Master thesis Economics & Business

Parking & Retail

About the ways parking and parking policy influence shoppers, residents, and entrepreneurs

The case of the Nieuwe Binnenweg area, Rotterdam

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Specialization: Entrepreneurship, Strategy and Organization Economics

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Abstract

This research is concerned with the way parking affects retail. The area the research has taken place in is the Nieuwe Binnenweg. The perception of three groups about the area and its parking policy is compared. These groups are: entrepreneurs with a business located in the Nieuwe Binnenweg, shoppers in the Nieuwe Binnenweg, and residents living in the Nieuwe Binnenweg. Some of the issues this research is concerned with in particular are: the modal split of shoppers, how parking policy affects the various groups, and how parking policy might affect certain factors in the future. The most interesting outcomes of this research are that entrepreneurs seem to overvalue parking in close proximity to their shops, however, one could explain this by the amount of spending of shoppers who come to the area by means of a car. Besides that, it is quite interesting that about half of the shopping public in the Nieuwe Binnenweg lives reasonably close to the Nieuwe Binnenweg. Furthermore, it is found that parking for residents is relatively cheap. Especially compared to what shoppers visiting the area by car have to pay. Residents themselves also consider the price they have to pay for parking their car quite low, as it is found that the willingness of residents to pay for a parking spot is much higher than the current tariff.

Keywords

Parking, Residents, Entrepreneurs, Shoppers, Modal split, Willingness to walk

Acknowledgements

There are several people I would like to thank for helping out during the process of doing this research. To start of course, my thesis supervisor: Giuliano Mingardo, for providing me with support and feedback during several meetings and by means of many e-mails. Furthermore, for providing me with the GIS postal code map, literature and a lot of tips and advice.

I would like to thank Antje Machèn, for helping distribute hundreds of surveys.

I appreciate the time Frank Belderbos, manager of the revitalization project of the Nieuwe Binnenweg, took to help me, and for the literature he provided.

I would like to thank Hans Oost, chairman of the entrepreneurship association, for his time and the discussions we had.

Last but not least, I am grateful to all respondents of the surveys, and to the entrepreneurs I had an interview with.

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1 Introduction

The city of Rotterdam with its about 600.000 residents is the second largest city in the Netherlands (Bik et. al., 2008). Many of these people do own a car and they do use it for transportation within the city. Besides that, millions of people do visit the city each year. Many of these visitors also come by car. This is why there is a big need for parking in the city of Rotterdam. Especially in areas in which multiple parties have a need for affordable and available parking space. An example of such an area is the Nieuwe Binnenweg. In this area parking is a sensitive issue for residents, shoppers, and entrepreneurs. For them, parking has an influence on the economy, accessibility, and attractiveness of the city. Within the area it is not possible to create unlimited parking space because of space and money constraints. That is exactly why more knowledge is needed about parking policy and the effect it has on making the area more attractive for the various parties involved.

1.1 Goal of the research

It is key to get an inside in how the shoppers, residents and entrepreneurs experience the shopping area and the parking policy in the area. So, this research does focus on three groups. Of particular interest is the comparison of the perception of these various groups.

To make this comparison between the perception of these three groups, two main research questions will get answered.

The **first research question** is about the **modal split** of shoppers in the area. *What is the relationship between the modal split of shoppers and their shopping behavior (spending and frequency of visiting the area)?*

The **second research question** is about the **parking policy**. *How does the parking policy affect the three groups this research focuses on?*

1.2 Method of conducting the research

Information has been attained in various ways. Quantitative research was done by distribution of a survey among shoppers in the Nieuwe Binnenweg, and distribution of a different survey among residents of the Nieuwe Binnenweg. These surveys were constructed in a way that gives an idea about the opinion of the residents and shoppers on various matters concerning parking and the attractiveness of the area. Furthermore, qualitative research was done by means of interviewing managers and owners of shops located in the Nieuwe Binnenweg. These interviews were based on a survey as well, however, this survey was only a guideline on which topics to discuss throughout these interviews. Furthermore, a literature review was done. Last but not least, information was attained by interviewing the project manager of the revitalization project that is going on in the Nieuwe Binnenweg, and the chairman of one of the entrepreneurship associations of the Nieuwe Binnenweg.

1.3 Description of the various sections

Section 2 is concerned with the literature on parking policy and retail business. In particular the issues of modal split and the relation between parking and business are dealt with. In section 3 the situation in Rotterdam is described, in particular in the area of the Nieuwe Binnenweg. Section 4 deals with the quantitative research of the shopping public in the Nieuwe Binnenweg. The perception of the shoppers is obtained, as the results of the survey are analyzed. Section 5 deals with the main findings of the quantitative research performed among residents. The perception of residents of the Nieuwe Binnenweg is obtained as the results of the survey are analyzed. Section 6 deals with the results of the qualitative research performed among the entrepreneurs. The perception of entrepreneurs in the Nieuwe Binnenweg is obtained as the results of the interviews among shop owners and managers are analyzed. Furthermore, section 6 is concerned with why parking is important for shops and their revenue. Again, dealt with is the issue of no-parking-no-business. Besides, the willingness to walk of shoppers is dealt with. Section 7 is dedicated to conclusions, recommendations and possible future research. In section 8 references can be found.

