

Multidisciplinary Analysis Report (BK7472)

Multidisciplinary Analysis Report Regarding housing,
work and income in the Neighborhood Tarwewijk,
Rotterdam, 2019.

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1. Introduction

Charlois is one of the oldest neighbourhoods in Rotterdam as the first settlements were already there around 1200. The area was characterized by the considerable amount of agricultural industry. In 1458 the piece of land became property of Karel de Stoute who decided to start protecting the area by placing dykes around it. In 1895 Charlois, named after a French estate belonging to Karel de Stoute, officially became part of the municipality of Rotterdam (Stadsarchief Rotterdam, 2018). Skip forward to the early 1900s, the area of Charlois a popular area for dock work and other heavy industry markets. Especially the Tarwewijk became the centre of these types of secondary industries processing different types of raw material. Due to the location, directly next to the Maashaven, the Tarwewijk was easily accessible for boats and containerships. After the bombardments of the second world war many cheap and small houses were built, and the industry created lots of job opportunities for these new inhabitants. Hence, the

area became famous for the amount of dockworkers and factoryworkers (Buurtmonitor Rotterdam, 2018). However, during the late 1960s and early 1970s many jobs in this sector disappeared due to the global oil crisis of 1972.

The area lost many jobs, and the average income level decrease tremendously. As many former dockworkers needed to move to other areas of Rotterdam in order to find work, many houses in the area became social housing and following the policy of Joop den Uyl, the prime minister of the Netherlands at the time, many of these social houses were given to Antillean and Surinam immigrants (Bastiaanssen, Martens & Polhuis, 2013). As the population and the economy of the Tarwewijk changed, new problems became apparent. Because of the low levels of education and the subsequent low average income in the area violence, disturbance and illegal trade became normal for the Tarwewijk. Many of the 'old' inhabitants move to other neighbourhoods due to these changes. This caused the area to become less popular to live in and

the situation worsened. For many years the Millinxbuurt was known for being highly unsafe and having many illegal businesses and residents (Engbersen, Snel & Weltevrede, 2005).

In order to make change in the area many institutes have been studying the changes made over the years to redevelop the neighbourhood and to create a more socially sustainable climate that both actively stimulates cohesion, economic activity and a healthy housing market. In order to further develop a clear image of the opportunities and weaknesses currently playing a role in the area this report will use multiple techniques to, in the end, answer the question: "How does socio-spatial inequality manifest itself in the neighbourhood in the domain of housing, work and income?"

As this research question is quite broad and undefined, our research will be more specifically aimed at how socio-spatial inequality is manifesting itself in relation to mobility and work within the

Tarwewijk. As many researchers have pointed out efficient transport systems are fundamental for a healthy economy in poor neighbourhoods (van Ham, Tammaru & Jansen, 2016). Therefore, this report will explore the topic of transport and mobility within the Tarwewijk, and discuss the relation between work and transport.

Approach

The research will be conducted on the basis of different research techniques. The first technique used in order to obtain a general idea of the area and its inhabitants an observational research was conducted. Over the course of two days photos and notes have been taken in the Tarwewijk. These images will be used to identify different key concepts and problems with the Tarwewijk. In the following week a thorough desk research will be done. By using previous research, more insight in the factual context of the area will be generated. This is needed for creating a theoretical framework in which this research is situated.

1. Introduction

Thirdly, interviews with different parties will be held. Interviews are an excellent tool to acquire insight into the lived experience of the area. Lastly a data analysis of all the data generated during the research will be produced. By using different research techniques the current situation in Tarwewijk is viewed in multiple perspectives. This creates a clear image of what the problems and the opportunities are in this area and will hopefully generate an answer to the proposed research question.

The majority of the project is divided upon three themes: housing, work/income and transport. These three topics are researched as autonomous themes. By first elaboration upon the themes as separate entities a solid base is formed in order to, at the end, draw conclusions about the correlation between the three themes, and how these themes are being projected within the neighbourhood. At the end of the research an analytical conclusion is written in which our

suggestions for improvement are made and suggestions for further research are given.

Hypothesis

The Tarwewijk is an area that has multiple faces, and is known for different things. Main characteristic of the area is its diverse array of nationalities and the low average income and education level. This makes the neighbourhood very interesting because of the different processes and households that are operating within it. On the one hand the area has many families with small children, which can be derived from the many schools and one family houses that are situated in Tarwewijk. On the other hand the area has a large groups of low educated households that are dependent of social welfare payments. Hence, the neighbourhood is also characterized by a duality.

What is particularly interesting about this duality is the fact that

half of the population of Tarwewijk seems to know how to make a living within the area, and the places in which these, mostly, families are situated seems to be a nice family neighbourhood. However, on the other side there are people who experience a large distance from the labour market and seem not to succeed in being self-sufficient. Therefore, the question could be asked what the factors are that are making it so hard for this particular groups.

(Public) transport can have a large impact on the economy in an area. Accessibility of different facilities is fundamental in creating a healthy economy. Our hypothesis is that within the Tarwewijk, the lack of sufficient transport systems and the therefore isolated characteristic is influencing the general economy within the area. For inhabitants without access to a car or bike it is difficult to exit Tarwewijk which could be an obstacle in getting to work. Due to the difficulty to reach the neighbourhood visitors are not

easily drawn to the neighbourhood create an unattractive environment for new entrepreneurs or businesses. Therefore there is little work within the area and as it is difficult to get out of the neighbourhood by public transport it will be hard for the citizens of Tarwewijk to find work and stop being dependent of social welfare payments. Hence, by improving the transport system in Tarwewijk, it will become easier for inhabitants of Tarwewijk to move within the area and outside the area as well as stimulating a more attractive climate in which new businesses can start.

2. Observations

Introduction:

This chapter describes the different important first observations that were made whilst visiting the Tarwewijk for the first time. They will be listed in order of observation and the observation will be done according to the observation protocol created by the veldacademy. At the end of this chapter a conclusion will be made regarding the observations made and the main research topic will be discussed and revealed regarding inequality within the neighborhood.

2.1 Observation - Observations Housing

Observation 1. A

Location:

Tarwewijk Moerkerkestraat,
Blankenburgstraat, Millinpark.

Date: 03-09-2019

Observant: Danique Kuijlenburg,
Femke Slooff

Buildings located between the Blankenburgstraat and Millinpark are characterized by a distinct appearance. On first appearance the buildings seem to be in good shape. Surrounding these houses garbage disposal places are placed, and in many places the streets are quite green. However, when one focuses on the buildings it becomes apparent that the houses are less maintained by the inhabitants as opposed to what the facade makes it look like. These houses in most cases have shabby looking window decorations, in some cases even newspapers are used to create some privacy (figure 2).

In the Moerkerkestraat buildings were missing windows (figure 1) and clearly lacked maintenance inside. In this street this lack was omnipresent, as garbage was placed outside of the garbage bins and the greenery in the street was mostly weeds. The general impression of the street therefore is less friendly. At the end the great difference between the maintenance caught the eye.

The lack of maintenance of buildings in this specific area seems fairly unjust. Presumably the inhabitants of the houses do not have the financial means to correctly maintain their buildings on the inside. And a vicious circle could be the outcome of this inability. If none of the neighbors are maintaining their houses, or the common areas, the incentive for others also decreases. Hence, the probability that correct maintenance is used in this area also decreases.



Figure 1: Housing situation Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.



Figure 2: Bad treatment of the housing by inhabitants, 03-09-2019, Tarwewijk, Rotterdam, The Netherlands



Figure 3: Sign indicating that one of the buildings within the neighborhood has been renovated, 03-09-2019, Rotterdam, The Netherlands.

2.1 Observation - Observations Housing

Observation 1. B

Location: Tarwewijk: Brielselaan, Katendrecht

Date: 03-09-2019

Observer: Danique Kuijlenburg, Femke Slooff

Across the Maashaven the neighbourhood Katendrecht is situated (figure 4). This area is characterized by being an very upcoming area in which many students are located and artistic events are held. In 2014 the Foodhallen opened in Katendrecht, and a new student housing complex was founded. Both adding to the 'new' character that is supposed to be attached to Katendrecht. What is extremely apparent the moment you look at both neighbourhoods is the difference in appearance. On the Tarwewijk side of the Maashaven the buildings situated near the waterfront are traditional working class houses common for the time period 1900-1930

(figure 5). These houses are very small and only have two floors. On the Katendrecht side of the Maashaven the new buildings are spacious and have multiple floors to accommodate more inhabitants. Houses in Tarwewijk are situated directly on the busy road, whereas on the other side the houses are accommodated with green and spacious boulevards.

This situation seemed unjust, as Katendrecht is an area which has been indicated to be a 'hip' and young area that attracts tourism and students. Tarwewijk on the other hand does not get this kind of governmental attention, as is it dedicated to be a family area for lower income households. This area does not have to be 'hip' or 'cool' and therefore the focus on modern accommodations is little to non-existing.



Figure 4: Image of Kathendrecht, 03-09-2019, Rotterdam, The Netherlands



Figure 5: Picture of houses on the edge of the Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.

2.1 Observation - Observations Housing

Observation 1. C

Location: Tarwewijk:
Oleanderstraat, Katendrechtse
Lagedijk

Date: 03-09-2019

Observer: Danique Kuijlenburg,
Femke Slooff

The variety in housing arrangements in the neighbourhood is very apparent when one walks through the neighbourhood as well. Tarwewijk has different kinds of houses, ranging from apartment buildings to modern single-family houses (Figure 6). The apartment buildings have a sober appearance with lots of use of grey tones and other dark colors. Surrounding these apartment buildings little playground and common areas are placed. These buildings seem to be built around 1970-1980.

The newer houses situated on the Katendrechtse Lagedijk and the surrounding streets are way more

modern (Figure 7). They are clearly aimed for single-family purposes and are made in warmer colored bricks which immediately changes the appearance of the street.

This situation is just. The different types of housing in this area are just, as different inhabitants also have different housing needs. However, what is unjust that the modern, single-family houses must also be way more expensive, as they are spacious and in a nicer area, hence, for low income families these houses are not an option. Therefore, the situation could appear that low-income single-families still will be living in the apartment blocks opposed to the houses that are specially made for their particular situation. Due to the difference in prices of the accommodations, segregation of income could be possible in this area which would be an unjust situation.



Figure 6: Image of upscale housing within the neighborhood of Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.



Figure 7: Image of upscale housing within the neighborhood of Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.

2.1 Observation - Observations Housing

Observation 1. D

Location: Tarwewijk: Gaesbeekstraat

Date: 03-09-2019

Observer: Danique Kuijlenburg, Femke Slooff

The difference between the part of the neighbourhood on one side of the metro line and the other is very prominent as well. In the top left corner about the Katendrechtse Lagedijk the surroundings change quite a bit. This area characterizes itself by being more child-proof and accommodation more families with higher incomes (figure 9). Many of the schools that are situated in this area are also in this corner of the Tarwewijk. This area has a triangular shape with at the heart of the triangle a square with a small playground. The houses surrounding this square are, as described above, modern and well kept. The interior of the houses is very neat, as well as the common areas.

On the first hand one would say that this situation is just, because it is creating a more diverse pallet of possible housing options. However, as a result of having more expensive houses in an area, the old inhabitants, commonly with lower income, will be pushed out of these areas as they cannot keep up with the prices (figure 8).



Figure 8: Housing situation Apartments Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.



Figure 9: Upscale housing within the neighborhood of Tarwewijk, 03-09-2019, Rotterdam, The Netherlands.

2.1 Observation - Observations Housing

Observation 1. E

Location: Tarwewijk: Dordtselaan

Date: 03-09-2019

Observer: Danique Kuijlenburg,
Femke Slooff

Due to the well-known housing situation in Rotterdam where there are two houses situated in a four level building, the fact that in the same type of building they fit four houses comes across as strange. Houses on the Dordtselaan, and the surrounding streets, are historical buildings split-up in different apartments. As can be seen on the picture (Figure 10) one house is split into at least four different post-addresses, meaning that at least four different individuals live in these houses.

In this situation it is hard to address if it is just or unjust. Because for the users it is just due to the splitting of the houses they are able to live on the main street without financial

problems. However, it can also be described as unjust that the users are forced to live in shared buildings that have less privacy opposed to having your own apartment.



Figure 10: Picture that shows the buzzers and nameplates of all the people that live within one apartment complex, 03-09-2019, Rotterdam, The Netherlands.

2.2 Observation - Observations Working and Income

Observation 2. A

Location: Tarwewijk: Brielselaan

Date: 03-09-2019

Observer: Danique Kuijlenburg,
Femke Slooff

Near the waterfront there are multiple big factories specialized in grain and oat products (figure 11). The factories are very industrial and block the view of the Maashaven. Next to the factories there is a busy road, and on the other side of this road small dockworker houses are located. At the end of this road a small common area designed to be specially for leisure is placed. However, the overall impression of the Brielselaan is highly industrial which contradicts with the housing function of the neighborhood it is situated in.

The factories are both operating either in the primary or secondary sector, which is directly linked to low paid and low educated work.

This reflects the income situation within the neighborhood. It is still unknown if people from the neighborhood actually work in these factories as well.

The factories in Tarwewijk are very just, as the area used to be specifically aimed at the distribution and production of grain. Therefore, the factories are corresponding with the historical background of the area.



Figure 11: Meneba factory, 03-09-2019, Rotterdam, The Netherlands.

2.2 Observation - Observations Working and income

Observation 2. B

Location: Tarwewijk: Dordtselaan

Date: 03-09-2019

Observer: Danique Kuijlenburg,
Femke Slooff

On one of the main three roads of the Tarwewijk, many small shops are located. Small, foreign supermarkets, barbershops, electronic shops and even a fishing supply shop are situated on this street. Outside of these small shops, some supermarkets and a few schools and day-cares there are little possibilities for work within the neighborhood. This could mean that inhabitants of Tarwewijk have to travel to other areas in order to sustain themselves.

The labor options in Tarwewijk seems fairly unjust, however, seen the outlay of the area it is just. The area is mainly focused on housing and not on work. Hence, the shops that are present in the

neighborhood are mainly for leisure purposes of life maintenance, such as supermarkets.



Figure 12: Fishing equipment store, 03-09-2019, Rotterdam, The Netherlands

2.2 Observation - Observations Working and income

Observation 2. C

Location: Tarwewijk: Dordtselaan

Date: 03-09-2019

Observer: Danique Kuijlenburg,
Femke Slooff

Many of the stores and facilities are seemingly non-European in their appearance. Almost all of the stores have foreign subtitles or even foreign names. Stores that can be found in this area are either specifically specialized in foreign products, i.e. polish supermarkets, Turkish supermarkets, Surinam lunchrooms and an Indian film library, or have a common goal with a foreign twist, a car shops that only advertises with Turkish language or a liquor store selling only very expensive bottles of champagne. These kind of shops are in most cases attended by only one or two cashiers/owners.

This point seems just. The majority of the inhabitants of Tarwewijk have

a non-European ethnicity. Hence, it only seems reasonable that the stores are adapting the needs of the people living in the surrounding areas.



Figure 12: Fishing equipment store, 03-09-2019, Rotterdam, The Netherlands

2.3 Observation - Conclusion

The first stage of our research into the housing, working and income conditions of the neighborhood Tarwewijk we went into the neighborhood itself to take photos and to generate an understanding of the neighborhood. During this initial round of observational research, we immediately noticed that the neighborhood had two distinct areas that both had their own unique feeling and style.

Our observation round started on the Dordtselaan and the surrounding streets. This area had a malevolent appearance. Both the shops and the houses on the inside were looking rather disorganised and lacking in maintenance. When we went into the neighbourhood in the direction of the Millinxpark we noticed inhabitants were quite hesitant when it came to our presence in the neighbourhood, probably because we were taking pictures and therefore seemed out of place. These encounters in this part of the Tarwewijk may have also influenced our general understanding of the neighbourhood and its inhabitants.

The area that we first visited seemed to be a lower-income area with social housing options. The common areas, such as shopping streets and play-

grounds, were dirty and disorganized. Also, the non-western ethnicity of the inhabitants was reflected in the shops available. Many shops were aimed at foreign products and users. This combined with the sometimes poor appearance of the neighborhood immediately led us to the hypothesis that many inhabitants of the Tarwewijk are low educated, low paid, and foreign, which was later confirmed by statistics found regarding housing, education, income and ethnicity. Within the neighborhood itself there is a lack of workspace and potential labour opportunities, besides the shops, and factories that were found on the edge of the neighborhood. We concluded that the people of Tarwewijk must look for work outside of their own area. As they, presumably, are looking for jobs that require a low level of education which are mainly situated far outside of the city centre, a long commute time can be expected. Hence, our first point of interest is the question of mobility and its correlation with labour and income.

As we continued this first stage of research, we went to a different area situated above the Katendrechtse Lage-dijk. This area came across a bit more family friendly and organised. Houses

here were in better condition and the public areas were better maintained compared to the area we visited before. The second point of interest therefore is how this distinction came about, and how it influences the area and the social situation within the neighborhood. Also, if there are many families living in the area, how does this connect to the work preferences in the neighborhood. As people with small children need to be more at home to fulfil their caretaker duties, it would be logical that they would also prefer a job in the area, instead of having a big commute every day.

For the next step, desk research, we can further our understanding of the neighborhood by obtaining more in-depth factual knowledge about the statistical housing situation. For now, we will be focussing specifically on the correlation between working and transportation within the area. Where our main research question will be:

Does the current Situation Regarding Transportation in relation with work, Effect the inhabitants of the Tarwewijk and form spatial inequality?

Lessons learned:

Before we went into the neighborhood we had only read some articles about the neighborhood itself. We decided that before we are going into the neighborhood that we were going to make observations within the range of our subject (housing, work and income), this way we went into the neighborhood with a clear focus. But also, when we went into the neighborhood we tried to not be influenced by the things we read before we went into the neighborhood so we were not biased in our observations. We learned that the things we read about (criminality, poverty) are not necessarily visible within the neighborhood, only if you look really well. The more we looked, the more of the problems we could see regarding the problems in the neighborhood. But at the end of the day the main thing that we learned, was the fact that sometimes information that you can find online might be true, but does not immediately correlate with your personal experience of the neighborhood.



3. Data Analysis

3.1 Data Analysis - Introduction

In the last chapter we made some observations regarding the topics of housing, work and income. We observed that within the neighborhood there are little working opportunities for the inhabitants of the neighborhood and therefore suspected the inhabitants of the neighborhood to have to go outside of the neighborhood to go to work. We suspect that the inhabitants have to travel a long way for their work. Which is a form of spatial inequality.

Before conclusions are drawn, research must be done when it comes to housing, work and income. And considering the fact that transportation is a key element when it comes to travel times between the Tarwewijk and work, research will be done in that area as well. Research will be done by looking at current plans made by the government and general statistics regarding demographics of the Tarwewijk. Which will be followed up by research done within the fields of housing, work, income and transportation (statistics and mapping).

Introduction

Since the 1900's the neighbourhood Tarwewijk was known for the industrial sector that was mainly focussed on grain and flour processing. The area current is inhabited by 12.480 inhabitants that are divided over 6.073 different households (Gemeentelijke Basis Administratie, 2017). After the disappearance of harbour work during the 60s and the following oil crisis in the 70s and 80s, the population of the Tarwewijk changed. Previously the neighbourhood was inhabited by Dutch, low-educated workers who had their jobs nearby. However, as the economic sector changed in the neighbourhood the cheap houses became the habitat of a, mostly, foreign population (Bastiaanssen, Martens & Polhuis, 2013). In 2018 still the majority identifies as Dutch (2.684 persons), but a considerable number of Surinam (1.505 persons), Antillean (1.084) and Turkish (1.419) people are living in the area (figure 13). The neighbourhood is therefore not only very diverse but also identifies as a young neighbourhood. The peak of the age demographic lays between 20-35

Ethnic Background Citizens Tarwewijk January 2019

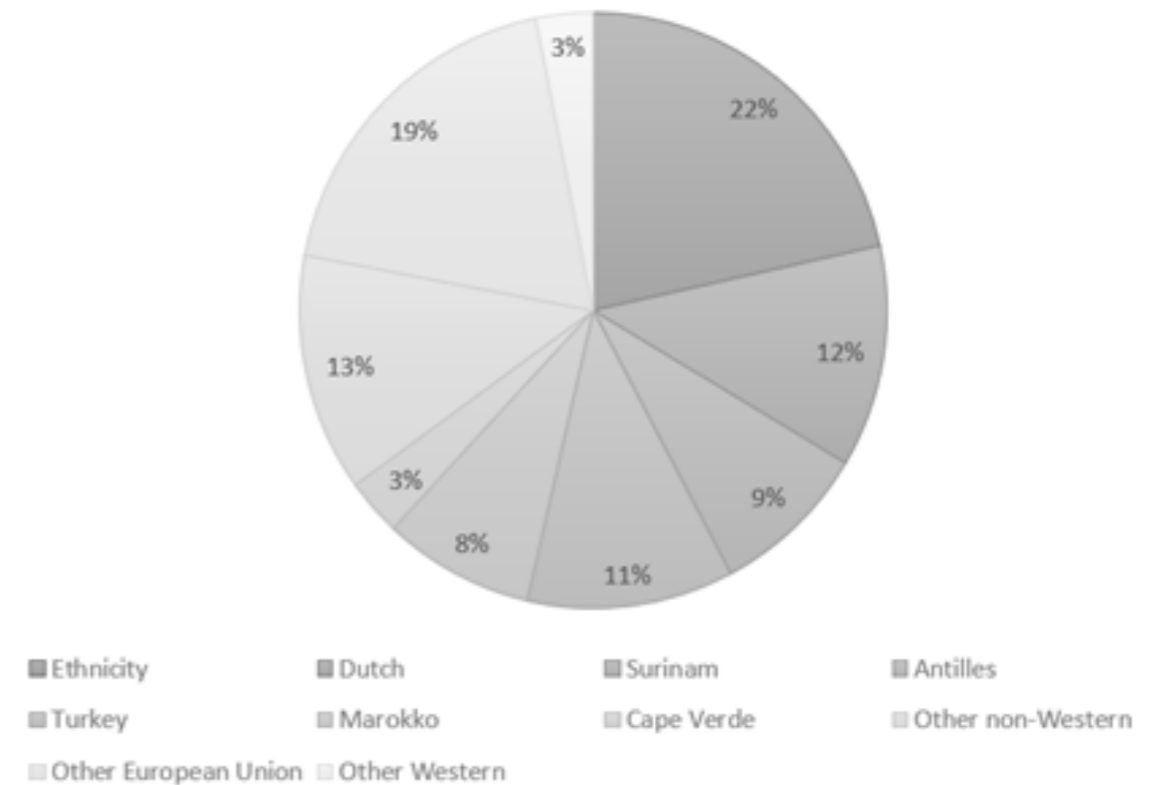


Figure 13: Ethnic background Citizens Tarwewijk January 2018, Rotterdam, The Netherlands

AGE DISTRIBUTION CITIZENS TARWEWIJK 2019

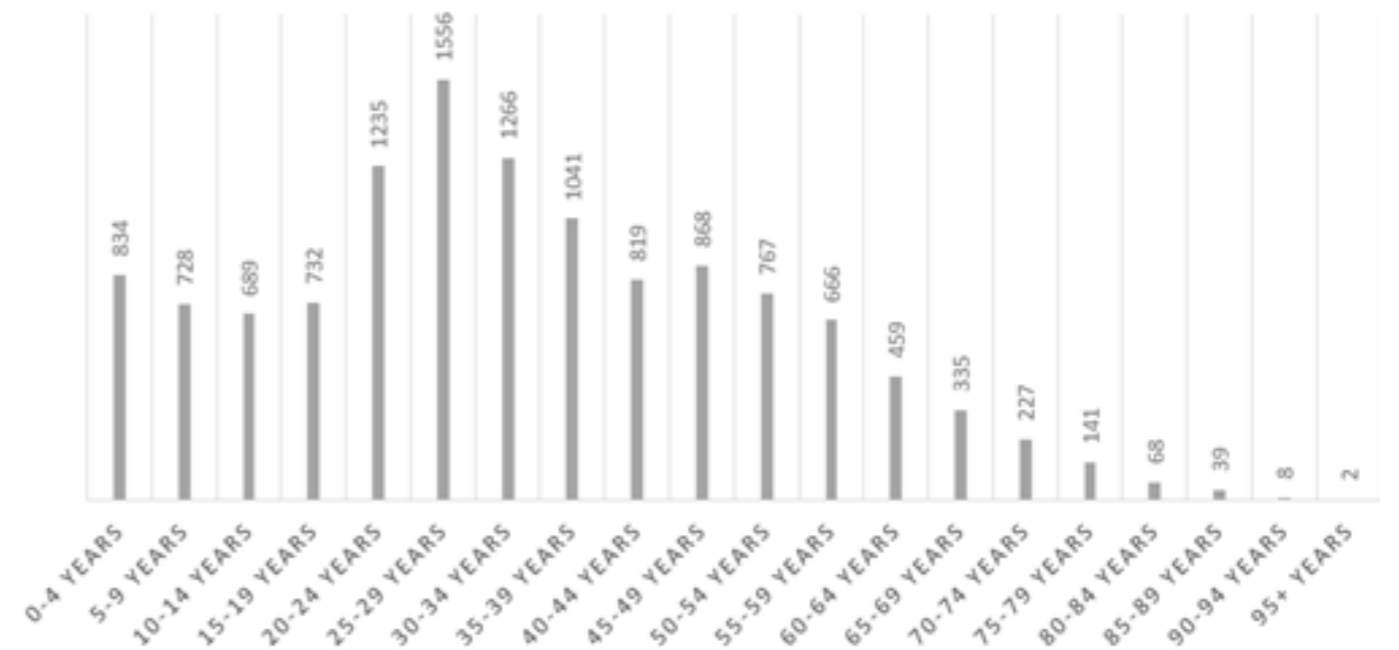


Figure 14: Age Distribution Citizens Tarwewijk 2018, Rotterdam, The Netherlands

3.1 Data Analysis - Introduction

years old (figure 14). Only 75% of the people living in the Tarwewijk are aged above 65-years-old (Gemeentelijke Basis Administratie, 2017).

