-40		40-60		60+		East Exit		West Exit	
Monday	3066	13	93 (3,34%)	970 (34,87%)	1146 (41,19%)	424 (15,24%)	149 (5,36%)					24,08%		75,92%		
Tuesday	3413	27	155 (5,23%)	929 (31,34%)	1172 (39,54%)	491 (16,57%)	217 (7,32%)					22,47%		77,53%		
Wednesday	3417	59	152 (5,73%)	711 (26,79%)	1157 (43,59%)	453 (17,07%)	181 (6,82%)					24,41%		75,59%		
Thursday	3508	25	180 (5,31%)	793 (23,37%)	1632 (48,10%)	610 (17,98%)	178 (5,25%)					27,24%		72,76%		
Friday	3002	38	48 (4,96%)	217 (22,44%)	427 (44,16%)	181 (18,72%)	94 (9,72%)					30,93%		69,07%		

the very short distance of just one station before, which is also the starting point of U-4 line so nobody uses the U-Bahn for just one stop and in such a short distance, figure which is exactly reverse in the opposite direction:

Figure 2: The results of the measurements in the Uberseequartier station with direction to HCU

Beyond all other, noteworthy is the identification, nearly, between the number of embarkation and the corresponding disembarkation made the same day, which suggests the exclusive use of U-Bahn from a number of mobile. Correspondingly, the number of trips and travel behavior for the other U-Bahn station, within the limits of HafenCity, that of HafenCity Universitat, is as follows:

Figure 3: the results of the measurements in the HafenCity station

Also, in this case, noteworthy is the identification, nearly, between the number of embarkations, and the equivalent of disembarkations, as in the case of Uberseequartier station, which also points to the exclusive use of the U-Bahn to the daily movements of a large number of mobile. On the question of the direction of the mobile destination, there is the almost exclusive use of the western entrance/exit, since the East entrance and the corresponding section in which it leads are almost unstructured or under construction, while the majority of mobile users of this station, intended apparently the HafenCity Universitat. Overall, however, the number of daily trips using the U-Bahn for commuters to or from the HafenCity at whole, touching or in some cases even exceeds 10,000 per day, as indicated by the aggregated data of all three tables, just three years after the launch of the current version, and the development of the region is located just in the middle and that this would mean, in the case of not being constructed for the traffic image of the region, as for a long time been in consultation, but even after the decision to build the U-Bahn network, many were and still are the dissidents, mainly for manufacturing cost reasons².

4.3 Questionnaire Survey

Then, and after completion of the measuring process of daily commuters using the U-Bahn, followed by the research with the questionnaire method. The data were taken into account for the size and representativeness of the sample was firstly the current population of HafenCity, which does not exceed 2,000 inhabitants, and a rate of around 3% would require a very small sample, firstly, secondly any research only to residents of the area will enable inference about HafenCity's regular visitors travel habits, precisely because of their constant residence inside that. For these reasons, the sample was determined by the number of residents and workers (and also visitors), whose number now reaches 8,000. In the survey, conducted by electronic transmission of the questionnaire, investigated the relationship of the respondents with the means of transport, their opinion on the transport networks (roads, pavements and bicycle) and their appreciation for the current picture of HafenCity in relation to goals of the Masterplan, attended by 222 participants. From the results of this survey as the most remarkable feature is the high degree of use of public transport and particularly the U-Bahn from the participants for their visit in HafenCity, with rates of 73.2% and 85.1% respectively, although the property of the high index of other mobility agent from the respondents themselves, particularly vehicle (58.6%, 36.2% respectively). Also more than half of the respondents do not consider it as good the road network, the public transport network and the network of cycle paths. Under other circumstances it might be considered problematic for such a new area, but the fact that this network (road and MTB) is going to be reconstructed after the completion of the development of the region, perhaps the opinion and this image be reversed. Also, large is the percentage of those who consider that the current situation in the region does not reflect the aspirations of the Masterplan (40%), while 57% of respondents felt that their demands on the development of the region considers that not fulfilled. Themselves, by percentage 76% and 68% respectively believe that until the completion of the program, the image of the area will be differentiated and will be mainly improved.

4.4 Traffic Volume measurements

Finally, by using the method of filming and with the secondary use of data, in addition and at the same parts of the day that measuring the movements in the stations of U-Bahn the traffic volumes, per each direction were videotaped, in one of the main hubs of the region, that of Versmanstrasse and Osakaallee, where will pass through all the through-flow who as provided and sought from the traffic study that has been done on the region, might be numerous. Specifically, by the Master Plan, the aim is for a total of more than 100,000 daily car journeys from HafenCity, of which only 5% will affect movements to or from the HafenCity while the remaining 95% will cover the through-flow transits, in the direction of discharging, other current areas with traffic problems and protection of the existing city center. Today, although the exact size of the video recordings are still processed, initially appears that over than 500 vehicles /h, pass through from this point and thus by the HafenCity, only through this input, at a set of four total existing inputs at the whole area.

² the survey data is available and recoverable as a whole and also individual during the intervals of each day. Here summarized and tabulated for the purposes of the Article

5. Summary- Conclusions

The HafenCity is now the largest, ongoing, urban regeneration and urban planning program in Europe. Both in study and planning, and in so far construction, great attention has been paid to architectural and bioclimatic design with a host of innovative applications. Benchmark in traffic evolution of the construction for the region, was the revision of November 2006 of the Masterplan by replacing the tram, with the U-Bahn, because of the total sinking of the reintroduction of that in the streets of the city of Hamburg. The results from the acceptance and use of the U-Bahn, today, just three years after the completion of the second station of the region, are very encouraging. But we can not say, and the same for the total of the traffic profile that the area will finally have at the end of the construction, which is expected to be in 2025 and this because of the direction which is tried to be given, officially by the traffic study. Tens of thousands of cars and are intended to cross daily the HafenCity, a process which, among other things, is also encouraged constructively, with a varied and large roads, network, by having the ability to move from each direction to each direction, by passing through HafenCity. Parallel streets of Versmanstrasse and Am Sandtorkai, which are the entrance / exit paths from the north and south respectively in the region, as well as four different bidirectional connection between them, make's such a route, unfortunately, too easy. Finally, because of that way, residential areas, especially in the construction blocks in the East edge of the area, Baakenhafen and Elbbrucken seem to be particularly unprotected. The HafenCity, is trying to be protected from it's inside, by it's own residents, employees and daily visitors, in connection with their travel habits, but challenged much by external factors. So while HafenCity is attempting to create a "Sustainable Mobility System" on it's inside, which is called upon to preserve, there are great concerns about the traffic and at the same time for the Urban profile of HafenCity, to a depth of a few years, precisely because of this traffic orientation that seeks to give. Finally, an important point is the fact that the great majority of direct consorted with the region, believe that at present the image of the area is far away from the key objectives of the integrated program, and also by their personal objectives, which must be taken seriously consider in the subsequent continuation.

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