2 Parking and retail literature review

Modal split

Too many cars and too much parking in a city do seriously damage urban vitality. One could think of issues like: pollution, congestion, accidents, less appeal of public space, etc. (Button, 2006). Marsden (2006), notes that a policy regarding parking is needed, that balances the damage cars and parking do to a city, and the revenue that is raised by local authorities because of parking. A city should stay easily accessible, as a strong local economy needs an efficient transport system. On the other hand, factors that contribute to a strong local economy are: an urban environment that is clean, safe, and of high quality. This implies a parking policy needs to make sure residents and visitors of a city can access the city by car, and park it for a reasonable price. In the mean time the city should not suffer too much of the negative side effects of cars. In short, residents and visitors should not be deterred because of the high parking fees, but urban vitality should also be guarded.

So, there is a balance in the number of cars that should enter a city. From literature concerned with parking and retail business, it becomes clear that entrepreneurs overestimate the importance of parking for two reasons. The first reason entrepreneurs overvalue parking near their shops, is that they overestimate the number of visitors that comes by means of car. To illustrate this, In a study performed in the Austrian city of Graz, shopkeepers were surveyed on which mode of transport their customers used to get to their shop. The result of these estimations by shopkeepers was off by quite a bit. They estimated that as much as 58% of their customers had come by means of car, whereas just 32% of the people shopping in the city of Graz indicated to have come to the area by means of car. So, the entrepreneurs' estimate was almost twice as high as the actual number of people that has come to the area by means of car (Sustrans 2003). Another illustration of the fact that entrepreneurs overestimate the number of visitors that comes by car, comes from similar research performed in the city of Rotterdam. In this city almost 57% of the entrepreneurs that were interviewed estimated that more than half of the customers came to the area by means of car, whereas the actual number of customers that indeed came by car was less than 22% (Mingardo 2009). These examples clearly illustrate the overestimation of the number of customers that comes to a shopping area by means of car.

The second reason why entrepreneurs overvalue parking near their shop, is the amount of money that visitors spend who come to their shop by means of a car. In several studies it is shown that consumers coming to a shopping area by means of a car do indeed spend more than customers coming to the shopping area by other modes of transport. So, entrepreneurs seem to have a point when stressing the importance of parking.

However, the same studies also show that due to the lower frequency of visiting the area, customers coming by car is not the category of consumers that spends most per week. In the city of Rotterdam the customers spending most on a weekly basis are the ones coming to the area by foot (Mingardo 2009). Marsden, (2006) mentions that research in London has shown similar results, as visitors by car spend most, but on a weekly basis visitors coming to the shopping area by means of bus spend most .

So, entrepreneurs overvalue the importance of parking near their shops for two reasons. They overestimate the number of visitors of shopping areas that comes by car, as well as the amount spend by visitors of cars, as they visit the shopping area less frequently.

No parking, no business?

According to the literature, parking is of key importance to retail business, as shoppers partly choose where to shop, according to how easily they can reach a shop. If parking is difficult or expensive, residents living in a shopping area cannot simply choose to stay for a shorter period, or choose to visit the area less often, as it is the place they live. Shoppers, on the other hand, can do so (Marsden 2006). That is exactly why entrepreneurs fear that if parking within close proximity of their shops is difficult or expensive, less business will be done because of shoppers that do not live in the area, and thus are more likely to come by means of a car. These shoppers will come to shop in the area for a shorter period of time because of the difficulty and price of parking, or they will visit the shopping area less often.

During interviews among entrepreneurs in the city of Rotterdam, entrepreneurs were literally asked to indicate how important parking is to them. Almost 90% of them indicated parking to be either important, or extremely important (Mingardo 2009).

Also the Platform Detailhandel Nederland recommends cities to keep the interests of shoppers and owners of a retail business in mind when making the parking policy for the shopping areas within the inner city. One of the goals such policy often has is to limit car traffic in the inner city, so too few parking spots are constructed, which drives up the price of parking in the inner city (Platform detailhandel Nederland, 2009).

However, urban vitality does suffer from too much parking, as is noted by Still et al., (1999). Examples of how a city can suffer are the reduction of environmental quality and congestion, caused by cars.