Since the change in population following from the changes during the 1980s, the neighbourhood also obtained a new image of being unsafe and highly criminal. Especially the 'Millinxbuurt' played a key factor in this new image of the Tarwewijk as being dangerous. As many of the former inhabitants of the Tarwewijk moved due to the lack of job opportunities, many houses became unattended and therefore neglected.

The new inhabitants of the area were mostly poor and dependent of social welfare payments. To overcome the monetary problem of the new population, houses got split up to house more households at lower prices. As a result, the area is characterized by three of four floor building with multiple households who share stairwells. This, according to the current population, causes

the neighbourhood to look 'cheap' and unorganised (Engbersen, Snel & Weltevrede, 2005). However, it is not only the appearance of the neighbourhood that displays the low level of income and unemployment, as the numbers of the annual research from the municipality of Rotterdam also describe this.

National Program Rotterdam South

Neighbourhoods with low levels of education, high levels of poverty and dependence on social welfare allowances are often described as 'kansarm' and therefore obtain special attention from the municipalities. In Rotterdam there even is a special bureau that is aimed at researching and developing programs for Rotterdam-Zuid. In the report for 2019-2022 of the NPRZ (Nationaal Programma Rotterdam Zuid, 2018) the importance of understanding the neighbourhoods in order to properly understand the problems faced within these areas is pointed out at

multiple occasions. Therefore, the following subchapters will describe the numerical status of Tarwewijk in order to obtain a clear image of the difficulties in the area with regards to housing, work and transport. In the first subchapter the current housing situation will be discussed. In the second subchapter the details of work and income within the area will be discussed, followed by a subchapter regarding transport.

3.2 Data Analysis - Housing

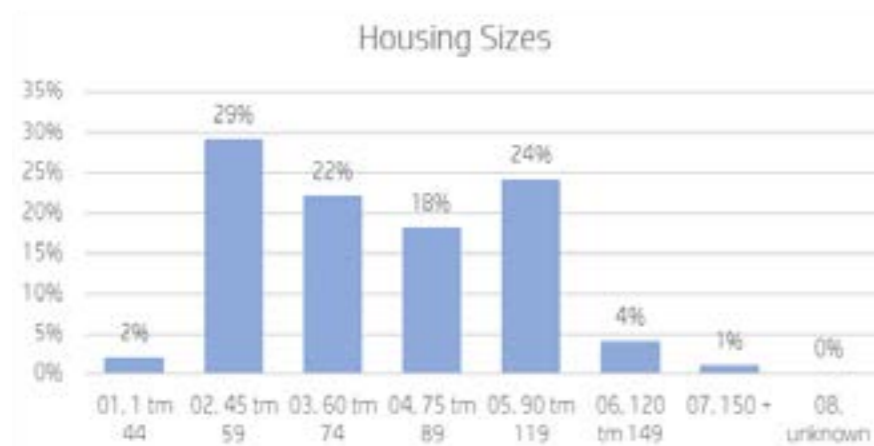


Figure 16: Housing Sizes in the Tarwewijk, 2018, Rotterdam, The Netherlands

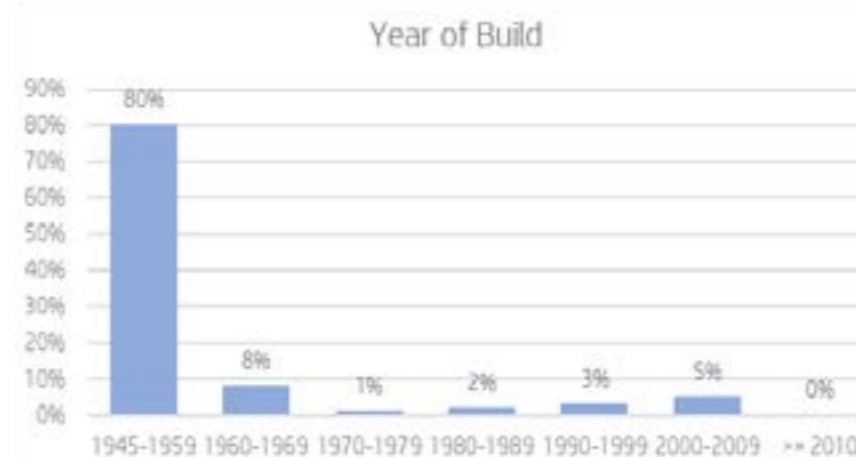


Figure 17: Year of build in the Tarwewijk, 2018, Rotterdam, The Netherlands

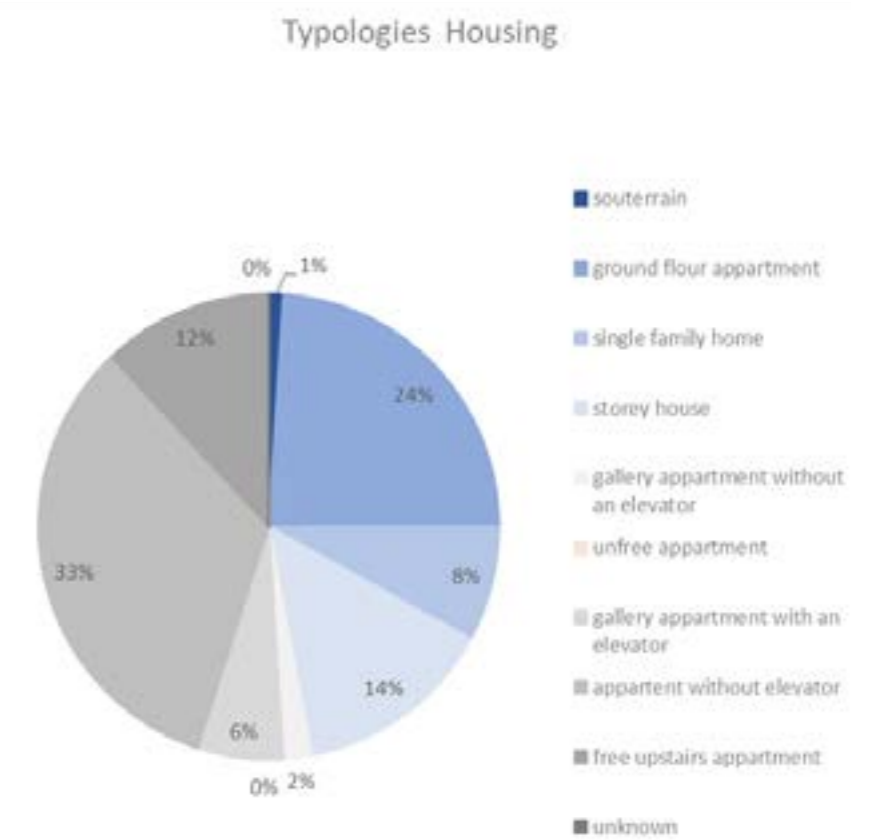


Figure 18: Housing typologies in the Tarwewijk, 2018, Rotterdam, The Netherlands

Within the neighborhood 94% of the housing stock is currently getting used (appendix). 80% of housing was built between 1945 (figure 17) and 1959 with means that the houses are relatively old, which is consistent with the observations that were made about the neighborhood in the last chapter. A lot of houses within the neighborhood are built in the common Rotterdam style, where two apartments were situated on top of each other in brick flats. This observation correlates with the data regarding building typologies. 33% consist of these types of flats which are flats consist of two different levels (figure 18). But more often than not these apartments were also split in half which resulted in 4 apartments in one block. Therefore 24% of housing is a ground floor apartment and 14% are single level apartments. The biggest percentage of the housing stock has a floor area of 45 to 59 square meters, which also correlates with this trend of splitting apartments (figure 16).

3.2 Data Analysis - Housing

Within the neighborhood over 77% of the houses are up for rent (figure 20). In The national program of Rotterdam south it is mentioned that the government wants to create more buying opportunities within the neighborhood, to attract more middle- and higher-income inhabitants (Nationaal Programma Rotterdam Zuid, 2018). Because, right now, 63,93% of housing has a housing price off less than 100,000.- euros (figure 21) which is way lower than the 256,700.- average of Rotterdam (CBS, 2019). Also, the biggest party involved in the ownership of the housing situation are individual renters which own 45% of the overall housing stock (figure 22).

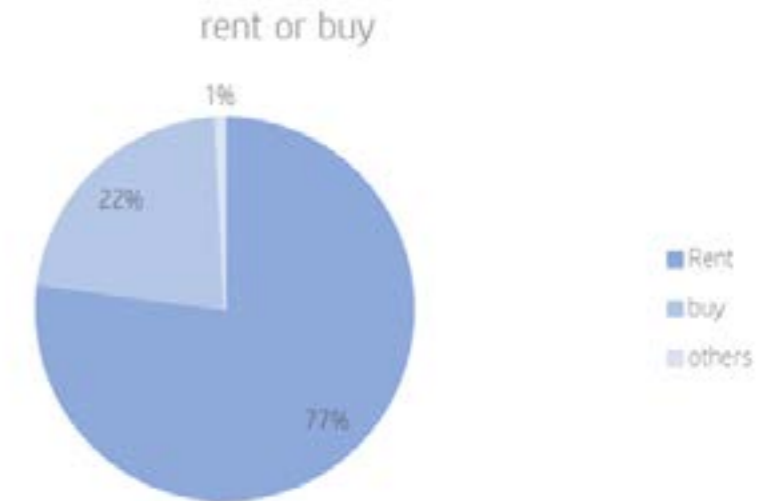


Figure 20: Rent or buy within the Tarwewijk, 2018, Rotterdam, The Netherlands

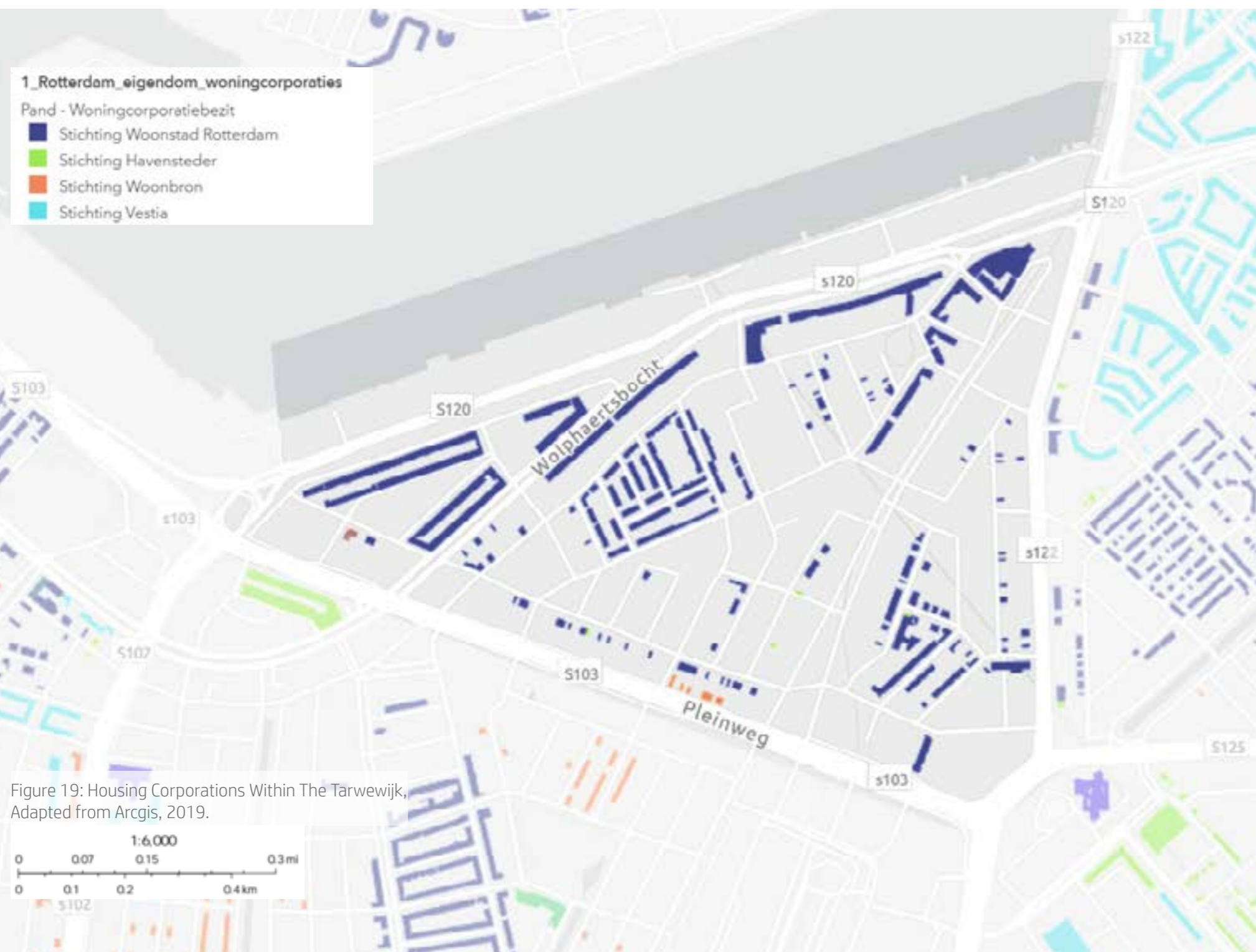


Figure 19: Housing Corporations Within The Tarwewijk, Adapted from Arcgis, 2019.



Figure 21: Housing Prices in the Tarwewijk, 2018. Rotterdam, The Netherlands



Figure 22: Owners of property within the tarwewijk, 2018, Rotterdam

3.3 Data Analysis - Work and income

Within the area of work and income there are several problems in regard towards the level of income and working opportunities for people with a lower level of education within the neighborhood. Right now 42% of people have a lower level of education and 45% have middle level of education (figure 23). Which results in 69% of people having a lower income and 27% a middel income (figure 25).

One of the problems mentioned in the national program of Rotterdam South is the extreme poverty that accours in these neighborhoods (Nationaal Progamma Rotterdam Zuid, 2018). This extreme poverty can be seen when one looks further into the percentage of people with a lower level of income. According to the carts shown on the side not only do 42% op people make between poverty line and minimum wage but also 14% of people live under the poverty line (figure 24).

The National Program of Rotterdam South is set up to combat these poverty problems within the tarwewijk and other neighborhoods. This program primarily focusses on the creation of jobs and the investment of putting people back to work.

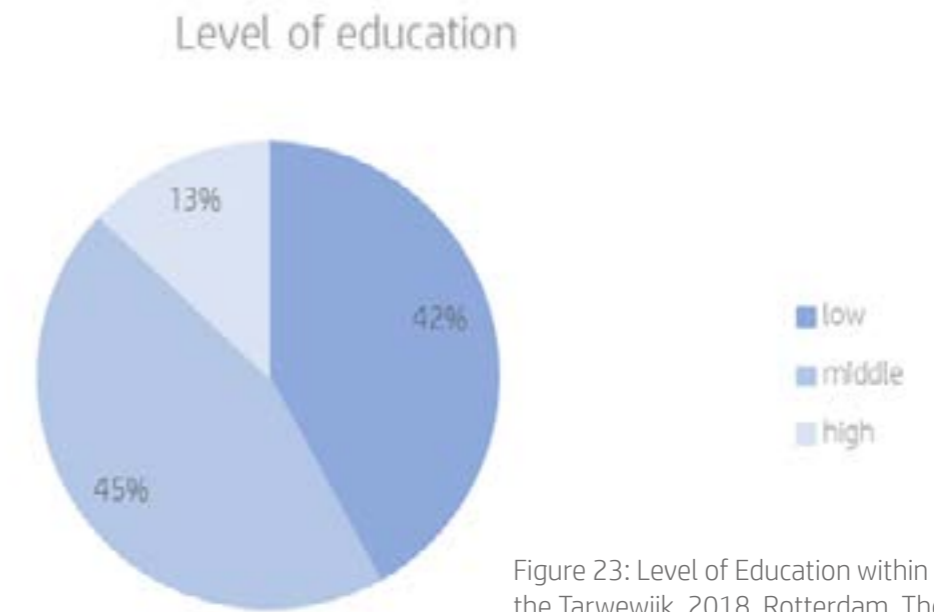


Figure 23: Level of Education within the Tarwewijk, 2018, Rotterdam, The Netherlands.

54.2% economically independent.

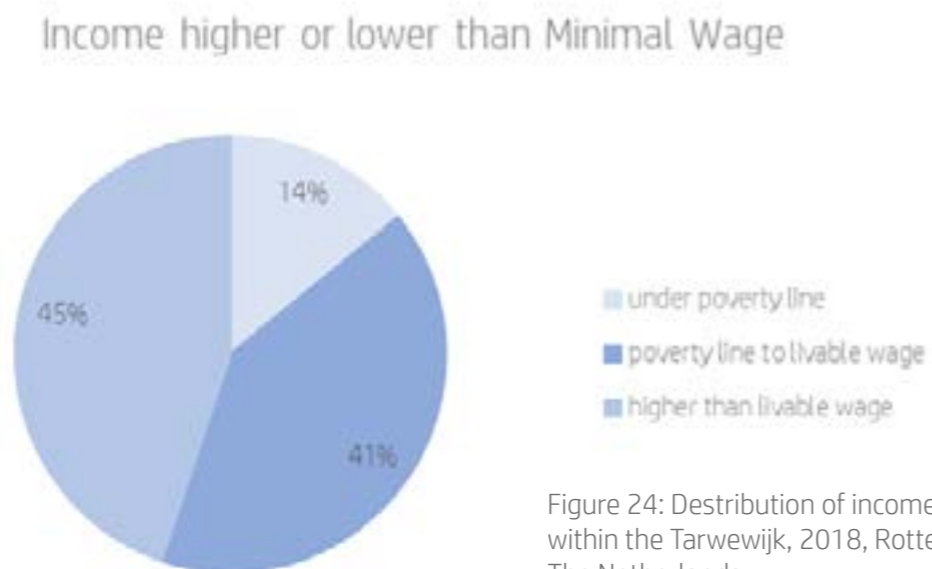


Figure 24: Destribution of income level within the Tarwewijk, 2018, Rotterdam, The Netherlands.

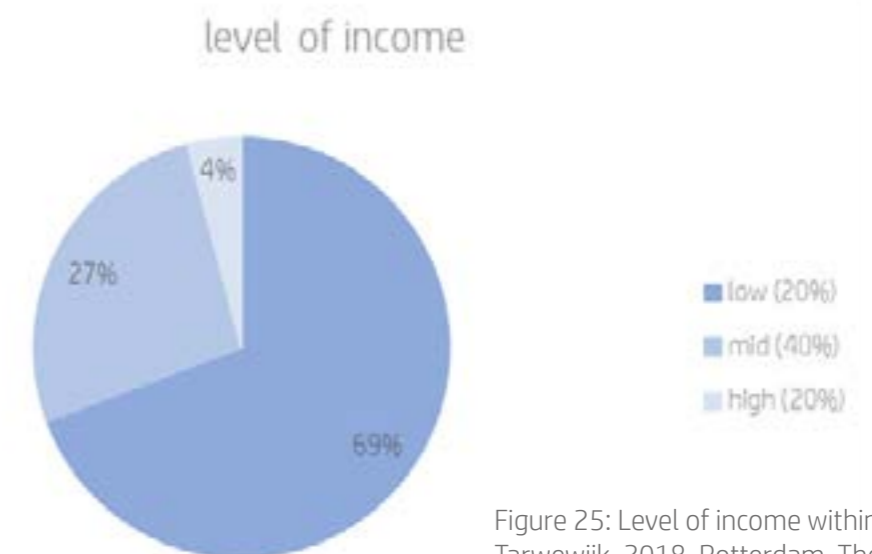


Figure 25: Level of income within the Tarwewijk, 2018, Rotterdam, The Netherlands.