3 Parking and retail in the Nieuwe Binnenweg

The Nieuwe Binnenweg is a long shopping street in the west of the city of Rotterdam. It is part of a main route from the western part of the city to the center of the city, so it is easily reachable and thousands of cars pass through it every day. There are parking spots on either side of the road, in front of the shops. So, one can park right in front of a shop if a spot is not occupied. Furthermore, it is often pretty easy to find an empty parking spot (Droogh Trommelen en Partners, 2008). Also, in the parking garages Nieuwe Binnenweg I and Nieuwe Binnenweg II, shoppers and residents of the Nieuwe Binnenweg can park their car.

Due to the fact that the shops are located along the entire street, which has a length of over 2 kilometers, part of the shops are located quite some distance away from the city center. That is why the Nieuwe Binnenweg can actually be divided into two parts. The part between the Lage Erfbrug and de 's-Gravendijkwal, which in Map 3.1 is part 1, and the part between the 's-Gravendijkwal and the Westersingel, which in Map 3.1 is part 2. Part 1 is the situated in the Delfshaven district, and part 2 is situated in the Centrum district.

Map 3.1: Location of the area

The shops in part 1 are overall considered to be quite unappealing (Droogh

Trommelen en partners, 2008). According to previous research, there was a vacancy rate of 11% of the shops in 2006 (F_fect and Platform Nieuwe Binnenweg, 2006). Especially compared to an average country wide vacancy rate of 7%, the 11% at part 1 of the Nieuwe Binnenweg seems high. This is partly due to the state of some shops in the area. Even though many properties have historic value, as they are situated in an area that was not bombed in the second world war, the level of maintenance seems to be an issue. Another problem is that shops in part 1 of the Nieuwe Binnenweg are mostly of a similar kind. There are many callcenters, hairdressers, sexshops, and mini super markets. Overall, the look of part 1 of the Nieuwe Binnenweg is poor and even neglected. A good point of this part of the Nieuwe Binnenweg is that it has a parking policy entrepreneurs as well as shoppers are very content with: the 'Stop & Shop' policy[1].

The shops in part 2 are overall rather appealing. Just like in part 1, chain stores are absent, so there is no HEMA, H&M, Blokker, etcetera, which gives the shopping street an original look. Furthermore, in this part of the Nieuwe Binnenweg there are wider pavements and there are even terraces on the pavement. The overall look of part 2 is much better than that of part 1. This is partly due to the fact that this is the part of the Nieuwe Binnenweg that is located in the Centrum district, in which other shopping areas are also located, e.g. Beurstraverse (Koopgoot) and the Lijnbaan. Because of the more central location of this part of the Nieuwe Binnenweg, parking is more expensive compared to the part of the Nieuwe Binnenweg located in Delfshaven.

So, the parts 1 and 2 of the Nieuwe Binnenweg do each have their strengths and weaknesses. However, there are also several opportunities and threats. One of the biggest opportunities is the revitalization project that has to make the Nieuwe Binnenweg more appealing to shoppers, entrepreneurs, and residents. In the beginning of 2011 the Nieuwe Binnenweg will be changed in a drastic way to make it a more appealing area. Properties that are in a neglected state are purchased by several parties in order to do them up, to attract entrepreneurs to start new trendy shops in them. Furthermore, the Nieuwe Binnenweg will become a 30km/h zone with instead of asphalt, stones on the driveway and even a path for cyclists will be realized.

Some of the threats the shopping area in the Nieuwe Binnenweg faces are among others, as mentioned before the high vacancy rate, which is especially a problem in part 1 of the Nieuwe Binnenweg. This vacancy rate might even go up, as some of the entrepreneurs may not survive the economic downturn of the previous years (CBS, 2009). Not only the economic downturn has had an influence on the turnover of shops. Another influence on the turnover of shops that can be considered a threat is the ongoing growth of online sales (Wijk van, 2009), (CBS, 2010). Another threat, that will fortunately occur when the Nieuwe Binnenweg has been changed drastically after the changes of the Revitalization project that starts in the beginning of 2011, is the opening of an entire new shopping boulevard in Delfshaven, Rotterdam. Among other shops, a AH XL will open there, which will definitely attract people which would otherwise do their grocery shopping at the Nieuwe Binnenweg as they are located quite close. Although, this shopping boulevard will have shops of a fairly different character, and a lot of floor space in the new development will be for leisure activities competition will probably be felt to some extent.

Artist impression: This shows the new shopping location in the west of Rotterdam with a park in the roof.

This shopping area will have a big garage with over 700 parking places, and it is closer to the A20 highway than the Nieuwe Binnenweg is, so accessibility of these newly developed shops is better than the shops at the Nieuwe Binnenweg. In map 3.2 one can see the location of the new shows is quite close to the Nieuwe Binnenweg.