3.3 Data Analysis - Work and income

Employment Agencies

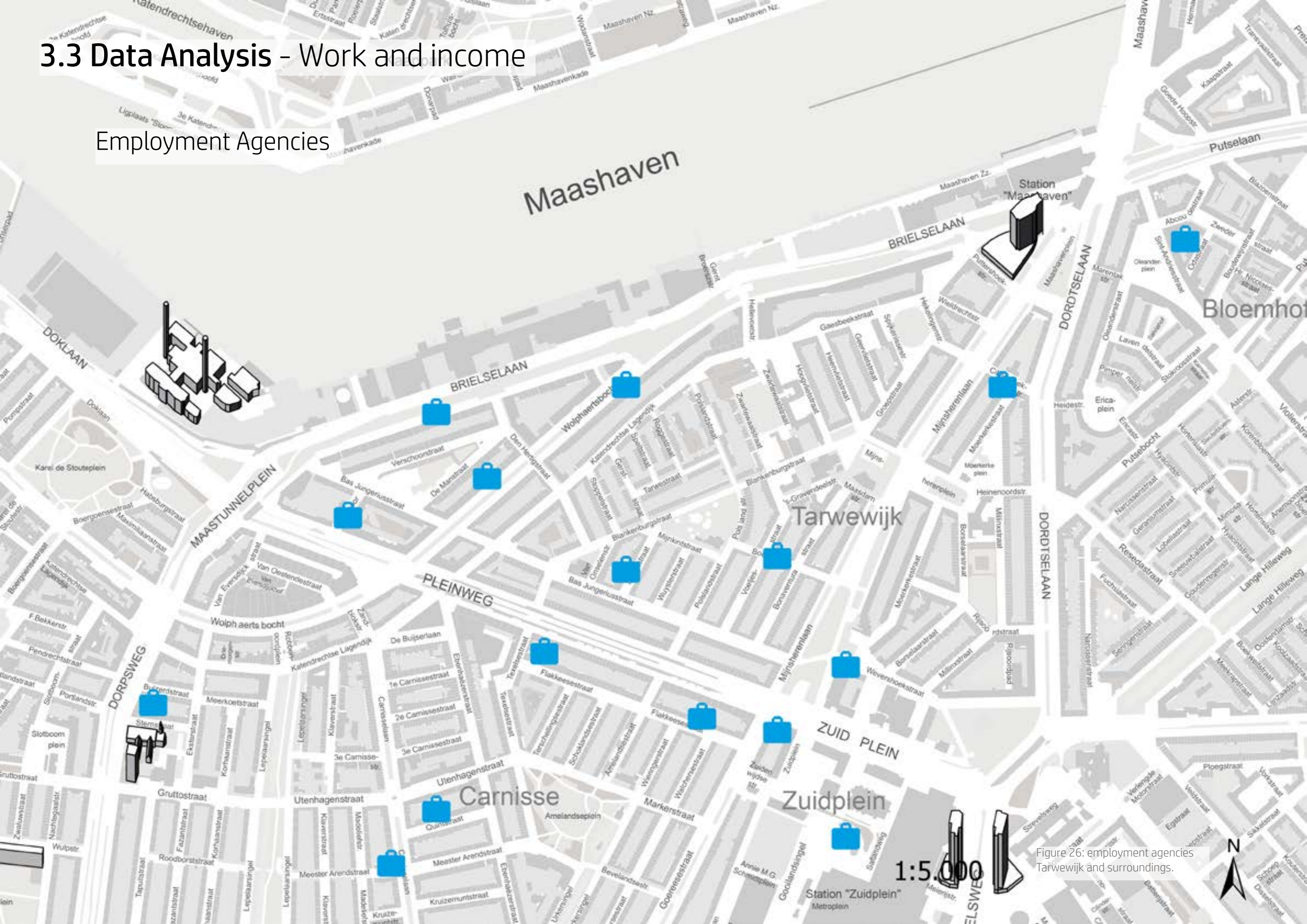


Figure 26: employment agencies Tarwewijk and surroundings.

3.3 Data Analysis - Work and income

The current situation regarding work within the neighborhood is the following:

Within the field of work there are two sides; the current situation regarding work among the citizen of the neighborhood, and the amount of work available with the neighborhood itself.

Right now the main source of income within the neighborhood is working and independent working which consist of 65% of the population (figure 27). One thing that is also very noticeable is the level of unemployment within the neighborhood. Right now the unemployment level is at 14,5 % as shown in the graph on the side.

Right now there are 429 companies or small businesses within the neighborhood of which the main sectors wholesale and retail trade, advertising and research cover 202 of those companies (figure 28). Wholesale and the retail trade is shown in the map below. Where we can see some of the working opportunities within the Tarwewijk.

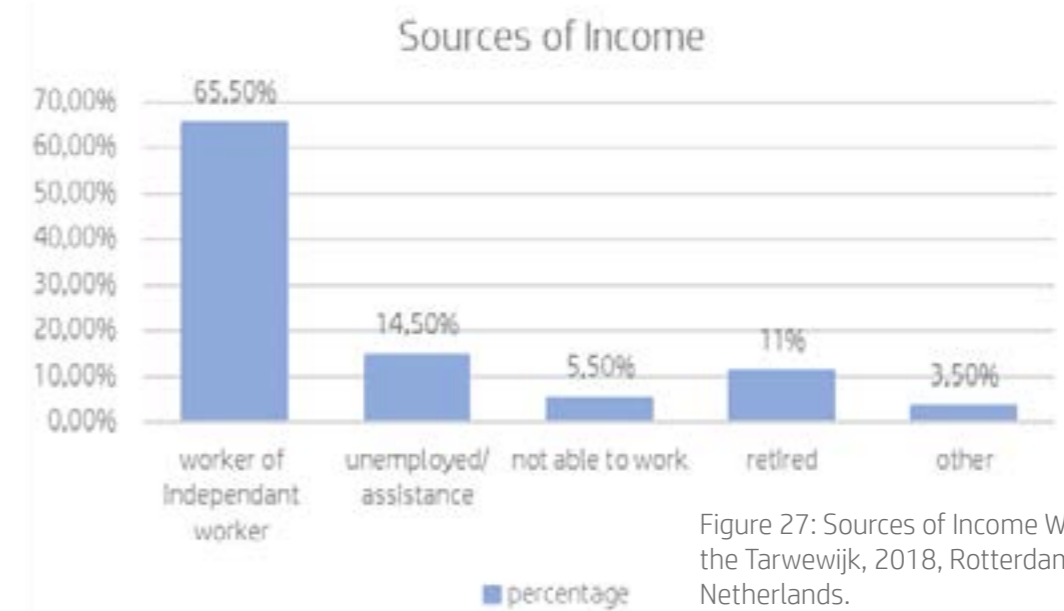


Figure 27: Sources of Income Within the Tarwewijk, 2018, Rotterdam, The Netherlands.

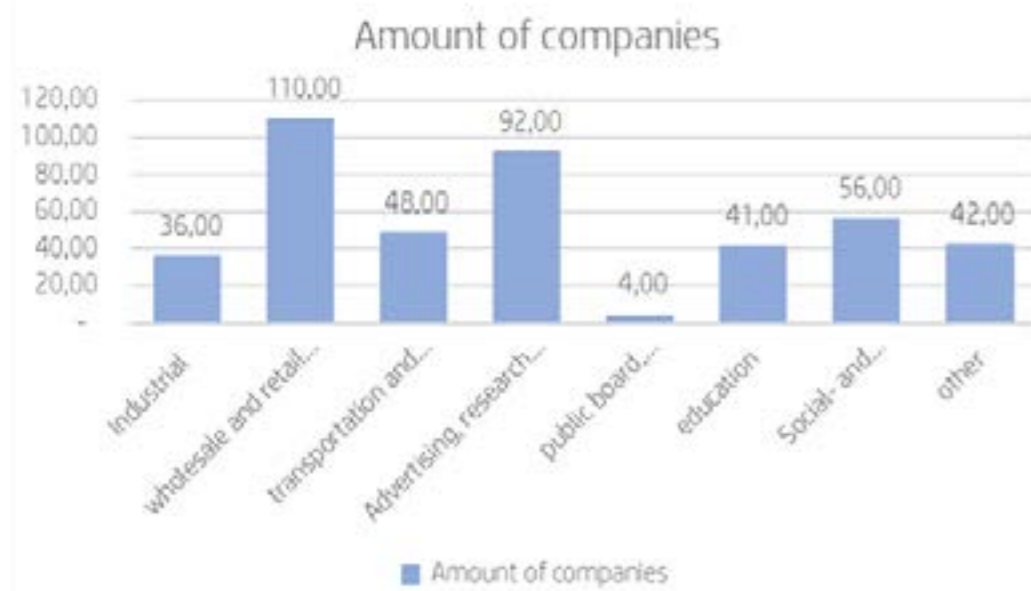


Figure 28: Companies Within the Tarwewijk, 2018, Rotterdam, The Netherlands.

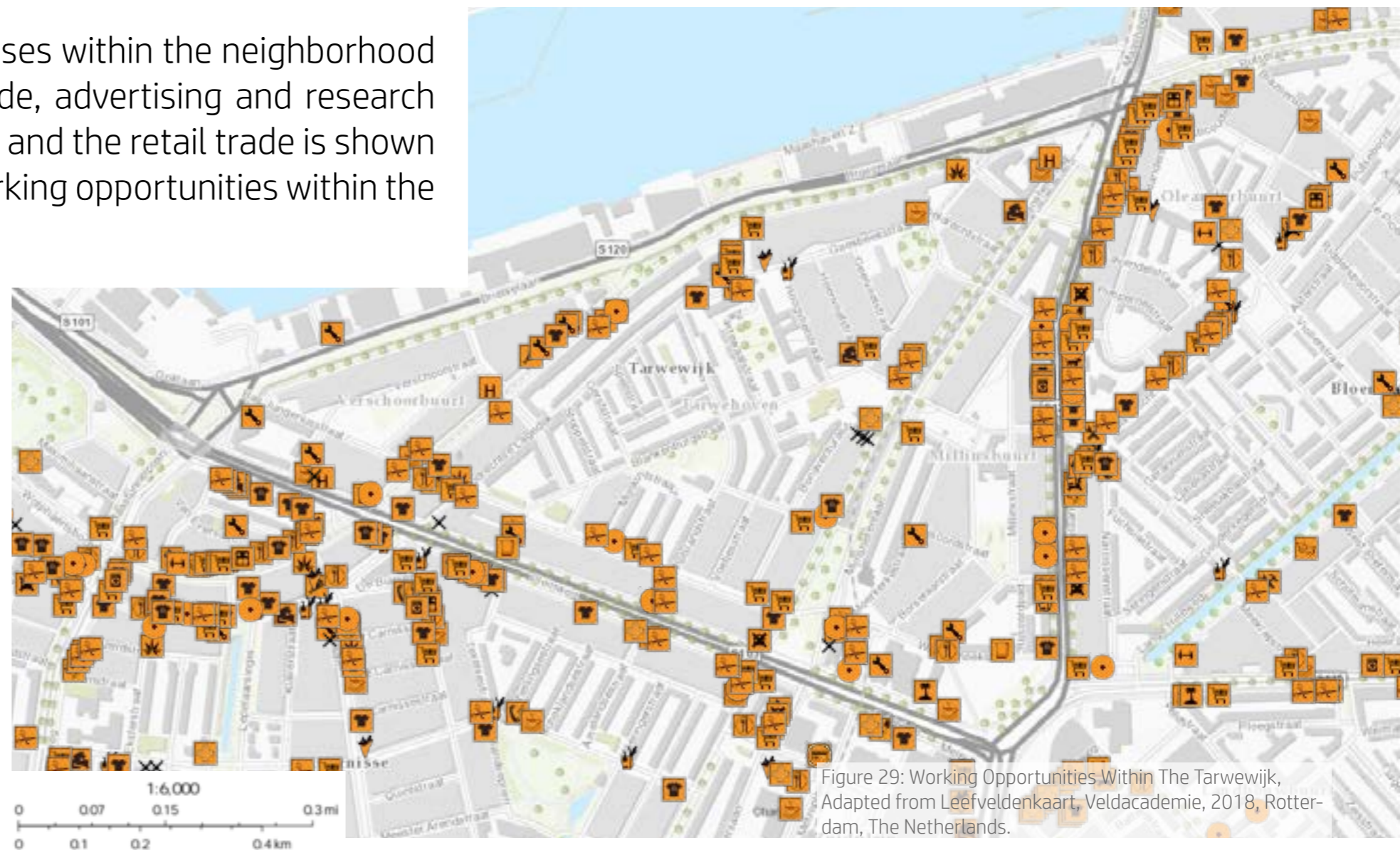


Figure 29: Working Opportunities Within The Tarwewijk, Adapted from Leefveldenkaart, Veldacademie, 2018, Rotterdam, The Netherlands.

3.3 Data Analysis - Work and income

As said before, according to the Voortgangsrapportage of the national program of Rotterdam South (Nationaal Programma Rotterdam Zuid, 2018), there are not enough working opportunities for people with a lower level of education to find a job within the sectors which they are currently educated in. According to the report the healthcare and technical sector are in need of lower educated workers. These two sectors offer opportunities for policy makers to combat poverty within the Tarwewijk and other neighborhoods within Rotterdam Zuid. We couldn't find data actually explaining in which sectors work. Also there was no data found on the location where people worked. This data is useful in order our research question. Hopefully this will be found out in the next chapter where we interview inhabitants of the neighborhood in regard to their work situation and their mode of transportation, and if this affects their daily life.

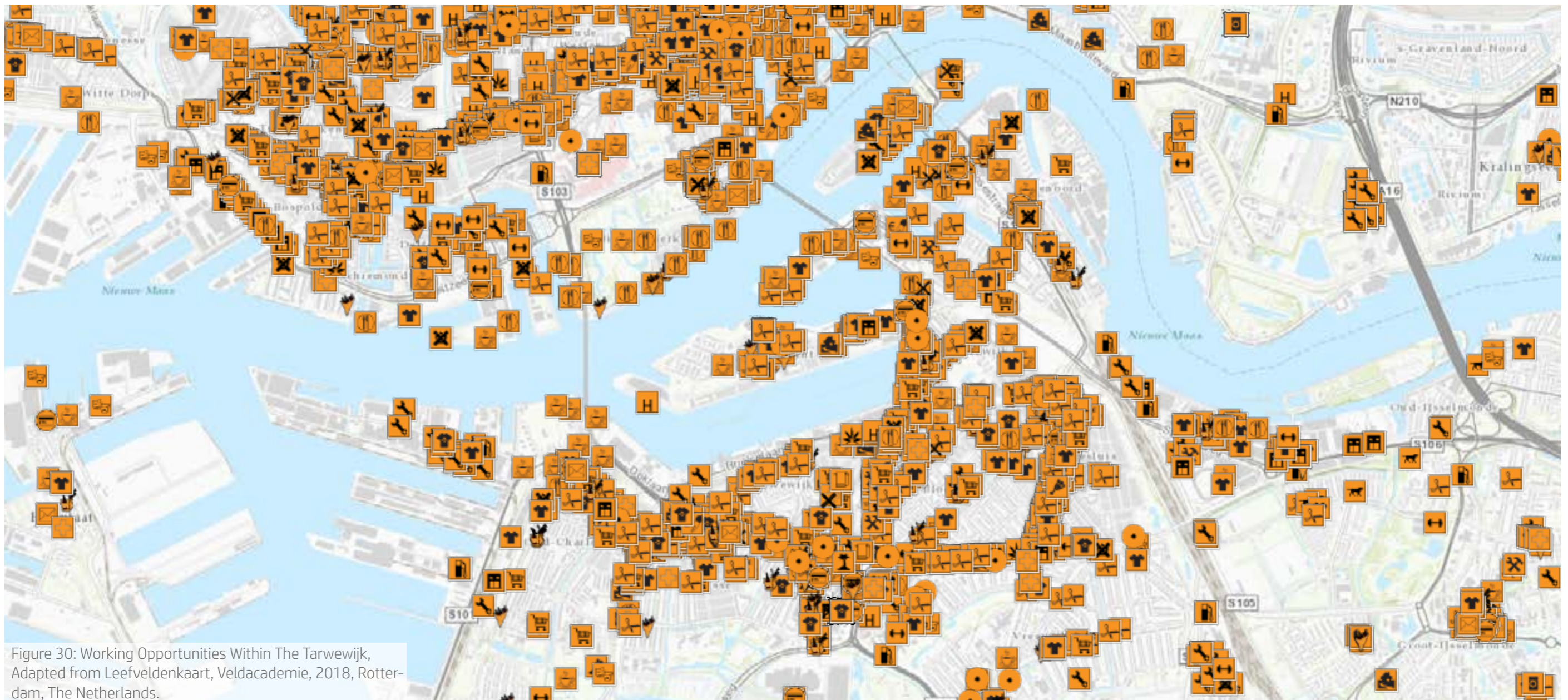


Figure 30: Working Opportunities Within The Tarwewijk, Adapted from Leefveldenkaart, Veldacademie, 2018, Rotterdam, The Netherlands.

3.4 Data Analysis - Transport

The NPRZ points out in their 2019-2022 report on Rotterdam-Zuid that transport and mobility in the area still below the national standard. As seen in the figure on the side (figure 31) there is a large part of the neighborhood that is not within an area of public transportation. The circles are drawn by Standard regarding walking distance (van der Blij, Veger, & Slebos, 2010). Within Rotterdam-Zuid the options for public transport are limited, as there are little metro and tram stops. In addition to this lack many of these lines are mostly directed via the city centre. For the people of Tarwewijk, who often depend on the public transport as their transporting to and from work, this will result in long travel times as they mostly work outside of the city centre. As the NPRZ also points out there are additional problems such as the lack of financial aids and lack of other options such as car or bicycle for these people. In Rotterdam-Zuid only 64 percent of the inhabitants have their own car and drivers license. On itself this is not a problem, but it becomes a problem when taken into account that only one fifth of the jobs for low-educated workers are within Rotterdam Zuid the most of the jobs available for low-educated workers (Bastiaanssen, Martens & Polhuis, 2013).

However, as both the NPRZ and current research points out that the (public) transport is still lacking in the area of Rotterdam-Zuid from a survey



Figure 31: Public transportation coverage of the Tarwewijk, Veldacademie, 2018, Rotterdam, The Netherlands.

conducted under the citizens of Rotterdam-Zuid . This is considered to be a point of improvement within the neighborhood.

3.5 Data Analysis - Conclusion

After the first observations in the Tarwewijk a few themes were clearly noticeable. Under the overarching theme of work, income and housing quite some interesting questions regarding social inequality could be asked.

On the basis of these observations we continued with thorough desk research to bring contextual background to the questions we obtained in order to provide us with enough information to later conduct meaningful interviews regarding our research question about transportation and work and income.

The first interesting observation was the diversity in houses in the area. The most common housing situation in Tarwewijk is the three or four level building that is split up in different appartements of which the staircase is shared. However, there was also a large share of houses that seemed to be relatively new and modern and aimed at one-family households. Hence, the first point of interest for

conducting desk research was to find out the different houses and households within the Tarwewijk. This confirmed the hypothesis that the majority of the houses in the area are split up to house multiple households.

Furthermore, other findings were that the majority of the households is relatively poor and has a low income. This accounts for the large share of social houses within the neighbourhood. In sum, on the topic of housing the data corresponded pretty closely with our hypotheses.

The large share of low income households is closely related to the kind of work most of the inhabitants of Tarwewijk have. However, besides the general facts that most citizens are low educated and therefore have low income jobs, there was little to none information on the specifications of where they work or what kind of work they do. This was something we thought was very interesting to look at for us during the interviews. What did become apparent was the lack of

big sustainable job opportunities within the area itself. Aside from the factories on the Brielselaan, and small shops on the Dordtselaan, no other options are available. This led to the hypothesis that inhabitants of the Tarwewijk must go to other areas, presumably outside Rotterdam Zuid, for their work.

Which on itself led to the question how they get to their work. As the area has a small coverage by public transport, and seen the low income that is common in this area, the options for transport are very limited.

During the desk research this appeared to be one of the main concerns of the municipality and the NPRZ.

The connection between mobility within the neighbourhood, work and the possible social inequality that exists from this point on will be the main focus of this report.

Lessons learned

The first thing that we learned was that having the clear demographics of the neighborhoods is a nice way to find both similarities with our observations done in the chapter before, but also the differences. We also learned that for us, because we our group was smaller than the other groups we had to make clear boundaries in the information we wanted to find out about the neighborhood. For us it really helped to put up boundaries to limit the information we had to research in the first place. We made a guideline of all the statistics we wanted to find per category to answer our research topic (appendix, p. 67). We also learned that there are still some data missing in the field of work.

4. Interviews

During the third and fourth week of the research regarding the mobility and work options in Tarwewijk interviews will be conducted. Interviews are par example the most efficient way to get an insight in the lived experience of the Tarwewijk and its networks. The first round of interviews that have been conducted over these two weeks, are with local shop owners. The shop owners are an important source of information as they are the closests to the actual market within the area. The second category of respondents are the inhabitants of the Tarwewijk. We went to a local point, in this case the local supermarket, and asked short questions about their work, their use of transport and their experiences. The third category was the local municipality firm in the tarwewijk from the program: 'Wijkgestuurd werken Rotterdam'.

We used different interview approaches for the different categories. For the local shop owners (local entrepreneurs) we thought of some questions beforehand

that would form the leading thread for the actual interviews. During the interviews we decided to have a fluid approach in order to get more information out of the respondents. We didn't record these interviews as we though it not appropriate at the time. So in the report the conversations will be described in a very lose way were only a couple of important quotes will be highlighted. For interviews we conducted on the streets we had clear outline for every single interview. This way we could do a lot of interviews in a short amount of time and we didn't have to take a lot of time out of someones day.. For the third category we preferred a couple of questions that we wanted to ask before hand. But here as well we kept the conversation lose. We did record this conversation. But because we had difficulty getting in contact with profesional the interview took place in the last week of the research, which didn't give us enough time to right the entire script out. So here the same approach was used as

with the interview with the local entrepreneurs (local shop owners).

The upcoming chapter will show the results of the interviews by means of the descriptions of the interviews and a review of the most important quotes placed within the map of the tarwewijk to show an overview. For the interviews with the local inhabitants, a table was created with the answers to the questions asked, to show a clear summary of the interviews. In the conclusion of the chapter the interviews will be discussed and conclusions will be drawn in relation to the research questions.



Figure 32: locations interviews local entrepreneurs, 2018, Rotterdam, The Netherlands.



Figure 33: locations interviews inhabitants, 2018, Rotterdam, The Netherlands.

4.1 Interviews - Local entrepreneurs

Interview 1

Location: Flower Shop on the Hellevoetstraat 61, Rotterdam

Time: 13:10

2 man

The first interview with a local entrepreneur in the Tarwewijk was with a local flower shop owner. When we first introduced ourselves and mentioned that we were working on a research project regarding the neighborhood, the owner (a caucasian man in his thirties) immediately mentioned that the shop had only been there for only two and a half weeks. He said: "I can't really tell you about the neighborhood and its inhabitants, considering we have only been here for two and a half weeks." So we asked him about the report by the government that came out in 2018 regarding the Tarwewijk, which mentioned that the neighborhood consisted of many small business owners. His answer to that

question was: " There are indeed a lot of small stores and companies in the neighborhood, and we have noticed that they are really valued by the inhabitants of the neighborhood" We asked him how many and what kind of customers he gets on a daily basis, to which he answered that businesses have been doing well and that the customers are very varied in background and age. Something that we also noticed when looking at general demographics of the neighborhood.

We asked him about the other small business in the neighborhood to which he answered that there are a lot of new businesses and shop leaving and appearing a lot. He mentioned that for example the store that was in the building before used to be a flower shop as well. He also told us: "If you want to really speak to someone that knows a lot about the neighborhood and its inhabitants, you have to go and visit the animal shop around the corner. The shop and owner have been in this neighborhood for over 25

years." he also told us the woman that owned the flower shop before them was the animal shop's owner's daughter.

We then asked if they had noticed any influence of the government when it comes to the placement of these little shops and companies, to which he answered: "There is interference when it comes to the placement of shops in spaces meant for shops. For example, we were chosen over a private tanning room and a funeral centre. They didn't think that those two types of businesses would be good for the appeal of the neighborhood"

We then thanked them for their time and effort and went to the animal shop.

4.1 Interviews - Local entrepreneurs

Interview 2

Location: Sjaak's Dierenwinkel
Katendrechtse Lagedijk 49

Time: 13:40

The man in the pet shop is also the owner. He has owned this shop for over 25 years, and he himself was born and raised in this area. He lives right above the pet shop with his wife.

When we asked him about the area in relation to work and the availability for work, he said that he saw some big changes over the past years. He described that most of the shops, that are doing well in the neighbourhood, are Polish specialty markets with sometimes Turkish or Moroccan shops. He stated that there are only a few 'Dutch' shops of which he is one. However, following to his account this is only due to the lack of pet shops in the area, but that any other kind of business will not stand a chance in this area. The flower shop and the Indonesian take

away restaurant around the corner were having a hard time according to this shop owner. People in the neighbourhood tend to stay and work within the neighbourhood. He described that many people are not eager to leave the area. But many people did move over the past years. He stated that the area formerly was a true 'Rotterdamse volkswijk' everybody knew each other, and it was almost like one big family. After the policies implemented by Joop den Uyl the area got flooded with Antillean people and afterwards Turkish people. The Antillean people moved to Katendrecht, and then the new inhabitants became Polish people. Hence the neighbourhood really changed in his perspective.

He also stated that within the area most people tend to work here, or not work at all. When we asked him for the reasons, he said that the education is low in these neighbourhoods, that the work ethos of the people currently living there is low and that they just do not want to go out of the area. We asked about if this has anything to

do with the transport options, but he said that he does not think so.

We spoke about the NPRZ program that this area is aimed to be an area full of little, independent businesses and an ideal environment for "ZZP" work, he said that this is not true and that the municipality does not know what is going on. He stated that the area is transgressing and getting worse over the years. The focus is wrong. He pointed at the new electrical car stations in the area, which are not wanted by the inhabitants of the Tarwewijk because nobody has an electrical car. In his point of view the government does not know what is really going on in the area.

On the topic of ethnic diversity, he said that most people coming to his shop were mostly Dutch people. He continued by saying that people with other ethnicities were bad for the neighbourhood and did not share the same Dutch mentality. He also stated that the violence in the neighbourhood was mostly due to these people. He said that

children of these kind of families get indoctrinated by their peers and by their teachers. " If I tell a boy of six years old everyday that he as to kill others of course he will become violent.", " It is the same with a dog, if I teach it to bite everybody it will do so!". In sum, this man had a very hostile attitude towards other ethnicities in the area.

4.1 Interviews - Local entrepreneurs

Interview 3

Locatie: Ahoy Hengelsport, Dordtselaan 130-138

Time: 13.48

In this shop we spoke to one of the employees. According to him the shop is one of the oldest shops in the Tarwewijk. This shop has been on the current location for over 20 years, and previously there were located a bit further down the road for also almost 20 years. He himself also used to live right across the street, next to his grandparents. However, he now lives in Barendrecht.

We asked about why there is a Fishing shop in this area. He said to formerly the shop was very well known under the area's inhabitants. And since a couple of years the shop is also visited by the new Polish inhabitants. He stated that these people are still interested in fishing and going outdoors where the Dutch inhabitants of the neighbourhood are working all day and do not enjoy

going out anymore. He said that this shop has a close connection to the local people. However, there are only Dutch people working in the shop and no employees with another ethnicity. But the clients do come from all different ethnicities and backgrounds. As this is a shop with a very specific product, they are widely known as being the best place to go to, even under people who are not from the area.

He also found that the area was not getting better over the past years. He said that there could have been major improvements made such as improving parking spaces and letting less non-Western people in the area. However, over the 30 years that he lived here and worked here he did not see any improvement, just a change in inhabitants. He also pointed out that the municipality in most cases does not know what is going on in the neighbourhood and that therefore the policies made for this area are mostly inaccurate.

On the topic of transportation, he was positive. He said that the area

is very well reachable by scooter or car, and by bike due to the Maastunnel and the Erasmusbrug. However, he did note that the public transport within the area is lacking and not many people use it.



Figure 12: Fishing equipment store, 03-09-2019, Rotterdam, The Netherlands

4.1 Interviews - Local entrepreneurs

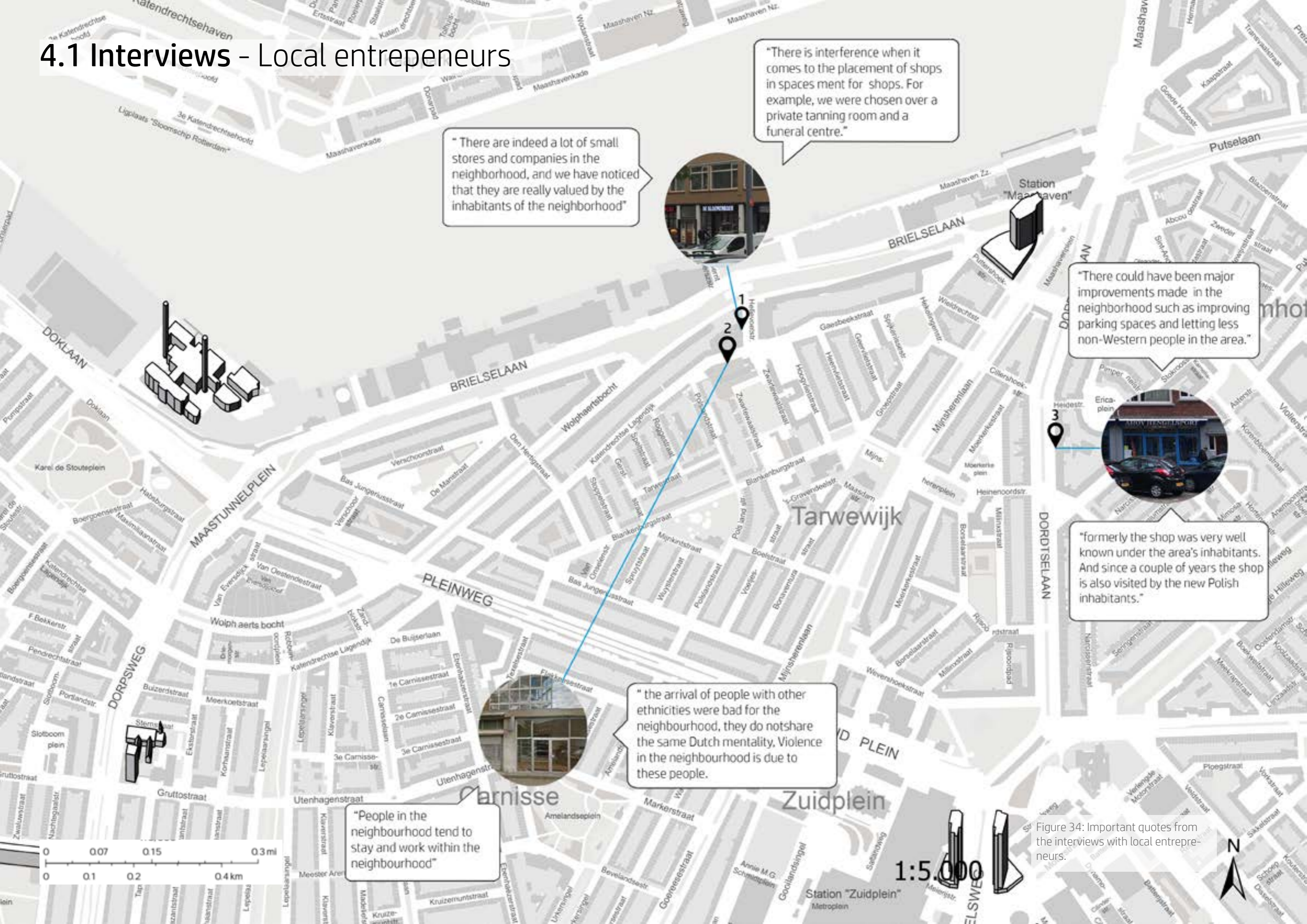


Figure 34: Important quotes from the interviews with local entrepreneurs.

4.2 Interviews - Local inhabitants

Location: Dirk van den Broek, Hellevoetstraat 2-18, 3081 NP Rotterdam / Time: 15:00 - 15:30

Interview 1

Gender: Female, Caucasian
Age (estimate): 20

Which neighborhood do you live in?:
Tarwewijk

What job do you do?: Student-assistant

Where do you work?: Erasmus university, Centrum Rotterdam

What is their preferred mode of transportation?: Public transportation

What is their travel time?: 45 Minutes

Are they satisfied with their current situation? Absolutely

Further information:

“When I broke my leg. Using public transportation was quite easy. Actually it made it easier for me to move around”

Interview 2

Gender: Male, caucasian
Age (estimate): 60

Which neighborhood do you live in?:
Tarwewijk

What job do you do?: No Job

Where do you work?: No job

What is their preferred mode of transportation?: Public transportation

What is their travel time?: No travel time

Are they satisfied with their current situation?: No, no good connections

Further Information: Would like to work inside of the neighborhood. Doesn't have a car. Public Transportation is a option. But, he finds the public transportation system very difficult to navigate. “The public transportation system is difficult to navigate” “I'm looking for a job within the neighborhood. I have no car, so I'm dependent on the public transportation system, which I find not that great”

Interview 3

Gender: Male, Moroccan
Age (estimate): 60

Which neighborhood do you live in?:
Tarwewijk

What job do you do?: Cab Driver

Where do you work?: Kattendrecht (headoffice)

What is their preferred mode of transportation?: Bike

What is their travel time?: 20 Minutes

Are they satisfied with their current situation?: Yes, especially by bike.

Further information: Has lived in the Tarwewijk since 1983. Has been a cabdriver for 7 to 8 years by now. Was employed through the UBV. Knows a lot of people that work in the harbor or in an office that are less satisfied with their traveling situation. Hasn't thought of moving to another neighborhood to better their travel situation, but has thought about it because of the neighborhood itself.

Interview 4

Gender: Male, turkisch
Age (estimate): 30

Which neighborhood do you live in?:
Tarwewijk

What job do you do?: Aafje

Where do you work?: Zuidplein

What is their preferred mode of transportation?: Scooter

What is their travel time?: 10 minutes

Are they satisfied with their current situation?: Definitely

Further information: Works at Aafje. Is a healthcare institution that focuses on the care of elderly people. Takes the public transportation system if it is raining. Finds the public transportation system to be functioning quite well. “I only take public transportation when it rains, like days like these, Otherwise I take the scooter”

4.2 Interviews - Local inhabitants

Location: Dirk van den Broek, Hellevoetstraat 2-18, 3081 NP Rotterdam / Time: 15:30 - 16:00

Interview 5

Gender: Male, Caucasian
Age (estimate): 60 years old

In which neighbourhood do you live?: Tarwewijk

What kind of work do you do?: In the harbour.

Where is your work situated?: The harbour

How do you get to your work?: public transport and the car.

How long does it take you to get to work?: 20 minutes.

Are you pleased with the transport options in the area?: Yes, it is fine.

Are you overall happy with the neighbourhood?: No

Did you ever consider moving due to travel time to get to work: Yes I have.

Interview 6

Gender: female, Caucasian
Age (estimate): 60 years old

In which neighbourhood do you live?: Tarwewijk

Do you currently work?: Yes, in healthcare

Where do work?: I would rather not share this information

How do you get to your work?:
By tram or by metro, but it is too expensive. It costs me around 6/7 euros per day to get to my work. I have to do this 5 times a week, so I think it is way too expensive.

Are you pleased with the transportation options within the area?: Yes

Public transportation is way too expensive. It costs me around 6/7 euros per day to get to my work. And that 5 days a week.

Interview 7

Gender: Female, Moroccan
Age (estimate): 30 years old

In which neighbourhood do you live?: Tarwewijk

Are you currently working?: Works at an elementary school in the neighbourhood.

Are you satisfied with the area? Work wise, yes. But outside of work I do not like it.

How do you transport yourself to your work? By public transport & car.

How long do you travel to work?: 7 minutes

Would you still consider working in this area even if you would move? Yes, because my work here is very much needed.

There are too many different nationalities. There are too many people with different values and norms. I would rather go to Barendrecht. I'm looking for a house there. So, I will be moving pretty soon.

Interview 8

Gender: male, Caucasian
Age (estimate): 40

In which neighbourhood do you live?: Tarwewijk

Where do you currently work? In 'het Oude Noorden'.

How do you transport yourself to work?: Mostly bike or Public transportation.

Are you satisfied with the transport options?: Yes I am very much pleased with it.

How long do you travel for work?: 20 minutes.

The municipality is planning on creating a bridge connecting the Tarwewijk with Katendrecht. That would be great, especially for small kids. My daughter goes to school on the other side of the river, and it would be very nice if she could cycle herself to school and friends. For now, that is just not safe enough, because of the traffic situation after the Erasmus bridge.

4.2 Interviews - Local inhabitants



"I did hear that the municipality is planning on creating a bridge connecting the Tarwewijk with Katendrecht. That would be great, especially for small kids."

"When I broke my leg. Using public transportation was quite easy. Actually it made it easier for me to move around"

"I'm looking for a job within the neighborhood. I have no car, so I'm dependent on the public transportation system, which I find not that great"

"I Work in the city centre so i travel by public transportation. It is 6/7 euro's a day which is way to expensive for me. "

"Many children, but also parents, need education, also in their values and norms. Sometimes I talk to parents who do not even speak Dutch."

"I wouldn't move to other neighborhood because of the transportation system, I would move because of the neighborhood itself"

"There are to many different nationalities. And to little 'Dutch' people. There are to many people with different values and norms. That is why I'm moying to Barendrecht"

"The neighborhood has changed alot over the years"

"I only take public transportation when it rains, like days like these, Otherwise I take the scooter"

4.2 Interviews - Local inhabitants

Interviews inhabitants summary

Person	Gender	Age	Which neighborhood do you live in?	Do you work?	What kind of job do you do?	Where do you work?	What is your main mode of transportation to work?	How long is your travel time? (Min)	Are you happy with with your current travel situation?
1	F	20	Tarwewijk	yes	Student assistant	Erasmus Uni.	Public transport	45	Yes
2	M	60	Tarwewijk	no	No Job	No Job	Public transport	-	No
3	M	60	Tarwewijk	yes	Cab Driver	Kattendrecht	Bike	10	Yes
4	M	30	Tarwewijk	yes	Care taker	Zuid Plein	Scooter	10	Yes
5	M	60	Tarwewijk	yes	dockworker	In the docks	Public transport	20 min	yes
6	F	60	Tarwewijk	yes	Healthcare		public transport	-	yes
7	F	30	Tarwewijk	yes	teacher	Tarwewijk	car or public transport	8 min	yes
8	M	40	Tarwewijk	yes	-	city centre	bike or tram	15 min	medium

Figure 36: Summary of the answers of the inhabitants interviewed

4.3 Interviews - The Municipality

coordinator of 'wijkgestuurd werken Rotterdam'

On the first of October 2019 at 11:30 we conducted an interview with the coordinator of the project 'Wijkgestuurd werken Rotterdam'.

'Wijkgestuurd werken Rotterdam' is a pilot in multiple sub-municipalities around Rotterdam in 2017. In 2014 the sub-municipalities as separate institutes were cancelled from the political structure. As the governmental on a local, neighbourhood level diminished many problems that are relevant on this small scale vanished compared with other problems, on a larger scale. Hence, in 2017, to counter this problem, the pilot of 'Wijkgestuurd werken Rotterdam' was set up. This project is directed towards the neighborhood level, and

is connecting the needs of inhabitants, social institutions and businesses. Their main activities are helping inhabitants of deprived areas that have a severe distance from the job market and control for focus points within the area. Part of the 'Wijkgestuurd werken' project is the pilot 'Hand-in-Hand (HIH)' which is specifically directed to resolve the problems in areas that are causing obstacles for inhabitants to start working. During this interview we spoke mostly about Tarwewijk, as this is one of the nine areas in which the project is highly active (Steenbergen, Buchel, Schipper & Loorbach, 2017).

The lady who spoke to us first explained what kind of things they do to help people in finding a suitable job. Their core activity is to look for vacancies and connect these to people out of the

neighbourhood who are looking for a job. In order to make them more qualified they also help them with language lessons or administrative tasks. They also have good connections to the other institutions in the area such as DOCK, an organisation that is helping to connect local businesses to the local job-applicants, who are helping them with achieving their particular needs. Every week a jobhunter goes out to all the local businesses, and also non-local businesses, and seeks for new vacancies. Most jobs are still found outside of the area. The coordinator labelled this as being highly problematic, because the people they work with are already, in most cases, taking a big step by starting to work and working far away from home could therefore form an even bigger obstacle, which could even lead to restrain

them. She continued by stating that there are indeed little job opportunities within the area, and most of the jobs are for small shops.

What is interesting is that the bigger corporations in the area are not aware/willing to work in collaboration with this project. Especially in the Tarwewijk there is a lot of opportunity for new jobs, with companies such as Meneba and Quaker that are all located on the Brielselaan. On several occasions these companies have said that they are looking for new people, however, they are still not responding on the multiple invitations of this project to talk about these opportunities. This is very difficult to understand, as the area has a general low-educated work population and Meneba and Quaker are mostly looking for people with such

4.3 Interviews - The Municipality

a level of education. Another, new, big project currently active is the renovation of Zuidplein, i.e. Hart van Zuid. As they are renewing this whole area, one would assume there would be a considerable amount of new jobs available. However, the requirements of jobs within this project are so extremely high that many of the inhabitants connected to the 'Wijkgestuurd werken' project do not suit these requirements. The coordinator we spoke to was worried about this development, because the project on Zuid was created to also stimulate the current economic situation within the surrounding areas.

When we asked her what concrete action could be made in the area to change the current situation she firstly pointed out that if the overall image of the area would be bettered it would

also stimulate people to be more careful with the neighbourhood, and that they would also be inspired to work harder in order to sustain the same level of wealth as others. Secondly, she stated that employers should lower their job requirements and should be more flexible within their vacancies, i.e. splitting up

jobs to create several smaller part-time jobs. And lastly, she would like to see more local entrepreneurs/businesses to make contact with them in order to broaden the scope of this project.



Figure 37: Location interview local municipality.

4.4 Interviews - Conclusion

Local entrepreneurs

Over the course of this research we conducted interviews on multiple levels within the Tarwewijk. The first round of interviews were with local entrepreneurs and businesses. Generally speaking all people we spoke to were not very enthusiastic about the neighbourhood and its social climate. All pointed out that many of the business spaces are occupied by Turkish and Polish shops and that different kinds of shops do have a hard time to keep afloat for a longer amount of time. In addition, they also all pointed out that the area is swiftly changing, and that this change has been going on for over 30 years. All three owners we spoke to said that the 'Dutch' inhabitants are leaving the neighbourhood and get replaced by foreign inhabitants. They also spoke about how they think the neighbourhood is getting worse. All of them either do not live here anymore, or have the wish to move out. On the positive side, they are all quite happy

with the transport system within Tarwewijk. All of them, even coming from different areas, found that it was easy to move around and get to the neighbourhood and therefore they were all satisfied with the mobility of the area which contradicts the assumptions made in chapter 3 where we predicted that people wouldn't be satisfied with the transportation within the neighborhood.

Local inhabitants

The second round of interviews was conducted with inhabitants of the Tarwewijk. At Wednesday September 25th we went to the local supermarket and asked a few of the people about their working situation and their opinions about the transportation. In total, we conducted nine small interviews with different respondents. Totally against our expectations, the inhabitants of the Tarwewijk were all highly satisfied with the transport options within the area. Most of the people we spoke were

currently working, generally outside of the neighbourhood which we did suspect in chapter 3 during the analysis. Public transport is the most frequently used form of transportation following from these interviews. Concluding from these interviews it can be said that overall people are quite happy about the transport situation. However, they are very unsatisfied with the area as a whole. Almost all respondents had the feeling that there are too many ethnicities in the neighbourhood, that the general appearance of the neighbourhood is not nice and that there are too little opportunities in the area regarding work.

Municipality

The third and last round of interviews was with the coordinator of the project 'Wijkgestuurd werken'. This municipality led project is a pilot introduced in 2017 in order to create a better connection between employers and possible employees on a neighbourhood level. The coordinator we talked to was on

the one hand positive about the developments already established in the area, as they see a decrease in long term unemployed inhabitants. However, she was also critical about the current situation of the area. She also stated that the image of the area should be changed in order to stimulate the inhabitants to take better care of themselves and their surroundings. Another critical note she placed was on the role of the big corporations in the area, such as Meneba and Quaker. These parties could possibly help fix the unemployment problems in the area, but they do not respond to any invitation to talk about the possibilities. She was also the first one to agree with our hypothesis that the transport system currently available in the area is too big of an obstacle for many people who have been unemployed for a longer period of time. She thought that for people who had worked outside of the neighborhood for a longer amount of time don't have a problem with it. The transportation system is especially hard to

4.4 Interviews - Conclusion

navigate for people with mental or physical disabilities that are now unemployed because they don't think they can work because of their disability. The project that she works for forms a network between companies, the municipality and the inhabitants.

To conclude, every group interviewed had the same idea regarding the state of the neighborhood, there is huge dissatisfaction between the actors within the Tarwewijk. Main points of criticism are the wide arrange of ethnicities present in the area, the uninviting appearance of the area and unappealing business climate in the neighbourhood. The conclusion of these interviews regarding our research question is not what we thought would come out of these interviews. it is true that people mostly work outside of the neighborhood, but to our surprise people are quite satisfied with the overall transportation system in place. Overall, the interviews were very insightful and shed light on new perspectives.

Lessons learned

One of the main things that we learned with the interview portion of our report is that the information that we obtained before, might not relate to the people that live in the neighborhood itself. One of the things that we found out was that our information that we found on the transportation system didn't correlate with that of the experience of inhabitants. We found that only using factual information to make conclusions does not tell the entire story, sometimes it even contradicts it.