Map 3.2: Location of the new shops close to the Nieuwe Binnenweg

All in all, this paragraph sums up the strengths, weaknesses, opportunities, and threats of the Nieuwe Binnenweg. Now that one has an idea of parking and retail business situation in the area, it is key to get an inside in how the shoppers, residents and entrepreneurs experience the shopping area and the parking policy in the area. So, the perception of the three groups this research focuses on. Of particular interest is the comparison of the perception of these various groups. This is exactly what will follow in the next three chapters.

Overview of strengths, weaknesses, opportunities, and threats of the area in the two different parts of the Nieuwe Binnenweg.

	Nieuwe Binnenweg in the Delfshaven district	**Nieuwe Binnenweg in the Centrum district**
Strengths	*Stop&Shop parking policy	*Appealing shops *Pleasent overall look *Central location
Weaknesses	*Unappealing shops *High vacancy rate *Maintenance issues	*Parking is quite expensive
Opportunities	*Revitalization project	*Revitalization project
Threats	*Economic downturn *New shopping boulevard	*Economic downturn *New shopping boulevard

4 Perception of the shopping public in the Nieuwe Binnenweg

4.1 Introduction

To get an idea of the perception of the shopping public in the Nieuwe Binnenweg, quantitative research was performed by means of the distribution of a survey. This survey was distributed among shoppers in the Nieuwe Binnenweg area (attachment 1). This was done in July 2010. In total 115 surveys were filled out by shoppers in the area of the Nieuwe Binnenweg. The sample of 115 respondents is statistically relevant[2], so it does provide interesting and usable information about issues like travel and spending behavior of the shoppers in the Nieuwe Binnenweg area. Due to the fact that the area can more or less be divided in an attractive part and a less attractive part, and because of seasonal influences, it is hard to say whether the results obtained by this quantitative research are representative of the general perception of shoppers in the shopping area[3].

In the rest of this chapter the most important findings about the shopping public are presented. To start, an overview of the results of the quantitative research among shoppers in the area is presented in table 4.1.

Table 4.1: Overview of the results of the survey held among shoppers

Subject	Number of respondents	% of total number of respondents
Frequency of visiting the area		
<1 time a week	51	44,4
1-3 times a week	22	18,3
3-5 times a week	13	11,3
Almost daily	29	26,1
Modal split		
Car	28	24,3
Public transport	23	20,0
Bike	19	16,5
Walking	44	38,3
Other: electric scooter	1	0,9
Amount spend		
€0 - €25	74	64,3
€25 - €100	28	24,3
Over €100	13	11,3
Opinion on car-free zone		
In favor	58	50,4
Against	48	41,7
Other	9	7,8

4.2.1 Analysis of the modal split of shoppers in the Nieuwe Binnenweg

One of the main goals of this research is to get an inside into the way shoppers come to the area. The way shoppers come to the area is very interesting, especially if one compares these data with the data of the expectations of the shop owners/managers in the Nieuwe Binnenweg (see Chapter 6). From the data in table 4.1 we can conclude that the modal split of the shoppers in the area is fairly mixed. We see that walking is the most common way of coming to the area (38,3%). However, we cannot say it clearly stands out, as just over one third of the shoppers comes to the area this way. The second largest group of shoppers comes to the area by means of car (24,3%). This group may be the second largest group, however, their importance should not be overvalued as these respondents account for less than a quarter of the total number of respondents. Least shoppers come to the area by means of public transport and bike, (20,0%) and (16,5%) respectively. There was just one shopper who came to the area by means of an electric scooter, but this does not seem strange as relatively few people own one[4].

Overall, the modal split in the Nieuwe Binnenweg is remarkably similar to the modal split that was found in research performed in the city of Rotterdam in the area of the Meent (Mingardo, 2009). This is a quite surprising finding, as the two shopping area's have a fairly different character.

The analysis of the mode of transport used and the frequency of visiting the area can be seen in the table below, table 4.2. In this table the absolute number of respondents is shown. They are grouped by the mode of transport used and the frequency of visiting the area. It shows that most of the respondents came walking and visit the area almost daily, or by car and visit the area less than once a week.

Table 4.2: Number of respondents grouped by means of transport and frequency of visiting the area

Mode of transport chosen Frequency of visiting the area	Car #	Public transport #	Bike #	Walking #
< 1 time a week	19	14	7	11
1 – 3 times a week	4	4	5	9
3 – 5 times a week	3	4	2	4
Almost daily	2	2	5	20

In the table below, table 4.3, the respondents are grouped by the mode of transport used. The most obvious results are that people using a car or public transport to come to the area, mostly visit the area less than once a week, (67,9%) and (60,9%) respectively. These modes of transport are the ones that have to be paid for, and these are probably mostly used by the people who have to make the biggest trip to go to the area. Another obvious result, is that the largest group of the people who come walking, visit to the area almost daily.

Table 4.3: Respondents grouped by mode of transport

Mode of transport Frequency of visiting the area	Car %	Public transport %	Bike %	Walking %
< 1 time a week	67,9	60,9	36,8	25,0
1 - 3 times a week	14,3	13,0	26,3	20,5
3 - 5 times a week	10,7	17,4	10,5	9,1
Almost daily	7,1	8,7	26,3	45,5

In the table below, table 4.4, respondents are grouped by the frequency of their visits to the area. An obvious result is that people who come almost daily mostly come walking (69,0). This is a logical result, for one who lives close will probably visit the area more often than one who lives far away, and if one lives close, walking is a good option. Besides, people living far away will probably not visit the area daily, let alone visit the area daily by foot. In the previous table, table 4.3, in which the respondents are grouped by means of transport, it already became clear that people who visit the area by car or public transport often visit the area infrequently. In the table below, table 4.4, which is grouped by frequency of visiting the area, the same result is visible if one looks at the percentage of respondents who come almost daily. People visiting the area almost daily, most often come walking (69,0%), and people visiting the area daily, do not often come by car or public transport, both account for just (6,9%).

Table 4.4: Respondents grouped by frequency of visiting the area

Mode of transport	**Car**	**Public transport**	**Bike**	**Walking**
Frequency of visiting the area	**%**	**%**	**%**	**%**
<1 time a week	37,3	27,5	13,7	21,6
1-3 times a week	19,0	14,3	23,8	42,9
3-5 times a week	23,1	30,8	15,4	30,8
Almost daily	6,9	6,9	17,2	69,0

4.2.2 Analysis of spending, modal split and frequency of visiting the area

Combining the analysis of the modal split of the respondents and the information provided by them about the amount of money they spend in the area gives the following results.

Mode of transport and spending

The first orange table, table 4.5, and the first green table, table 4.6, show the results of the analysis of the mode of transport used by the respondents to come to the area, and the amount spend in the area by the respondents.

In table 4.5 respondents are grouped by the amount they spend and by mode of transport they used. One sees which percentage of mode of transport is in which spending category. The percentages are of the respondents that come by a certain mode of transport and belong in a certain spending category.

So, for instance 9 respondents came by car and they spend between €25 and €100. These 9 respondents which came by car account for 32,1% of the total number of respondents which came to the area by car.

The main result of this table is that almost two third of the respondents (64,9%) has spend less than €25. Furthermore, one can see that this is especially due to the high number of shoppers who come to the area by foot, as many of them belong to the category of spending of less than €25.

Table 4.5: Respondents as a percentage of the total number of the mode of transport, grouped by category of spending

Mode of transport/ Spending	Car		Public Transport		Bike		Walking		Total	
	#	%	#	%	#	%	#	%	#	%
€0 - €25	14	50,0	13	56,5	10	52,6	37	84,1	74	64,9
€25 - €100	**9**	**32,1**	6	26,1	8	42,1	4	9,1	27	23,7
Over €100	5	17,9	4	17,4	1	5,3	3	6,8	13	11,4

In table 4.6 respondents are grouped by the amount they spend and the mode of transport they used, just like in the table above. So, the absolute numbers are the same, however in this table, the percentages are of the respondents that belong to a certain spending category. So, for instance in this table the 9 people which came to the area by car account for 33,3% of the total of respondents who spend between €25 and €100 in the area.

The main result of this table is that more than half of the respondents which came walking to the area spend less than €25 (51,4%). Furthermore, one can see that the biggest percentage of people spending between €25 and €100 are the respondents which came by car (33,3%). The same holds for the category of spending of over €100. Also, in this category the respondents which came to the area by car is the largest group (38,5%).

Table 4.6: Respondents as a percentage of the total number of the category of spending, grouped by mode of transport

Mode of transport/ Spending	Car #	Car %	Public Transport #	Public Transport %	Bike #	Bike %	Walking #	Walking %
€0 - €25	14	19,4	13	18,1	10	13,9	37	51,4
€25 - €100	**9**	**33,3**	6	22,2	8	29,6	4	14,8
Over €100	5	38,5	4	30,8	1	7,7	3	23,1
Total	28	24,6	23	20,2	19	16,7	44	38,6

Frequency of visiting the area and spending

The second orange table, 4.7, and the second green table, 4.8, show the results of the analysis of the frequency with which a respondent visits the area, and the amount spend in the area by the respondent.

In table 4.7 respondents are grouped by the amount they spend and the frequency with which they visit the area. One sees which percentage of frequency of visiting the area is in which spending category. The percentages are of the respondents that come to the area by a certain frequency and belong to a certain spending category.

So, for instance 14 respondents visit the area less than once a week and spend between €25 and €100. These 14 respondents which visit the area less than once a week account for 27,5% of the total number of respondents which visit the area less than once a week.