5. Analysis

In this final stage of the research an analysis of all the data will be conducted. This chapter will be structured by the main concepts housing, work/income and transport. Each sub-topic will be explained by both the data that we gathered and the connections that we distinguished over the course of collecting the data. After analysis each sub-topic as a separate entity will draw a conclusion. From all of these different layers a anchorpoint map will be produced as well as an opportunities map. The anchor points map is a visual representation that displays the

already existing strengths of the neighbourhood, i.e. what already is working correctly. The opportunities map shows what still could be improved in the Tarwewijk in order to diminish the social inequality within the neighbourhood. It was decided to add and explain the anchorpoint map and opportunities map in the conclusion of the paper (chapter 7). Hence, it would be more efficient to use the anchorpoint maps as a way to conclude our research.

5.1 Analysis - Work and Income

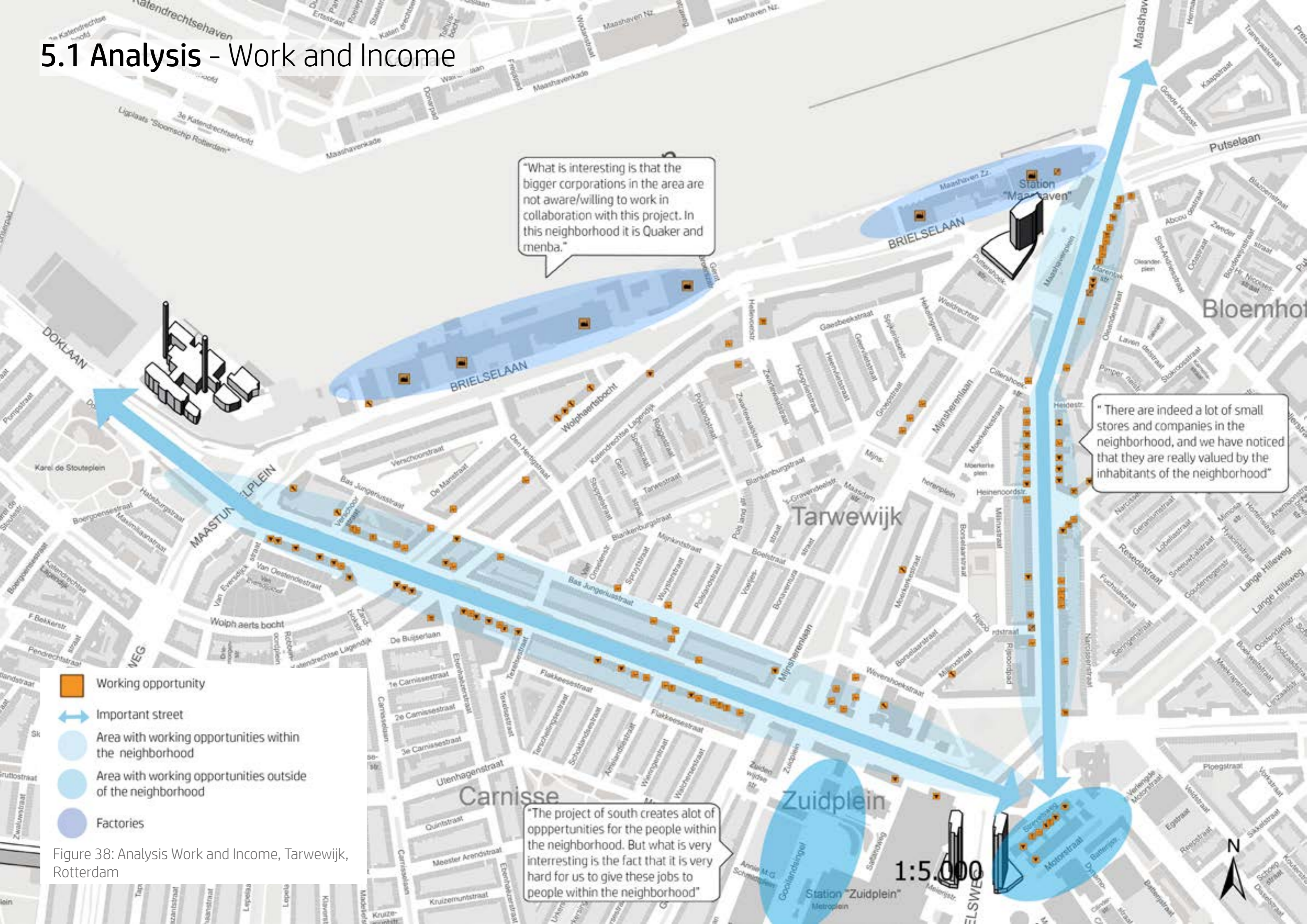


Figure 38: Analysis Work and Income, Tarwewijk, Rotterdam

5.1 Analysis - Work and Income






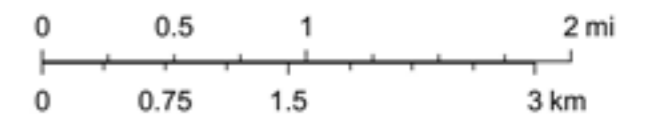
-  The Tarwewijk
-  People who work in the neighborhood
-  People who work outside the neighborhood

Figure 39: Analysis Work and Income (Were people work, interviews), Tarwewijk, Rotterdam



5.1 Analysis - Work and Income

In the Tarwewijk there are 8800 inhabitants who are currently receiving income from work. On average these 8800 people receive an income of 20.200 euros a year, around 1700 euros a month. In total 54 percent of the households are described as low income households, and 22 percent of the households are under the social minimum (chapter 3). There is also a large share of people who are dependent on social welfare payments, namely 2.110 people. Hence, the area can generally be described as being a poor neighbourhood.

This is also reflected in the education level within the area. In the age category 15 till 75 year olds 4.090 people are low educated, 4.390 are medium educated and 1.270 are highly educated (chapter 3). In the neighbourhood there are 685 different job options. The biggest sector is the industrial sector with around 195 different jobs, second biggest sector is the consulting industry with 150 jobs and lastly the hospitality sector with 125 jobs

(chapter 3). The businesses mostly found in the area are small shops that sell foreign products, such as Polish or Turkish specialities (figure 38). There are only a few big companies situated in the Tarwewijk, Meneba and Quacker (figure 38). Seeing the demographics of the neighbourhood most of the possible employees would like to work on jobs that require a low level of education, i.e. conveyor belt work or behind the sales register. Which apparently they find outside the neighborhood right now, according to the interviews we had with local inhabitants (figure 39).

Hence, the main question that needs to be answered is how the neighborhood is connected to other work opportunities and how this connection could be strengthened.

From the interview with the coordinator of 'Wijkgestuurd werken' it got clear that currently there are job opportunities within the neighbourhood, and that these are highly important. She pointed

out that long travel time could form a severe obstacle for people who have a distance from the labour market. She added that currently the connection between the jobs in the area and the kind of jobs inhabitants would prefer is still lacking. The big companies are not interacting with their bureau and in most cases the vacancies that they do put out have to many requirements (figure 38, text balloons).

What could be a great opportunity work wise for the Tarwewijk is the redevelopment of the Zuidplein area (figure 38). They are creating many new jobs in this area, and there even is a social program in order to make sure that the people of the area will truly benefit from these developments. However, for now the vacancies in this project are also expecting to much and therefore the people from the Tarwewijk find little connection to this project. There is also a lack of communication with the area. As the inhabitants of the Tarwewijk are not informed on the renovations and the possibilities that are also

being creating for them.

There are a few things missing within the Tarwewijk regarding work. Firstly, there is no specific street in which economic activity is particularly situated, just the surrounding roads that form the borders of the neighborhood. The Dordtselaan is what is mostly coming close to a shopping street (figure 38), but most of the shops on this street are very small. Also it is difficult for pedestrians to easily stroll this street as there are many cars, little crossovers and many bikes on the pedestrian paths.

The Tarwewijk is close by the shopping centre Zuidplein, but as mentioned before this is not creating many new jobs for the inhabitants of the Tarwewijk.

Hence, by creating a better climate for leisure and consumption more jobs could be created. Secondly, the connection within the area between job-applicants and the employers is weak. Many people are looking for jobs within this

5.1 Analysis - Work and Income

neighbourhood, and on paper there are many job positions to be fulfilled. However, as the big companies are not very willing to cooperate with the current organisations who help the unemployed most vacancies go to people from outside the area.

Lastly, the NPRZ has described in their program for 2019-2022 that the area is very well suited for young, new entrepreneurs. However, in order to attract new businesses the area should first undergo big redevelopments in order to get more attractive. The spaces are, as already described by the NPRZ, relatively cheap and therefore attractive for young entrepreneurs. The local entrepreneurs within the neighborhood find the current situation to be quite favorable as well.

To conclude the Tarwewijk has many working opportunities situated along the edge of the neighborhood (figure 38) These are just small local entrepreneurs. For them the environment seems very good within the neighborhood. But there is not

enough working opportunity for the people within the neighborhood, so people seem to work outside of the neighborhood, scattered across Rotterdam (figure 39, from the interviews with inhabitants, chapter 4). For people with a distance to the work market there is a difficulty finding suitable jobs within the neighborhood. The big corporations that are situated at the edge of the neighborhood at the harbor (figure 38) do not offer any jobs for those people. The Hart van Zuid project is promising as well, regarding the work situation. Only the problem is that not a lot of inhabitants now about the project.

5.2 Analysis - Transport

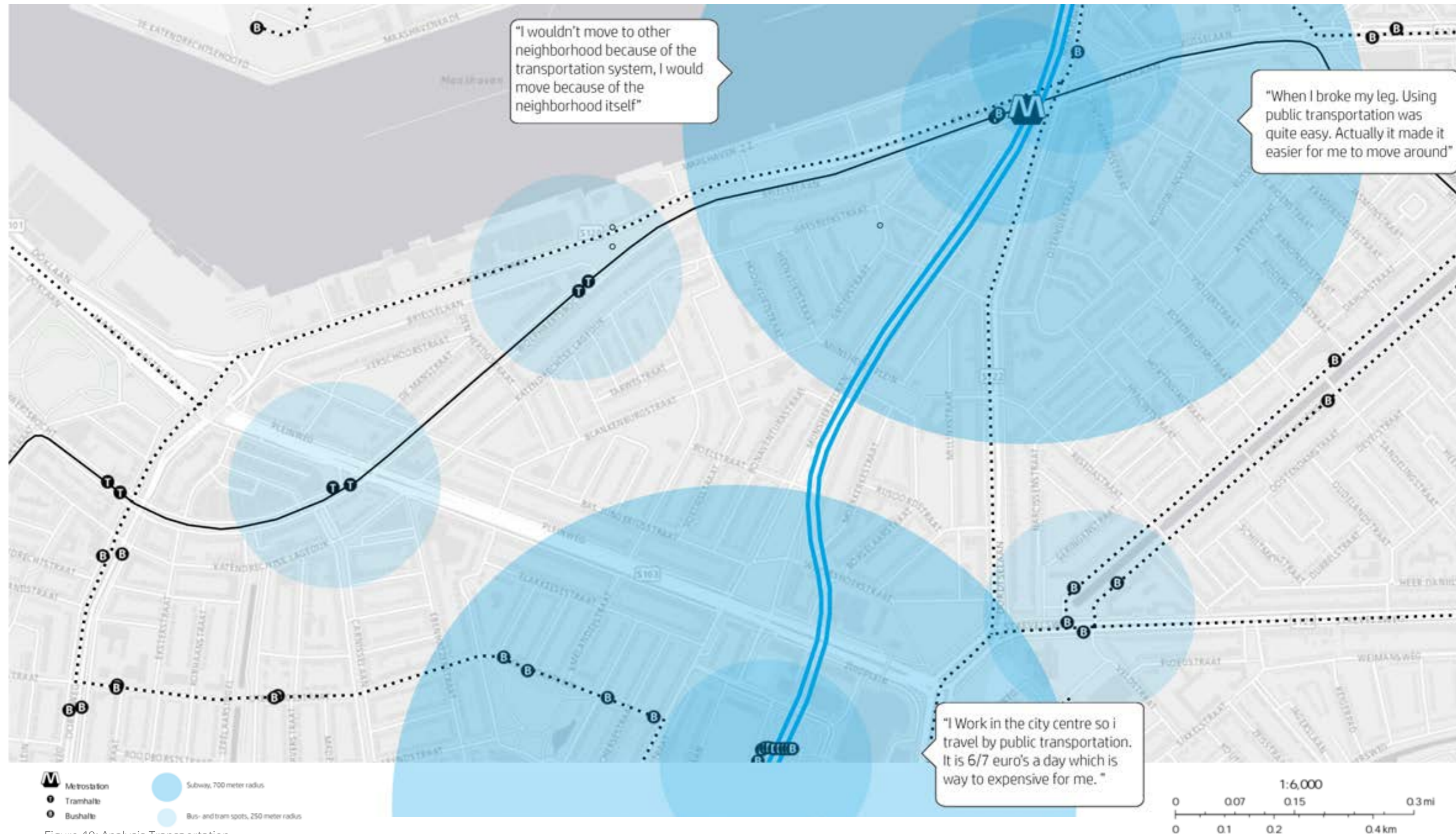


Figure 40: Analysis Transportation

5.2 Analysis - Transport

In Tarwewijk there are multiple ways to travel within the area, and to other neighbourhoods surrounding the Tarwewijk. The Tarwewijk has three options for public transport, namely the metro, tram and busses. In Tarwewijk there are is one tram available with 2 stops, both on the Wolpheartsbocht.

The tramline connects the area with the areas directly next to it, and to Carnisse and the Zuiderpark. The metroline, an above ground metroline, is situated on the Mijnsheerenlaan and has one stop within the area, at metrostation Maashaven on the top right corner of Tarwewijk. The next stop of the metro is at metrostation Zuidplein on the one side, and on the other side at Maashaven, which is situated on Katendrecht. Hence, this metro can both be taken towards the shopping district of Zuidplein, as towards the city center of Rotterdam (Beurs or Rotterdam Centraal). There is also a bus in the area of Tarwewijk on the Brielselaan and on the Dordtselaan, but this busline has no stops within Tarwewijk itself.

Other transport options within the area are cars, bikes and by foot. In total the area has 3.400 cars and 145 motorbikes. The total amount of bikes is unknown for this area, as well as households without cars and bikes.

What can be seen in figure 40 the public transport network is mainly situated on the perimeters of the area. The metro does cross the neighbourhood, but does not have a stop that is directly within the area itself. The only form of public transport that actually has a stop within the area is the tram. However, this stop is also situated near station Maashaven, and therefore not directly within the area. Hence, if inhabitants want to transport themselves within the neighbourhood public transport is not a suitable option for them. As a result, to move around the area, citizens will need to go either by foot, bike or car. In the area there are 3.225 cars in total and 0,5 cars per household. This is respectively low compared with the average in Rotterdam (CBS in uw buurt).

Therefore, almost 50 percent of the households will be dependent on public transport in order to move themselves. The municipality of Rotterdam has create a standard distance for public transport. From every household in the area there must be a bus or tram stop within 277 meters, and a metro stop at a maximum of 700 meters. As is shown on map X there is a whole area in Tarwewijk where there is no bus, tram or metro is within the standard distance.

What is especially problematic regarding the transport network in Tarwewijk, is the lack of public transport within the area. As half of the population is dependent on public transport, it can be qualified as a critical problem that many are not within the standard distance of any transport facilities. To get to out of the neighbourhood, for work, school or other reasons, the most suitable option is the metro. However, there are only two stops, both situated on the perimeters of the neighbourhood. Therefore the total travel time is, in most cases,

increasing as one first has to walk or bike towards one of the two stations. The nearest by train station from Tarwewijk is station Rotterdam Zuid. From the Tarwewijk only the bus is connecting the station with the area, and on average it will be a 20 minute ride to get to the station. Rotterdam Central station is 22 minutes away from the Tarwewijk and reachable by metro. Hence, there is no difference which route is taken the average time to get to a station is around 20 minutes. Considering that many people are dependent on public transport to get to their work or school, this is relatively high.

The inadequacy of the public transport in the area can cause obstacles for the unemployed to start finding work outside of the area. Due to the lack of efficiency and the costs of the public transport it is not a highly attractive option for people. Another outcome of the lack of public transport in the area is that the neighbourhood is not very inviting for visitors and therefore for entrepreneurs or

5.2 Analysis - Transport

shops. Shop owners are almost in all cases only selling their products to the inhabitants of the Tarwewijk, and not to visitors from outside the area. Hence, there is only a small market in the area.

What is interesting from our findings is that factually the public transport is not holding up with the standard distance as decided upon by the municipality which in combination with the low level of cars in the neighbourhood would cause the inhabitants to be unsatisfied with the transport options, but from the interviews conducted with the Tarwewijk inhabitants the complete opposite seems to be true. All people who were interviewed reacted positively to the question is they were satisfied with the (public) transport options. They all said that their work was easy to reach by public transport or other transport options.

However, some did state that an extra tram or bus stop would suit the area, but even if these did not get implemented it was still great.

One of the respondents knew about the plans of the municipality to build a new bridge directly from the Tarwewijk to Katendrecht. He stated that this would be a perfect option to reach the city centre.

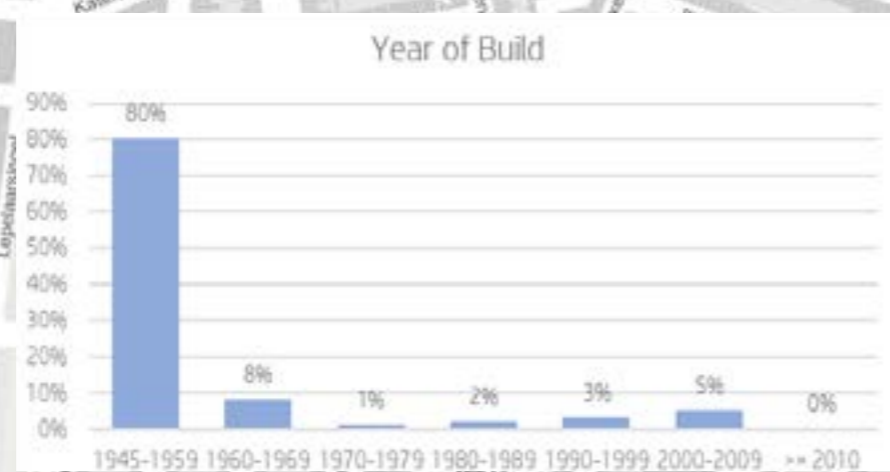
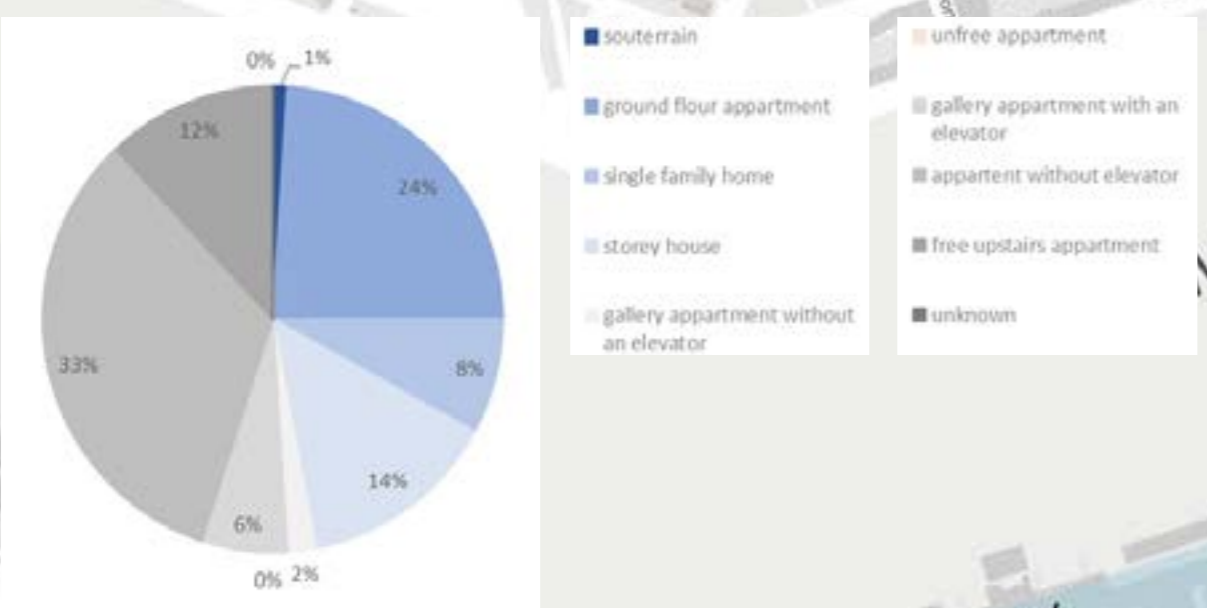
From the interviews another striking difference became apparent. Namely that there is a clear divide between people who are orientated towards the city centre and people who are orientated within the neighbourhood. Some of the respondents had a clear preference for the city centre as their own work was situated over there as well as the school of their kids and their friends. Others had an outspoken orientation for the neighbourhood itself, as their work, school and friends were located over there.

On average the people with a city centre orientation were quite satisfied with the transport options. However, the people with a Tarwewijk orientation were less satisfied with the public transport. This corresponds with the hypothesis that within the area it is

impossible to get around by solely using public transport options. Hence, if inhabitants do not have a car, bike or scooter it can be difficult to be mobile.

In sum, within the area there is a low rate of cars per household, and the public transport is not holding up with the standard distance. On paper this is a tremendous problem for both mobility and economy within the Tarwewijk. As (public) transport is not efficient it could cause that people are less likely to succeed in finding a job, within or outside the area, and it does not support a healthy economy that attracts new actors. However, following from the interviews conducted under the local population, the people of Tarwewijk do seem to be fairly happy with the transport options within Tarwewijk, and, on average, do not experience any negative effects of the transport system.

5.3 Analysis - Housing



- Apartments
- Factories
- Row houses

Figure 41: Analysis housing, tarwewijk, Rotterdam

1:5,000



5.3 Analysis - Housing

When it comes to analyzing the housing situation within the Tarwewijk we primarily focussed on the distribution of the houses throughout the entire neighborhood and the condition of these houses. As the research question of this report is focussed on mobility and its relation to work, housing is not a main aim. Hence, the analysis of housing will be less specific compared to the other topics.

Firstly, when it comes to the housing situation in Tarwewijk, it is very diverse. This was one of the observations that was made during the first walk through the neighbourhood. This was confirmed by the statistic research done in week two. As seen in figure 41 there are a lot of different typologies to be found within the neighborhood. Apartments without an elevator seem to be the most common typology. In fact, once you make an analysis regarding the different typologies divided by single family housing (attached, semi-attached and freestanding), apartments

and other forms of building, there becomes a clear distinction visible (figure 41, map). There seems to be a very concentrated area of single family housing in the middle of the western part of the neighborhood.

During the observations of the first week, this was the part of the neighborhood that also seemed to have the greatest potential within the neighborhood, and formed an anchorpoint for the neighborhood.

The rest of the neighborhood seems to consist of primarily apartment buildings that were built after the second world war (figure 41). These apartment buildings are four story apartments which normally support two units, but in this neighborhood these two apartments were mostly turned into four apartments to support lower-income families.

There is one exception to the buildings within the neighborhood and that is the strip of land along the Brielselaan. This part of the

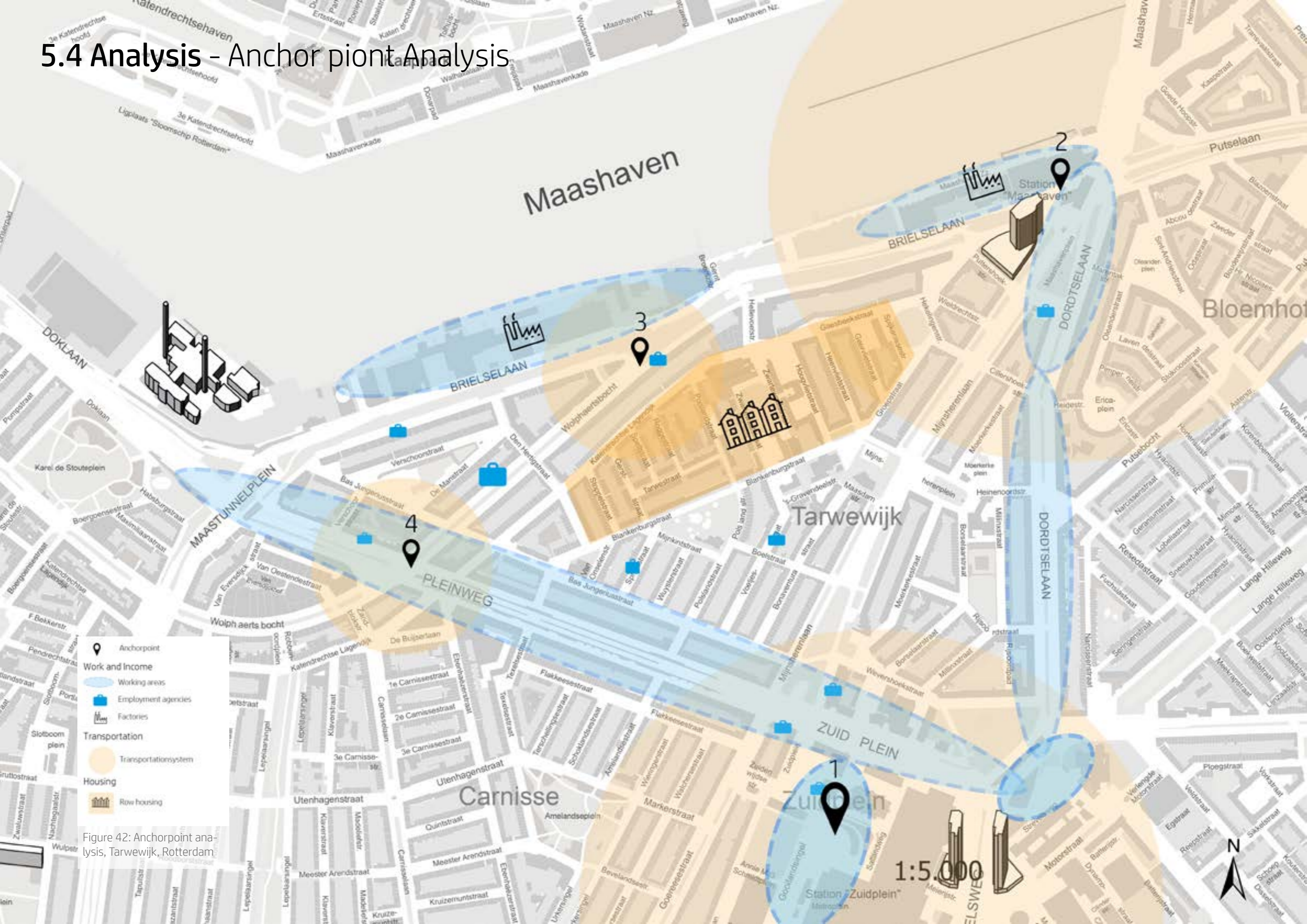
neighborhood mostly supports big factories (figure 41, map). This is still a descendant of the old harbour functions that were situated in these neighborhoods.

The state of housing seems good on the outside most of the times, but worse on the inside. We concluded in the first week, that this must be because the inhabitants themselves do not take good care of their living situation. Whether it is because they do not care or because they do not have enough money to take care of their apartment we do not know. Because our research does not seem to necessarily focus on housing this was not further researched and spoken about with the inhabitants of the neighborhood and the municipality. This would be a good subject for further investigation.

To conclude, because we only had a minimal amount of time for this research, a decision was made to not analyze the housing situation within the Tarwewijk too extensively.

But what did get analyzed was the current housing stock and possible anchor points within the neighborhood that show promise, such as the concentration of single family housing on the west side of the neighborhood.

5.4 Analysis - Anchor point analysis



- Anchorpoint
- Work and Income**
 - Working areas
 - Employment agencies
 - Factories
- Transportation**
 - Transportation system
- Housing**
 - Row housing

Figure 42: Anchorpoint analysis, Tarwewijk, Rotterdam

5.4 Analysis - Opportunities map

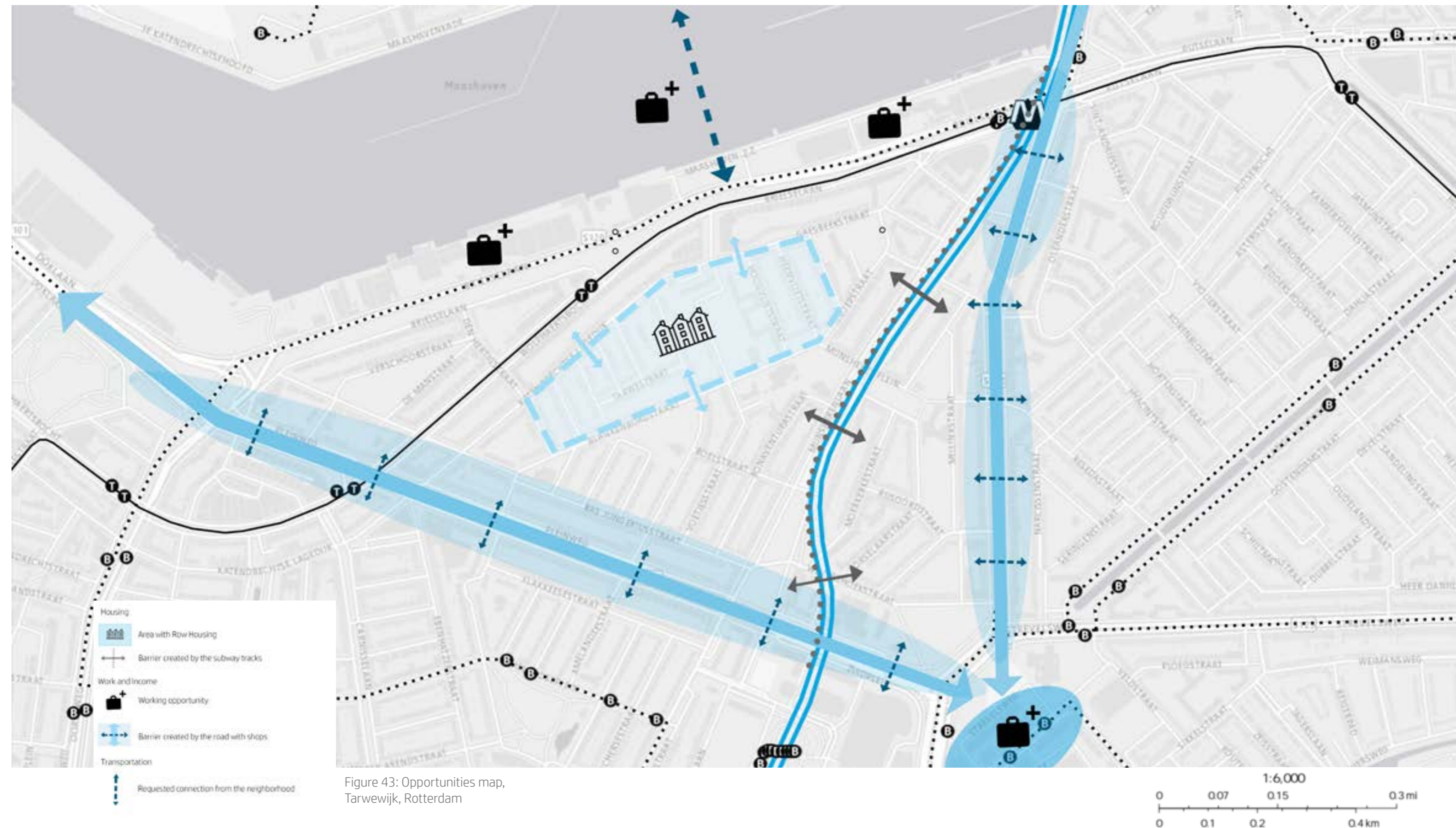


Figure 43: Opportunities map, Tarwewijk, Rotterdam

The image features a 20x20 grid of white icons on a light blue background. The icons alternate between a house and a stack of coins in a checkerboard pattern. A semi-transparent white rectangular box is centered over the grid, containing the text "6. Networks" in a bold, black, sans-serif font.

6. Networks

6. Networks

Throughout this research we have been primarily focused on our research question in order to make it easier for us to gather specific information. This was mainly done because our group consisted of only two people and we decided that we had to limit our research by creating a very specific research question in order to be able to handle the workload. Because our research question focused primarily on the relation between work and transportation, social networks were not researched in depth. During our research we did come across some signs of possible social networks that are in place within the neighborhood related to work, and decided that we were going to implement these into our report as well. These findings are primarily from the interviews that were done with the entrepreneurs, inhabitants and the municipality.

Local entrepreneurs

There seems to be a clear social network between some of the local entrepreneurs within the

neighborhood. They know each other and in some cases they are working in their family business. In the interview with the owners of the flower shop, they spoke about the fact that almost all the entrepreneurs in the area know a lot about each other and their businesses. The flower shop owner, for example, told the story of taking over the flower shop from the daughter of another entrepreneur in the neighborhood that had been there for over 25 years. They know each other well and helped each other out from time to time. There seems to be a social network, or in this case a network that involves work relationships, present in the neighborhood that adds value to the working experience of entrepreneurs and creates some sort of support system. Talking with the pet store owner it seemed as if a lot of non-Western families start local food places where a lot of the people in the family work within those shops to support the family. Maybe there is almost also a familial network going on when it comes to local small shops. But

all of this is speculation. There has not been done enough research to confirm this idea.

Local inhabitants

During the interview with the inhabitants of the neighbourhood there were not really any conversations in which social networks by means of their work became clear. There was a man who was looking for a job and then his friend who already worked at the RET (Rotterdam public transport service) helped him with looking for vacancies. But because we were questioning people regarding their work and transport options, there were no questions asked that were specifically regarding social networks. But there was one situation where we found that there might be a very big social network present among workers in social sectors:

There was one interview with a local teacher that revealed a lot about the social networks present in the neighbourhood. She told

us that her colleagues and herself sometimes have the idea that they are not merely teachers but also social workers. They also have to deal with problems that both concern parents and the children. One of the most important problems that she mentioned was the lack of knowledge of the Dutch language which does not only make it more difficult for her to talk with the parents, but also the children who have a learning disability due to their lack of the Dutch language, which is mostly due to the fact that their parents do not speak Dutch with them at home. As she has to adopt a very social role during her work, she created a big social circle that can help her in these kinds of situation. This not only shows that some social jobs really do influence a personal social network, but also the importance of such social jobs for the neighborhood and its inhabitants.

6. Networks

The municipality

Another network that we found, that was very interesting, is the network that the municipality created for the neighborhood and its inhabitants in order to find jobs. It may not be related to a social network, more to a professional network, but for research regarding work it is also very interesting to mention. In our interview with the local municipality worker we found that there are a lot of good networks in place between local entrepreneurs and the municipality. The municipality is highly involved in the placement of entrepreneurs in the neighborhood, which was discovered during an interview with the flower shop owners. The municipality gets a say in which shop gets to operate where.

But the entrepreneurs also work together with the government to create job applications for people who have trouble finding jobs within the neighborhood. This network creates direct connections between the municipality, the entrepreneurs and the local inhabitants. Once

again, it may not be relevant for the research regarding social networks, but it is still useful information.

If this research regarding housing, work and income is to be continued by other parties it would be interesting if the networks that were discussed in this chapter would be further researched. Which is something we have not been able to do because of time constraints.

The background of the slide is a repeating pattern of two white icons on a light blue background: a simple house silhouette and a stack of three coins. These icons are arranged in a grid that covers the entire page. In the center of the page, the text '7. Conclusion' is displayed in a bold, black, sans-serif font. This text is centered horizontally and is partially overlaid by a semi-transparent white rectangular box that also serves as a background for the text.

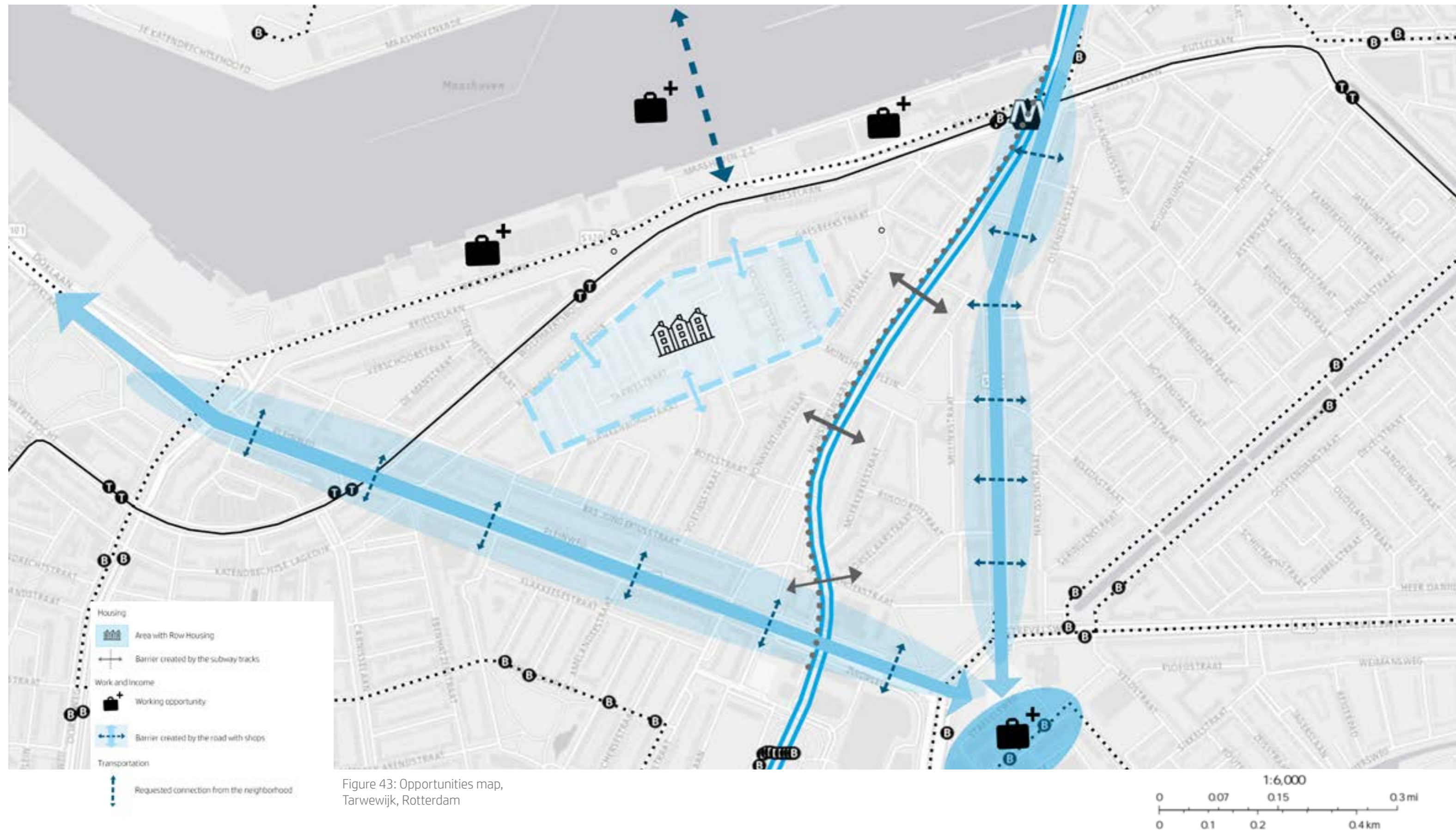
7. Conclusion

7.1 Conclusion - Anchor points map



Figure 42: Anchorpoint analysis, Tarwewijk, Rotterdam

7.2 conclusion - Opportunities map



7.3 Conclusion

Introduction

The Tarwewijk situated in Charlois Rotterdam Zuid is an area with a lot of opportunities. The main advantage of the neighbourhood is its geographical location. The Tarwewijk is located right next to the Maashaven on the one side, and on the other side the shopping area Zuidplein is situated. The Maastunnel and the Erasmusbrug are both close by Tarwewijk, and the area is easily reachable by car. Due to its location the area is known for the factories that are situated on the Brielselaan (figure 42). As the name of the area suggests the main sectors still active are flour and grain factories. Other active streets are the Dordtselaan and the Pleinweg. Both have a high concentration of shops, mostly smaller shops that sell country specific products (Chapter 5.1 analysis - work and income). Another area that is dense in work opportunities is Zuidplein. Especially with the anticipated redevelopments of the area, urban planners expect many jobs to become available for inhabitants of

Rotterdam Zuid. That the area has a young population can also be seen within the neighbourhood. There are many elementary schools and other institutions that facilitate to young children (chapter 1 - introduction). In the neighbourhood there are distinct differences between the houses. On the east side of the area, surrounding the Millinpark, there are mostly split up houses that house multiple households. However, on the North-West side of the area there are mostly family houses. (Chapter 5.3 analysis - housing)

What we found from the different forms of research conducted over the course of five weeks is that there are both strengths and weaknesses present in the Tarwewijk within the fields of housing, work, income and transportation. During the first week (Chapter 2 - Observations) observations were made about the neighborhood within the field of Housing, work and income, where the main observation was made about the working and travel situation. The decision was made to create a

research question to find out how the relationship between work and mobility in the Tarwewijk is a form of spatial inequality. This way the research was limited and a clear conclusion could be drawn. Besides our research question, the different topics were individually analysed and combined to create a clear analysis of the anchor points within the neighborhood and the points of opportunities. In this conclusion, first the anchor points and points of opportunities will be discussed followed up by the conclusion to the main research question:

Does the current Situation Regarding Transportation in relation with work, affect the inhabitants of the Tarwewijk and form spatial inequality?

Anchorpoints

The greatest strength of the area is its young and diverse population. Relatively the area has a very young population, and most of its inhabitants are within the age category that has working capacity

. This combined with the diversity of ethnicities that are present in the area makes for an eclectic and buzzing population (chapter 3 - analysis, page 16, figure 13 and 14). Most of these people have a lower level of education that is closely linked to the need of the work market present in this area.

The Tarwewijk, in some parts, is a great area for young families who are just starting on the labour market. The houses are compared to other starter houses in Rotterdam cheap and there are many facilities that are primarily aimed at these kind of families. One of the first things that we observed was the variety in the housing typologies within the neighborhood. This was later confirmed by statistics. This information was analysed by sorting these different typologies into two categories: appartements and single family housing. This resulted in a clear distinction between the amount of apartments within the neighborhood and the amount of single family housing, which doesn't correlate with the

7.3 Conclusion

amount of families with kids within the neighborhood. There are more apartments within the neighborhoods than single family housing. This distinction is even more prominent when it is seen in the context of a map of a neighborhood (Chapter 5.3, figure 41). There is one concentrated area with a lot of single family housing. This area has a higher level of quality compared with the rest of the neighborhood. We concluded that this area of the neighborhood forms an anchor point within the neighborhood (figure 42, anchor point 3). This part of the neighborhood is within walking distance of public transportation and it is in the same area as the Brielselaan, on which grain processing companies are situated.

Tarwewijk has another tremendous advantage and that is its geographical location. Situated near the Maashaven, several big transport hubs and shopping area Zuidplein it is fairly easy to reach. Due to this location there are also several different places in which

many jobs could possibly be found, and that create anchor points. Both the Brielselaan, on which grain processing companies are situated, and Zuidplein offer different kinds of jobs that require a lower education level.

Zuidplein, is one of the anchor points of the Tarwewijk. Even though it lay outside of the neighborhood it offers facilities such as clothing shops, cultural events and options for different kinds of sports. Together with the facilities that are situated within the Tarwewijk itself, mainly shops with foreign products such as Turkish or Polish specialities and other culturally bound shops, it offers a diverse mix. There is also a good connection to the transportation system, with Subway station, Zuidplein, at the heart of this area. These things combined shows the importance of this area to the Tarwewijk, and thus forms an anchor point for the neighborhood (Figure 42, anchorpoint 1).

The reason why the subway station maashaven forms another

anchorpoint (Figure 42, anchorpoint 2), is because of its connection to public transportation and it overlaps with two very important working areas within the neighborhood. As talked about before the Brielselaan is another important area within the neighborhood where there are a lot of factories situated with low-educated jobs. The anchorpoint also connects to the Dordtselaan where another big part of the working opportunities are situated within the neighborhood.

Another main shopping street that provides a lot of working opportunity is the Pleinweg. This street is also within walking distance to public transportation system and forms anchorpoint 4 (Figure 42, Anchorpoint 4)

These are some of the most important points or areas within or surrounding the tarwewijk in relation to our research topics: Housing, work, income and transportation.

Opportunities

The first opportunity of the neighbourhood is the already existing family houses which creates anchor point 3 (Figure 42, Anchorpoint 3). There are many facilities that cater to the wishes of young families, i.e. elementary schools, day-care centres and sport associations within this part of the neighborhood. However, this is not present in the totality of the neighbourhood. It is mostly the North-western part of the neighborhood that has this family characteristic. The East part of the neighbourhood is still mainly focussed on one-person households, or couples without children within its housing typology. Hence, the family houses and its facilities could be extended towards this Eastern part of the area. Not only in its functions, but also in its looks this part of the neighborhood stands out from the rest. Of course, its type of housing is different than the rest of the neighborhood. But what also is a lot different is the front gardens that are connected

7.3 Conclusion

to the houses and the better maintenance of public property. This makes it stand out. This forms an opportunity to better the entire neighborhood by extending these characteristics to the rest of the neighborhood and not just this isolated part (figure 43).