The main result of the table is that almost two third of the respondents (64,3%) has spend less than €25. This is of course the same as in table 4.5. Percentages are slightly different as one of the respondents was eliminated[4]. Furthermore, one can see that no matter the number of visits a respondent makes to the area, the respondent is most likely to spend less than €25 per visit.

Table 4.7: Respondents as a percentage of the total number of the frequency of visiting the area, grouped by category of spending

Frequency of visiting the area/ Spending	<1 time a week #	%	1-3 times a week #	%	3-5 times a week #	%	Almost daily #	%	Total #	%
€0 - €25	30	58,8	15	68,2	10	76,9	19	65,5	74	64,3
€25 - €100	**14**	**27,5**	5	22,7	3	23,1	6	20,7	28	24,3
Over €100	7	13,7	2	9,1	0	0,0	4	13,8	13	11,3

In table 4.8, respondents are grouped by the amount they spend and the frequency with which they visit the area, just like in the table above. So, the absolute numbers are the same, however in this table, the percentages are of the respondents that belong to a certain spending category. So, for instance in this table the 14 people which visit the area less than once a week and spend between €25 and €100 in the area now account for 50,0% of the total of respondent who spend between €25 and €100 in the area.

The main result of this table is that the largest share of respondents visits the area less than once a week (44,3%). Furthermore, one can see that the biggest percentage of people spending between €25 and €100 are the respondents which came by car (33,3%). The same holds for the category of spending of over €100. Also in this category the respondents which came to the area by car is the largest group (38,5%). Furthermore, one can see that respondents visiting the area less than once a week is the biggest group in both the category of spending between €25 and €100, and in the category of spending of over €100.

Table 4.8: Respondents as a percentage of the total number of the category of spending, grouped by the frequency of visiting the area

Frequency of visiting the area/ Spending	<1 time a week #	%	1-3 times a week #	%	3-5 times a week #	%	Almost daily #	%
€0 - €25	30	40,5	15	20,3	10	13,5	19	25,7
€25 - €100	**14**	**50,0**	5	17,9	3	10,7	6	21,4
Over €100	7	53,8	2	15,4	0	0,0	4	30,8
Total	51	44,3	22	19,1	13	11,3	29	25,2

4.2.3 Pattern of mobility of the shoppers in the Nieuwe Binnenweg

To start, we see in table 4.1 that the largest share of people visits the area less than once a week (44,3%). However, the second largest share of people claims to visit the area almost daily (26,1%). In the survey the postal code of respondents was asked. By means of this information it is possible to analyze if people who have a postal code that is far away from the area, visit the area by another mode of transport than people which have a postal code that is close to the area. Furthermore, we can analyze whether the distance people have to travel to come to the area does effect the frequency of them visiting the area. The number of respondents with a postal code which is close or reasonably close to the area is 51[5].

In the table below, table 4.9, the respondents with the postal codes that are close or reasonably close, are grouped by their chosen mode of transport. Analyzing the results, one sees that people living close to the area mainly come by means of walking. The number of respondents living in the area that comes walking, is 35 out of a total of 51 people living in the area. That is over two third of the respondents living in the area (68,6%).

Another result is that from the respondents who live close to the area, just 4 were by means of car. This is such a low number because one has to pay to park a car in the area, and why use a car if one lives this close to the shopping area anyway? One of the questions in the survey, was about the willingness to walk to a destination. On average, respondents which did come by car declared to be willing to walk just under 700 meters (686 exactly). The 4 respondents which have a postal code which is close or reasonably close to the area, declare to be willing to walk 20, 25, and two times 50 meters. In a way this result is to be expected, as they live close and come by car, their willingness to walk is low, so they do indeed come by car even though they live close. In a way one could say that these ‘lazy’ respondents practice what they preach.