A second and third opportunities are focussed on the labour market. The second opportunity for the neighborhood are the factories on the Brielselaan next to the harbor. The Tarwewijk has always been an area in which industry was a main characteristic. Historically speaking the area was and is still known for the grain manufacturers that are situated on the Brielselaan. There are two main factories that are dominant on this street Meneba and Quaker. From the interview with the municipality it seems if though these two companies are not interested in working with the municipality to get them in contact with workers (chapter 4,3, page 35). There lies an opportunity with these companies to create more lower income jobs for people within the

neighborhood. Stimulating these big companies to work together with the municipality, can solve a big part of the unemployment within the neighborhood.

The third opportunity lies within Zuidplein. Hart van Zuid is redeveloping this whole area and has the intention to create many jobs in order to increase the level of activity within the whole area of Rotterdam Zuid. During the interview with the municipality it was mentioned that the project could offer a lot of working opportunity for the neighborhood, if the requirements for the jobs weren't so high (chapter 4,3, page 35).

In order to create this possibility, two things should be changed. The first one being the kind of education youngsters choose to go into. In most cases youngsters are currently educating themselves in branches that are not actually linked to what kind of jobs are available in the neighbourhood (chapter 3.3, page 23). This could later on create

a barrier for them if they are not able to find a suitable job. The other change could be the connection between the employers and the possible employees. For now most of the requirements per job are set too high and therefore many possible employees are not applicable for most jobs. This is either due to the hours that are required per job or the kind of experience and education they should have (chapter 4,3, page 35). Employers should therefore look critically to their requirements and be more flexible in their contracts. They could also improve their contacts with organisations within the area such as the project 'Wijkgestuurd werken' of the municipality of Rotterdam or DOCK Rotterdam.

The last opportunity found in this research is the transport system. Currently the Tarwewijk is connected to multiple kinds of transport systems. All public transport systems are situated on the perimeters of the area and none actually go into the area. The only way to reach within the area

itself is by bike, by car or by foot. Which is problematic in two ways. First of all for the inhabitants of the Tarwewijk, who in most cases, 50 percent of the times, do not have access to a car and therefore are dependent on the public transport or bike. Hence, many people are dependent on an efficient transport system that is easily accessible. Currently there are different options around the area for public transport but none of them is situated within the area itself. By increasing the stops within the area, or creating a new bus line to connect the area with either Maashaven or Zuidplein the transportation system would be even more efficient. Another addition to this opportunity is the built of a bridge that connects the Tarwewijk with Katendrecht (figure 43). From the interviews held with the inhabitants there were some people that went to work by bike (Chapter 4.2, inhabitants 3 & 8, page 34) This would limit the time it takes to get to Rotterdam city centre, the place where still most people tend to find work. By increasing the connection it could

7.3 Conclusion

lead to more work opportunities and a more diverse labour market and shorter traveling time.

Answer research question

research question: *Does the current Situation Regarding Transportation in relation with work, effect the inhabitants of the Tarwewijk and form spatial inequality?*

The answer to the research question of this report is difficult as there is not a single straightforward answer that is fully encompassing the whole problem. Tarwewijk is still an area that is changing a lot, the socio-spatial inequality issues within the area are consequently diverse. On multiple levels inequality could be seen. However, when it comes to the travel situation it was still unknown. What can be concluded from this research is that there is indeed still socio-spatial inequality within the Tarwewijk in the field of work and income. The lower-educated that often have to travel for their work towards areas situated outside of the neighbourhood are also the

ones who obtain the lowest income and therefore do not have access to personal transportation such as a car (Chapter 4.2, page 34). Hence, they are highly dependent on public transport. But this doesn't mean that people are not satisfied with the current travel situation. The hypothesis that people do not like their current mode of transportation seems to be incorrect. In chapter 2 and 3, it seemed as if the public transportation system within the neighborhood wouldn't be sufficient for the inhabitants of the neighborhood. But that hypothesis seemed wrong after the interviews with inhabitants (Chapter 4.2, page 31-34). This of course, does not mean that everyone is satisfied with the transportation system. During our interview with the municipality, it seemed that especially people with a distance to the labour market because of mental or physical illness have more trouble navigating the transportation system (Chapter 4.3, page 35). But it does conclude that the hypothesis does not correlate with the end result of this research

Network

Just like the category housing, the topic of network was not researched as thoroughly as the topics of work, income and transportation. But, there were a couple of conclusions made regarding the network of people regarding their working situations. Most of these findings were made during the interview portion of our research.

As mentioned in chapter 6, There seems to be a clear social network between some of the local entrepreneurs within the neighborhood. This was a result coming from the interviews that were held with some local entrepreneurs within the neighborhood (chapter 4.1). Some of the entrepreneurs mentioned that there was a network between different entrepreneurs that formed a support system within the neighborhood for other entrepreneurs.

Another possible networks found was the network regarding work and personal life. In chapter 4,

during the interviews with the inhabitants we spoke with a local teacher, who was also an inhabitant of the neighborhood. What we concluded from her interview was the fact that there seems to be a network between teachers and parents were the teachers seem to be playing a different role that just teaching. Teachers seem to not only teach, but they also seem to have the role of social worker within the neighborhood.

There is also a network in place between, the municipality, workers and local entrepreneurs that was created by the municipality to offer local workers working opportunities with employers within the neighborhood and the rest of Rotterdam South.

To conclude, there seem to be networks in place regarding the topic work within the neighborhood, but they are not yet proven, and make a nice subject for further research.

7.3 Conclusion

Lessons learned

Over the past five weeks we have been researching the Tarwewijk in regards to the theme's housing, work and income. Every week a little piece was written regarding the lessons learned with each different topic. These were small and specific about that particular section to report. For this conclusion we will discuss our main lessons learned.

In the last week we were busy analysing all the data we gathered and drawing conclusions from it. What we learned during this last week is that having a very specific research questions helped us in structuring our research. Especially because we were a smaller group of who only one person had the graphic tools to do the mapping and other graphic requirements. Having a clear research question helped us with limiting our research so that we were able to do our research within the given amount of time.

Because we were so limited in personal, we sometimes felt that we were not doing enough work to

fill the requirements of the research and the course. For example topics such as networks and housing were not really discussed properly, and still require some research. This will be discussed in the next subchapter. But in the end we tried to do as much of the work as possible.

Another thing that we learned over the course of this project is that communication is key with conducting such a research. Even though we had many hours in which we worked together in the same space, we sometimes forget to inform each other on what we were working on. This sometimes caused that we had to do double work in order to make it suit with what the other was doing. Hence, in the future we should also be a bit more direct in our communication and also make sure that the other one is completely on board with what we were doing.

The main thing that we learned during the making of this research report was, what it is like to do this

type of research. Research such as interviews and the anchorpoint analysis were new to us, at least to some of us, and it was a great learning experience.

We would like to thank the veldacademie for helping us through this process, by giving us information on the different topics and help us understand the different tools that one could use for research such as this report.

Recommendations for further research

As this project only lasted five weeks not all topics and other questions that we found during this research could be discussed and researched thoroughly. We found a few topics that could be researched further to get a better understanding of the socio-spatial inequality within the neighborhood. The first interesting topic that came to our attention is the topic of housing. As we discussed in chapter 5.3 (page 48) of the report, there were some interesting research topics and

questions that we found that require more research. Topics such as the diversity of building typologies. And research questions such as whether or not the bad treatment of some of the apartments within the neighborhood are a sign of socio-spatial inequality? These are all topics that require further research to get a better understanding of the neighborhood.

One other topic that requires extra research is the topic of network, especially research regarding the network between work and social live. Some networks that require further research are the networks between the different entrepreneurs in the neighborhood. As mentioned in Chapter 6, page 50, under the subchapter, local entrepreneurs, there seems to be a type of support system between different entrepreneurs, something that is very interesting, and it yet to be explored. Another network that was mentioned in Chapter 6, page 50, is the network between people with a social job and inhabitants of the neighborhood.

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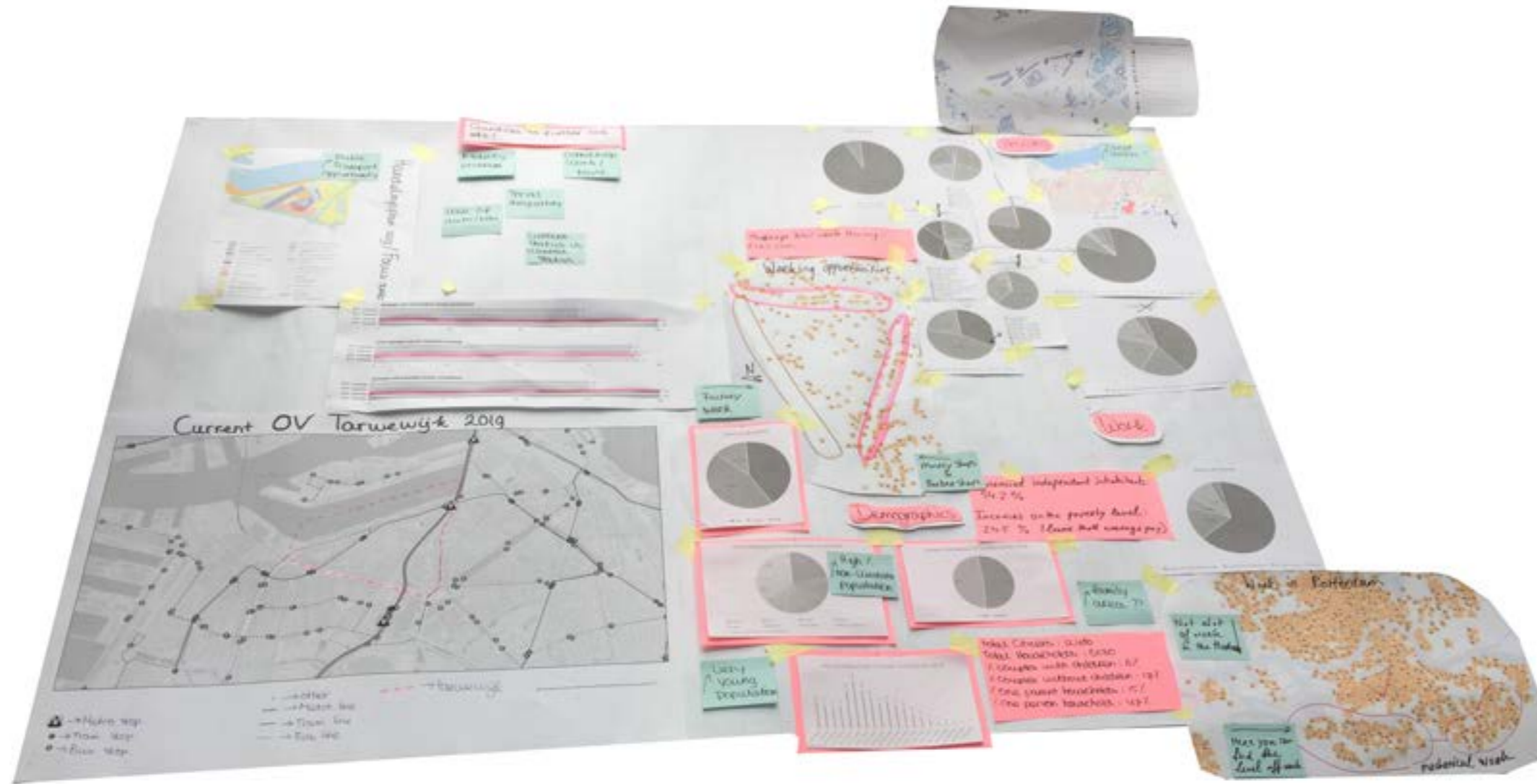
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9. Appendix

Presentation Week 1



Presentation Week 2



Presentation Week 3

How Does The Current Situation Regarding Transportation in relation with Work, Effect the Inhabitants of the Township?

Statistics Regarding OV

Statistics Regarding what

INFO Missing

Information regarding the location of work & habits of the Township

Information regarding the type of work

Information regarding the travel situation

Interviews: Inhabitants Needs support companies Local companies

Time interviews: Daily day to night

Location Interviews

QUESTIONS

General Questions:
Gender
Age
Which Neighborhood do you live in


What kind of work do you do?
Where do you work? (Location)
What is your usual mode of Transportation?

Transportation
How long do you travel to work?
Are you satisfied with your current commute to work?

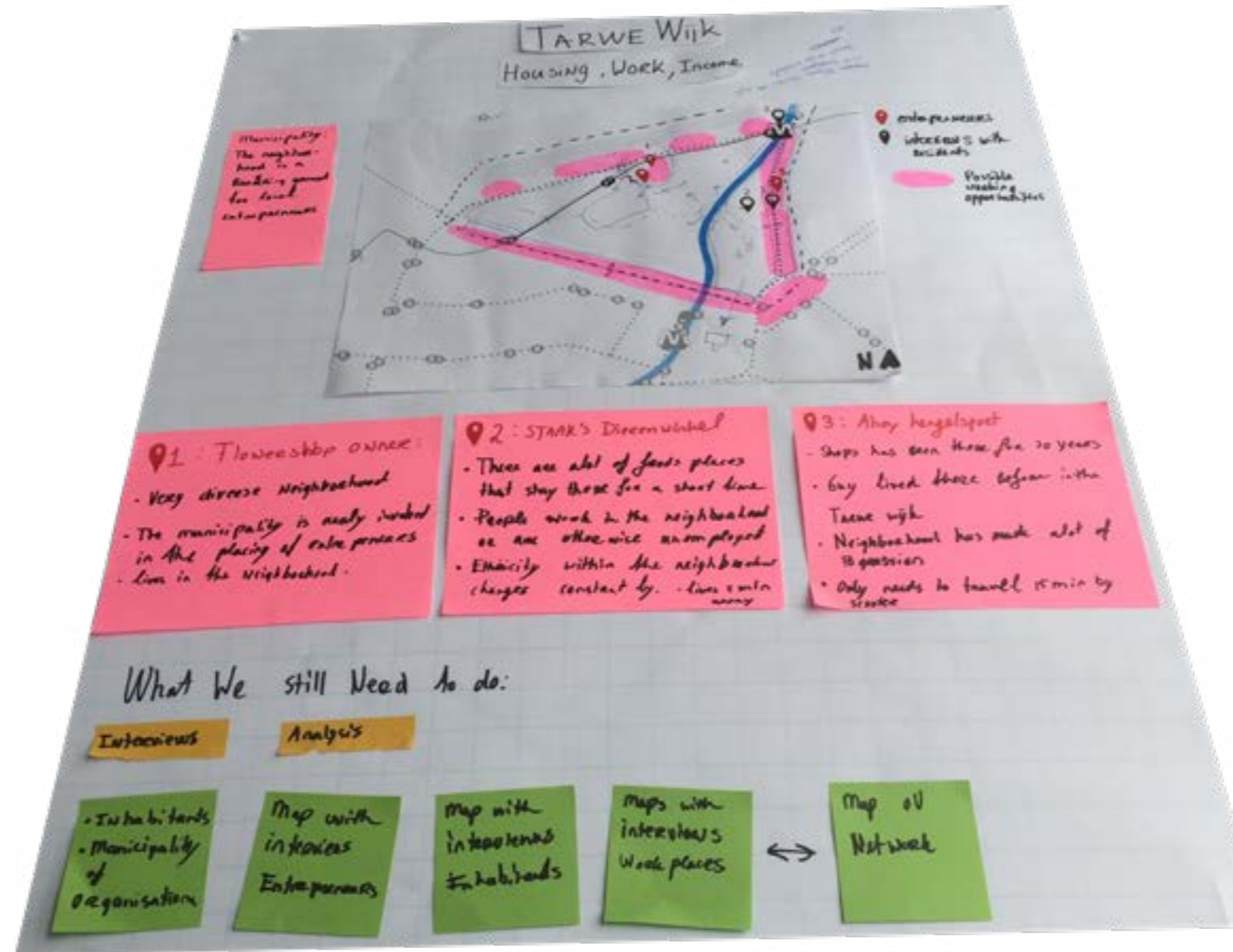
Policies
Current policies mentioned that people use and the current technology

Whilst this is a sector which has a high demand of lower-income workers

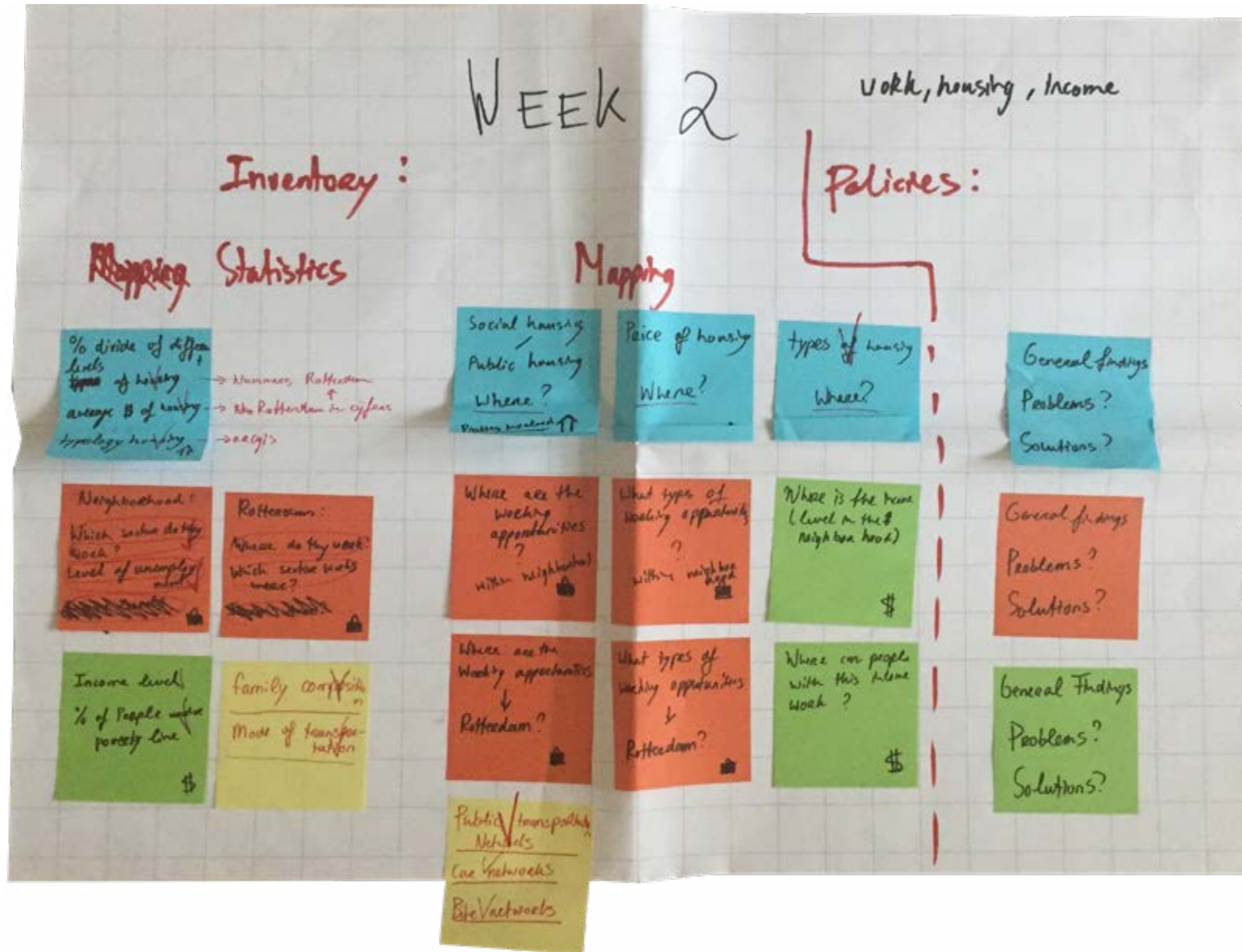
The technology sector is primarily situated very far south of Pitt-Rivers and in the North



Presentation Week 3



Review created of all the statistics that we wanted to find



Review of all the questions that we had after week 2

1731NK1.NI

1 Demographics

- ↳ ~~policy~~ % households
- Age
- Gender
- Ethnic Background
- Level of education

+ Introduction (Polities)

2 Housing

- ↳ Housing used (Introduction)
↳ polities
- ↳ Map housing age, (act age, typologies, size of housing, NOZ - waarde gem)
- ↳ Map owners, (what rent or Buy, Renters price, what owners)

Interviews

- ① work faerewijth → wengen over de scatenen
- ② geavanceerde Rotterdam

3 Work & Income

- ↳ Introduce level of education (what)
- ↳ ~~policy~~ Introduction research question
- ↳ level of income, Income higher or lower than poverty line & (relate to education)
- ↳ Source of income, ~~what~~ how they work in, where they work, → map work vijk, ~~what~~ what work there is, → map work collection

4 Transport

- ↳ Introductory policy
- ↳ Current IV system
- ↳ Statistics IV system
- ↳ opinion inhabitants

Conclusion → lay this link

Statistics

Ethnic Background Citizens Tarwewijk January 2019

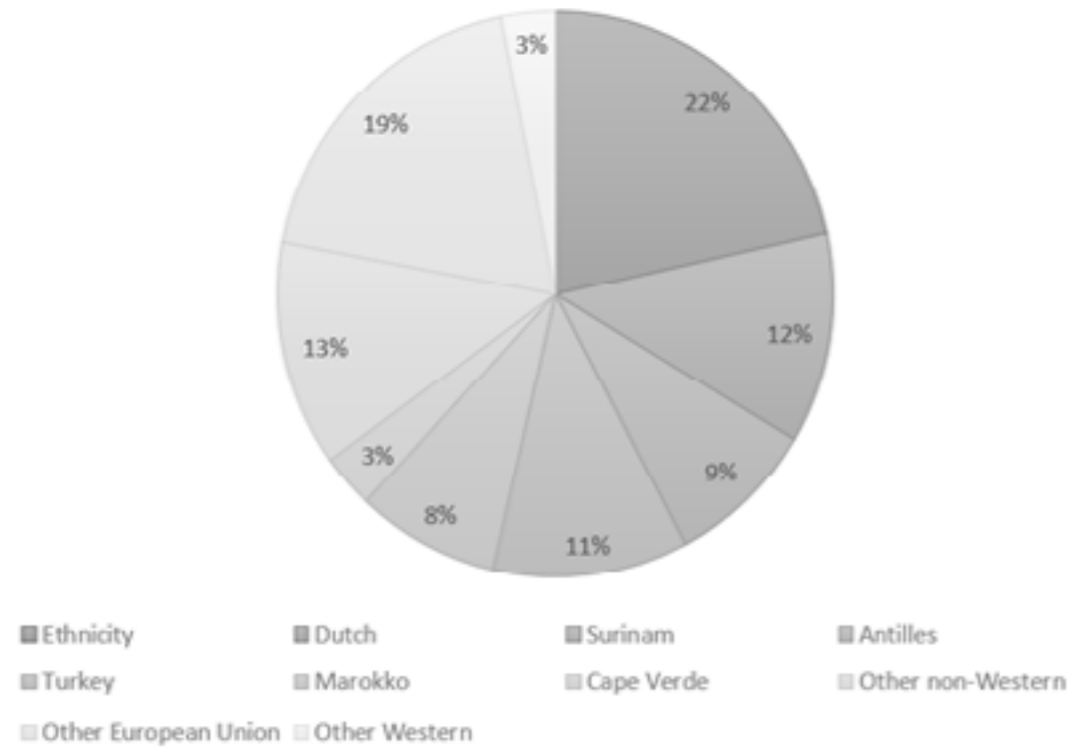


Figure X: Ethnic background Citizens Tarwewijk January 2018, Rotterdam, The Netherlands