Table 4.9: Respondents from close to the area, grouped by means of transport

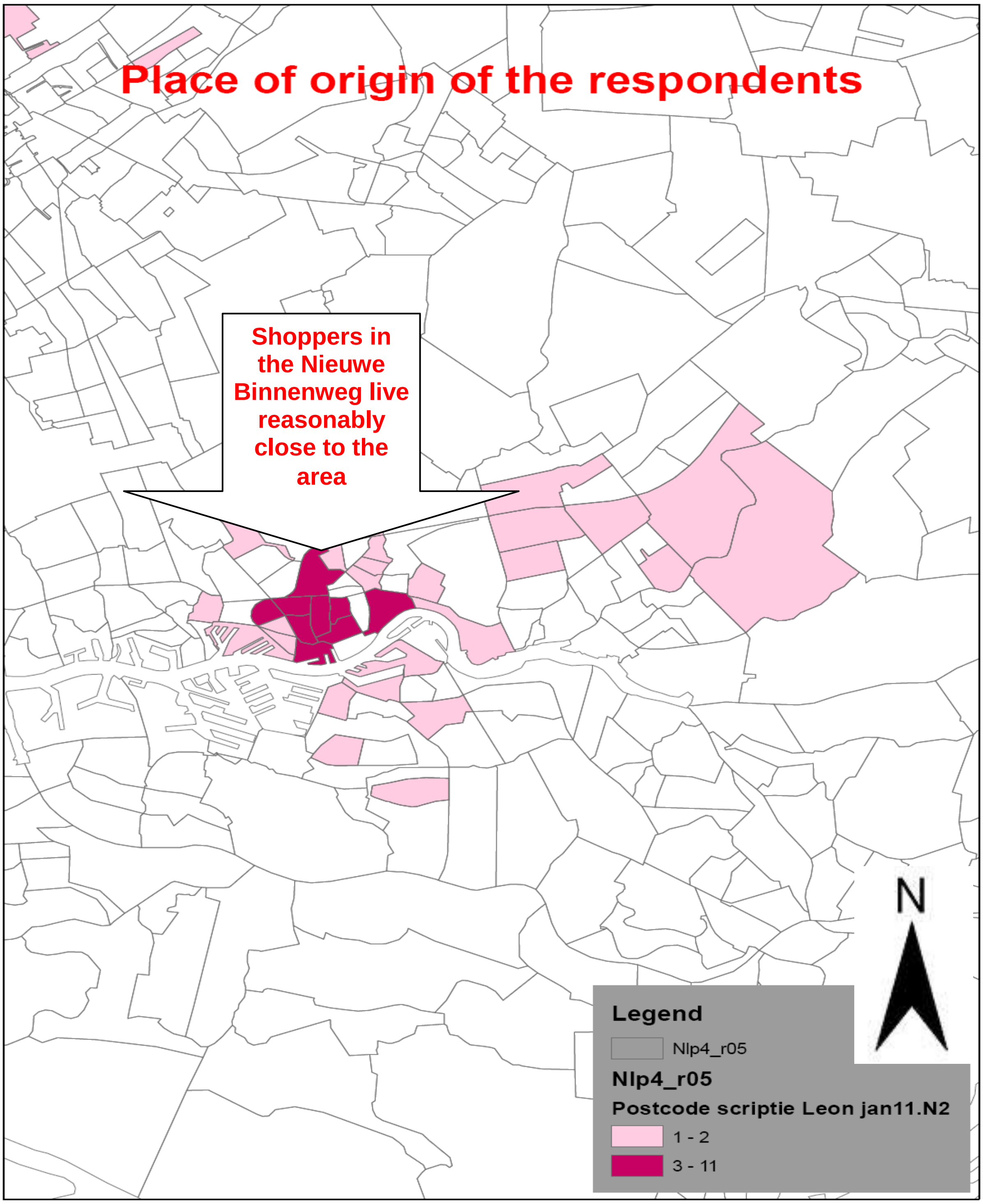
Mode of transport used/ Postal code	Car	Public Transport	Bike	Walking	Total number of respondents
3014	1		1	8	10
3015			2	2	4
3021				11	11
3022			1	2	3
3023		2	1	5	8
3024	1		1	4	6
3025				2	2
3026	1			1	2
3027	1	2	2		5

In the table below, table 4.10, respondents from the close or reasonably close postal codes are grouped by the frequency of visiting the area. Analyzing the results, one sees that the people which live close to the area visit the area more often than average. In table 4.1 one sees that a little more than a quarter of the total number of respondents visits the area almost daily (26,1%). Mind that in this percentage the people living in the postal codes close and reasonably close to the area are included. In table 4.10 we see that many people living close to the area visit the area almost daily. In total 26 of the 51 people living close to the area visit the Nieuwe Binnenweg almost daily. That is just over half of them (51,0%). From this analysis of the postal code of respondents one can conclude that, as expected, the closer one lives to the Nieuwe Binnenweg, the more often one visits the Nieuwe Binnenweg.

Table 4.10: Respondents from close to the area, grouped by frequency of visiting the area

Frequency of visiting the area (a week)/ Postal code	Less than 1 time	1-3 times	3-5 times	Almost daily	Total number of respondents
3014	1	1		8	10
3015				4	4
3021	3	1	1	6	11
3022	1	2			3
3023		1	2	5	8
3024	1		2	3	6
3025	1	1			2
3026			2		2
3027	4	1			5

Map 4.1: Origin of respondents in the Nieuwe Binnenweg that filled out the survey