AGE DISTRIBUTION CITIZENS TARWEWIJK 2019

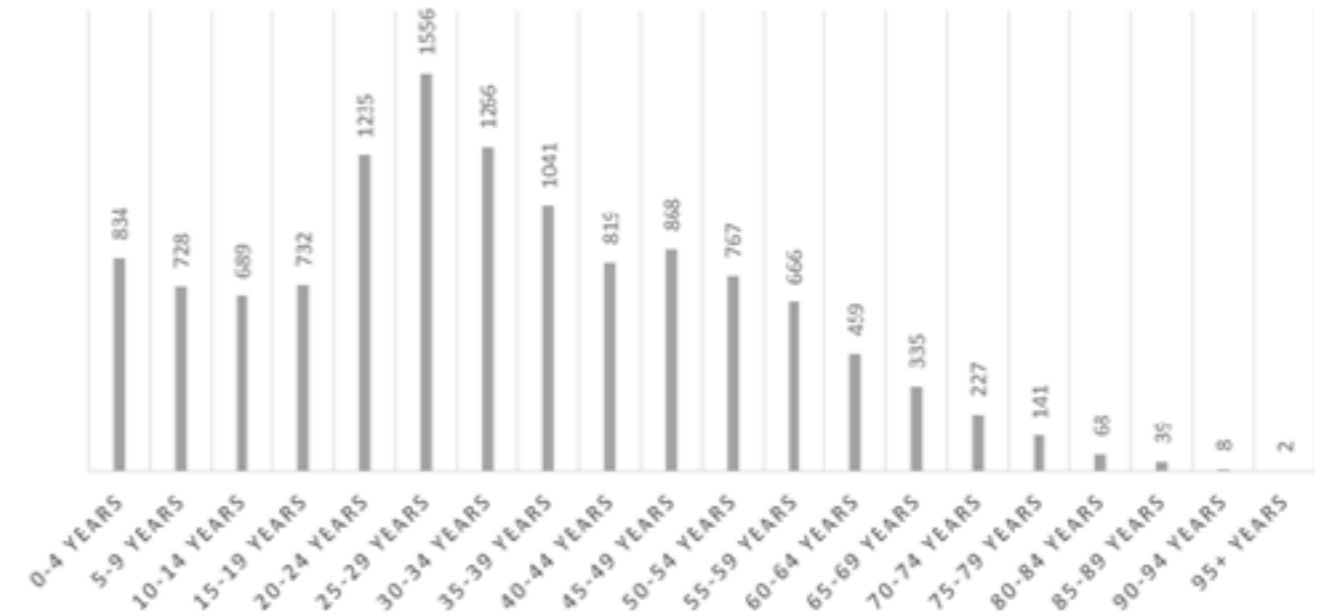


Figure X: Age Distribution Citizens Tarwewijk 2018, Rotterdam, The Netherlands

rent or buy

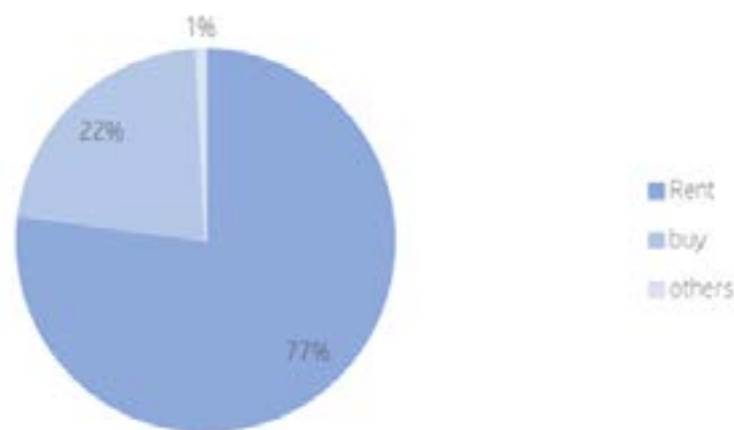


Figure X: Rent or buy within the Tarwewijk, 2018, Rotterdam, The Netherlands

Owners of the property

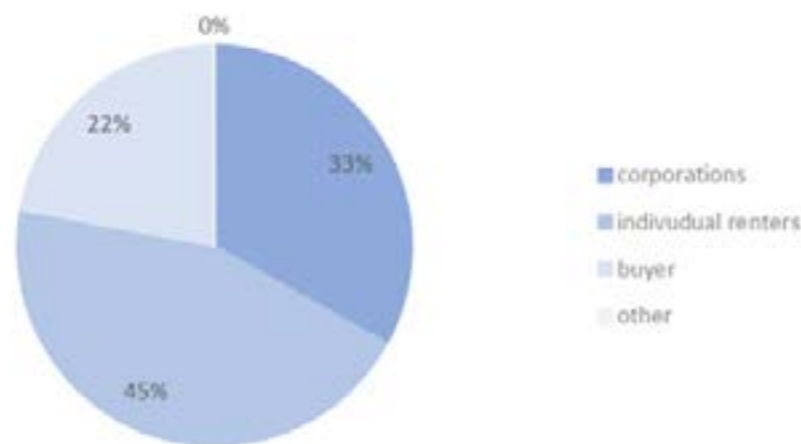


Figure X: Owners of property within the tarwewijk, 2018, Rotterdam

Level of education

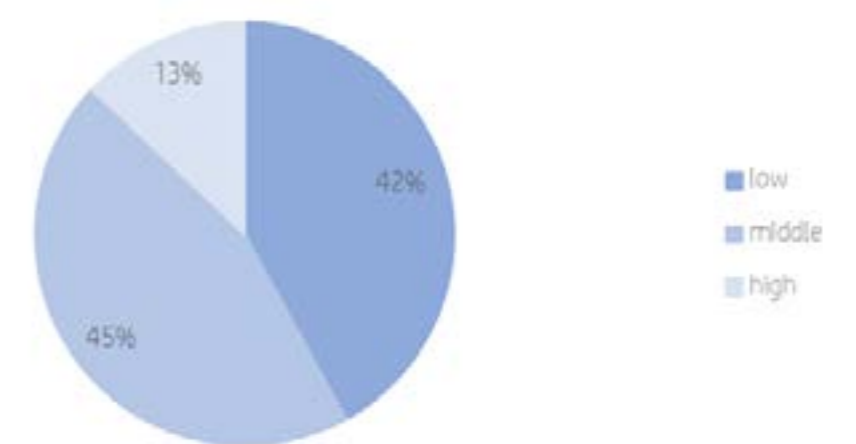


Figure X: Level of Education within the Tarwewijk, 2018, Rotterdam, The Netherlands.

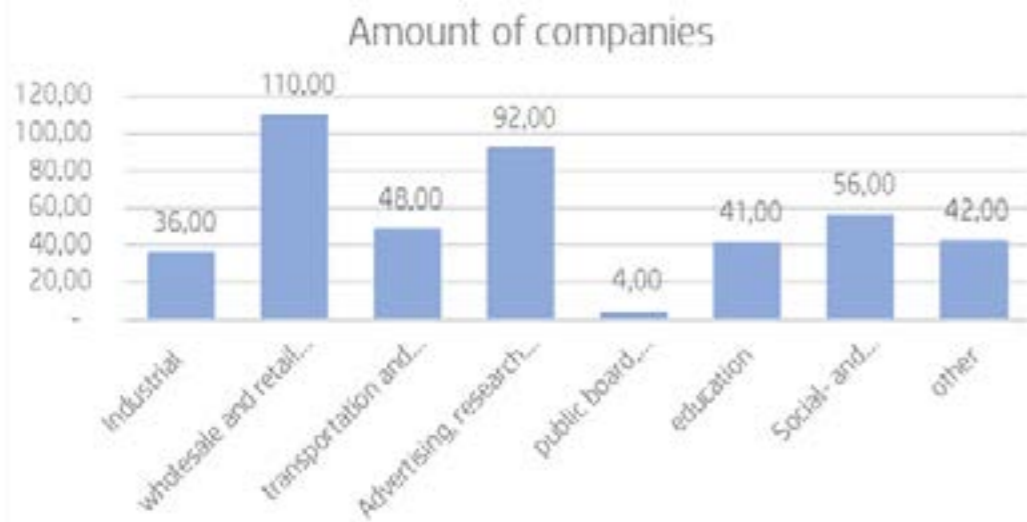


Figure X: Companies Within the Tarwewijk, 2018, Rotterdam, The Netherlands.

Income higher or lower than Minimal Wage

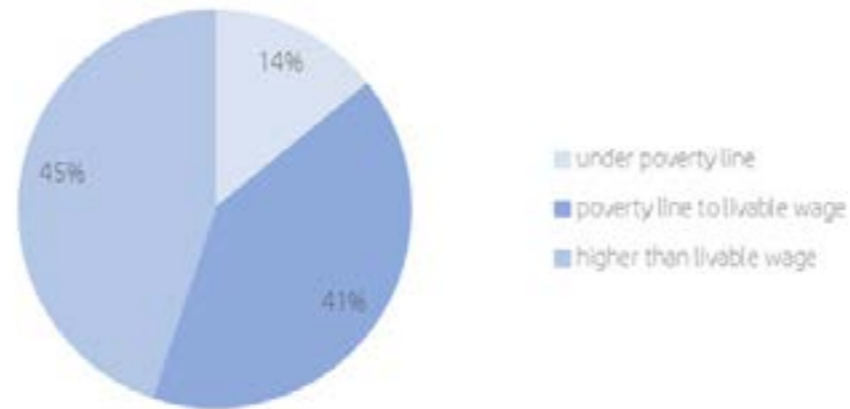


Figure X: Distribution of income level within the Tarwewijk, 2018, Rotterdam, The Netherlands.

level of income

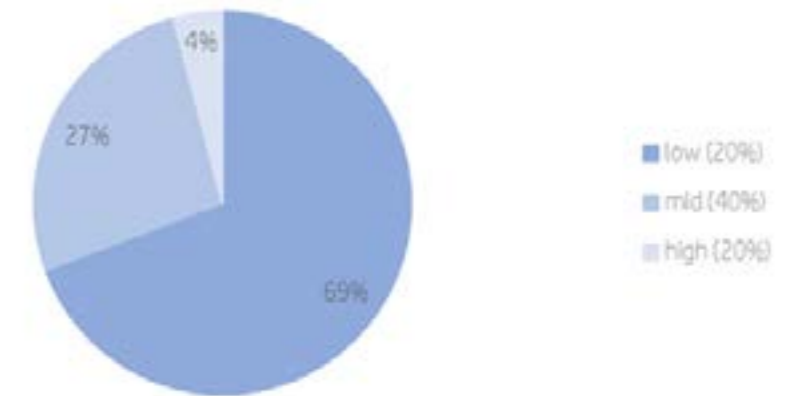


Figure X: Level of income within the Tarwewijk, 2018, Rotterdam, The Netherlands.

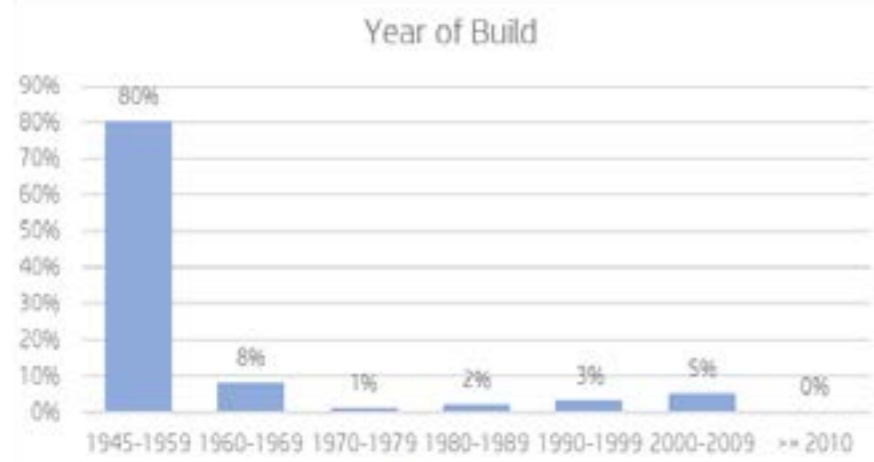


Figure X: Year of build in the Tarwewijk, 2018, Rotterdam, The Netherlands

Housing Prices



Figure X: Housing Prices in the Tarwewijk, 2018. Rotterdam, The Netherlands

Typologies Housing

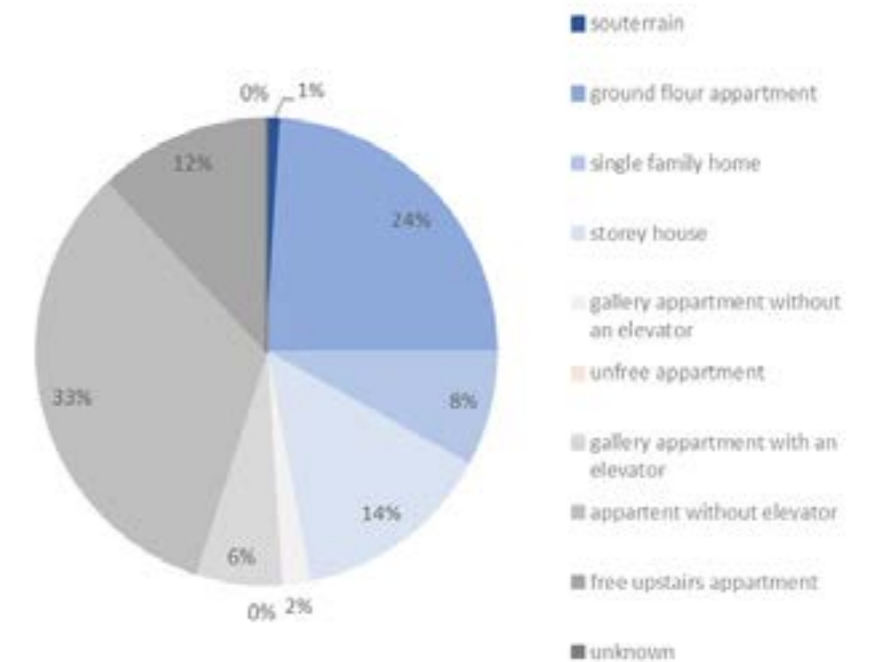


Figure X: Housing typologies in the Tarwewijk, 2018, Rotterdam, The Netherlands

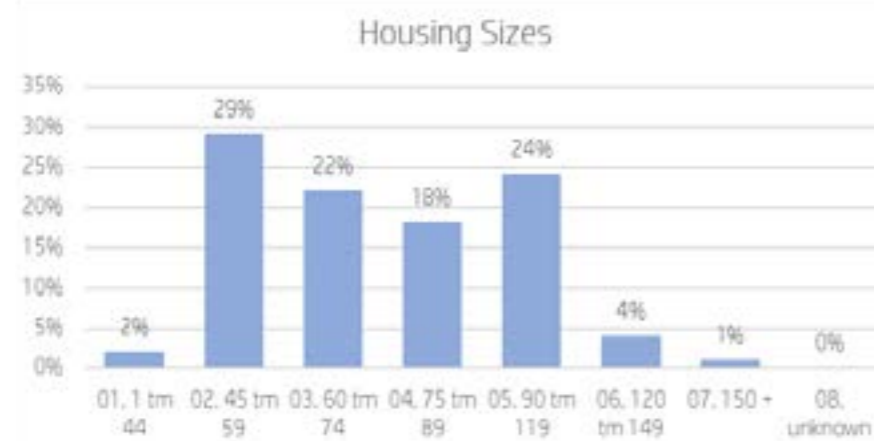


Figure X: Housing Sizes in the Tarwewijk, 2018, Rotterdam, The Netherlands

Sources of Income

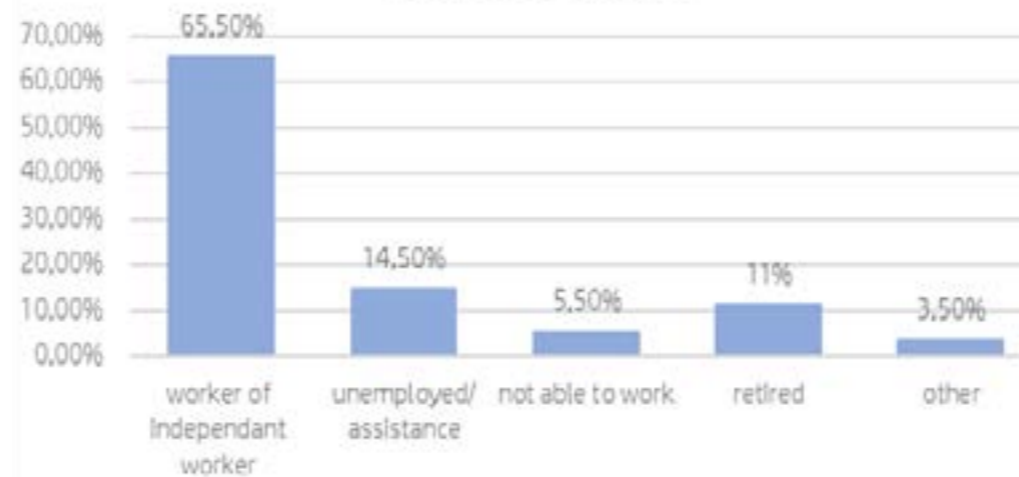
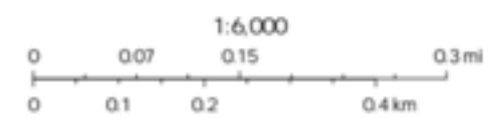


Figure X: Sources of Income Within the Tarwewijk, 2018, Rotterdam, The Netherlands.



- Pand - Pandtype
- | | |
|--|---|
| ■ Rijwoning | ■ Utiliteitsbouw < 5000 m2 |
| ■ Twee-onder-een-kapwoning | ■ Utiliteitsbouw >= 5000 m2 |
| ■ Vrijstaande woning | ■ Industripand |
| ■ Gestapelde woningen | ■ Overig pand |

Figure X: Building Typologies Within The Tarnewijk, Adapted from Arcgis, 2019.

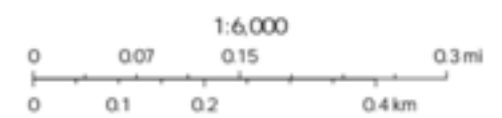




1_Rotterdam_eigendom_woningcorporaties

- Pand - Woningcorporatiebezit
- Stichting Woonstad Rotterdam
 - Stichting Havensteder
 - Stichting Woonbron
 - Stichting Vestia

Figure X: Housing Corporations Within The Tarwewijk, Adapted from Arcgis, 2019.





Maashaven

Kaappark

Bloemhof

Tarwewijk

Carnisse

Zuidplein

1:5.000



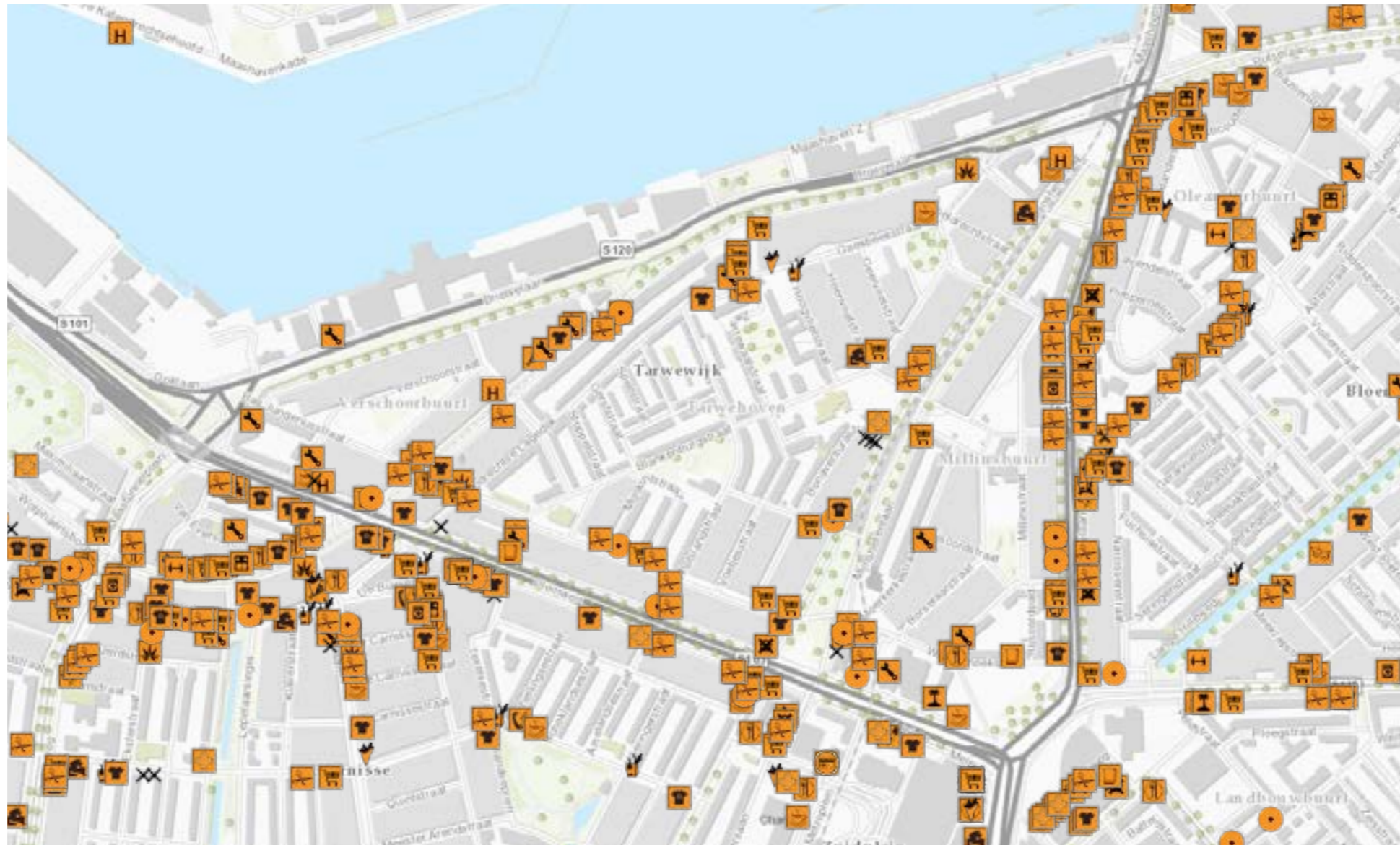


Figure X: Working Opportunities Within The Tarwewijk, Adapted from Leefveldenkaart, Veldacademie, 2018, Rotterdam, The Netherlands.