5 Perception of residents of the Nieuwe Binnenweg

5.1 Introduction

In general, if taken into account the heterogeneity of demand for on-street parking, imposing parking tariffs is indeed welfare improving. This tariff should be the same for all types of users of parking places (Ommeren, Wentink, Dekkers, 2009). In Rotterdam, this is not the policy of the city council. A parking permit costs just €9,89 to residents, but the actual costs are way higher than that. One should for instance consider costs like, the people who are employed to patrol the streets to control parking tickets and parking permits, the costs of the space parking uses, the costs of the urban vitality that goes up if a street is less green and has less broad pavements because of the parked cars, the costs personnel that deals with the administrative burden parking brings, etcetera. The city council decided to make parking this ‘cheap’ to residents because if feels that residents should not pay the real cost of parking since parking needs to be affordable for them. The main argument for this policy is that if parking for residents is too expensive, people with cars will leave the area. The people with cars are mostly the richest people which do have jobs. This is the type of people the city council actually wants to have in the area because this is the type of people that brings in money. This policy is of the city council is not so strange, as although policies differ in detail, in most large cities, parking for residents is either directly, or indirectly subsidized (Ommeren, van, et. al., 2009).

To get an idea of the perception of the residents of the Nieuwe Binnenweg, quantitative research was performed by means of the distribution of a survey. This survey was distributed among residents of the Nieuwe Binnenweg (attachment 2). This was done in August 2010. In total 47 surveys were filled out by residents of the Nieuwe Binnenweg. The sample of 47 respondents is not statistically relevant[6], but it does provide interesting and usable information. Out of this sample 30 respondents have at least one car, so only they are included in table 5.2 as only they can answer the second part of the survey.

In the rest of this chapter the most important findings about the residents of the Nieuwe Binnenweg are presented. To start, an overview of the results of the quantitative research residents of the Nieuwe Binnenweg is presented below in table 5.1, and table 5.2.

Table 5.1: Overview of the results of the survey held among residents of the Nieuwe Binnenweg (respondents with and without a car)

	Number of respondents	% of total number of respondents
Impression of the area		
Good	29	61,7
Sufficient	12	25,5
Not too good	5	10,6
Bad	1	2,1
Frequency of visiting a shop in the area		
(Almost) daily	26	55,3
Several times a week	18	38,3
(Almost) never	3	6,4
Cars allowed in the Nieuwe Binnenweg		
Yes	12	25,5
No	29	61,1
No opinion	6	12,8

Table 5.2: Overview of the results of the survey held among residents of the Nieuwe Binnenweg (only respondents with a car)[7]

Subject	Number of respondents	% of total number of respondents
Number of cars of household		
1	27	90,0
2 or more	3	10,0
Number of parking permits of household		

0	0	0,0
1	25	83,3
2 or more	5	16,7
Location of parking most often used when at home		
On the street in the Nieuwe Binnenweg	1	3,3
On the street in the area	11	36,7
Garage in the Nieuwe Binnenweg	15	50,0
Elsewhere	3	10,0
Car in the area during day time		
Yes	20	66,7
No	10	33,3
Distance willing to walk between home and car		
0 - 300 meters	18	60,0
300 - 650 meters	10	33,3
650 - 1000 meters	0	0,0
Over 1000 meters	2	6,7
Amount willing to pay per month to have a private parking place		
Less than €20	8	26,7
€20 - €50	16	53,3
€50 - €100	1	3,3
€100 - €250	5	16,7

5.2 Analysis of the Nieuwe Binnenweg and its parking policy

From the results in table 5.1 it becomes evident that almost ninety percent of the residents (87,2%) has got an impression of the area that is either good or sufficient. Besides, over ninety percent of the residents (93,6%) visits a shop several times a week or daily.

In total 30 out of the 47 respondents declare that at least one car is owned by their household. That is almost two third of the respondents. When focusing on the residents with a car, we find from table 5.2 that every household that owns a car does have at least one parking permit. So, there are no respondents who do own a car, without having a parking permit to park it in the area. Remarkable however, is that 3 respondents declare to have 2 or more cars, and that 5 respondents declare to have 2 or more parking permits. So, probably two of the respondents who do have just 1 car, have got at least 2 parking permits.

Residents were also asked where they do park their car. We see that half of them parks them in one of the garages, and that just one respondent states to mostly park in the Nieuwe Binnenweg on the street. That almost no one parks on the Nieuwe Binnenweg on the street can be explained by the fact that the permit for residents of the Nieuwe Binnenweg is not valid in the Nieuwe Binnenweg, because of the shopping function of the street. This one person might be a person who mostly or only has his or her car parked there during the night, as during the night parking in the Nieuwe Binnenweg is free.

Willingness to walk of the residents was calculated to be 331,9 meters[13]. This is a lot lower than that of the shoppers at the Meent and the shoppers at the Nieuwe Binnenweg, 704 and 686 meters respectively. This is logical if one takes into account that a resident has to walk this distance every single time he or she takes the car to go somewhere. A walk of over three hundred meters can even be considered very long, as people who are not living in a big city usually park in their own garage, garden, under their own carport, or just outside their garden on the side of the street. So, the willingness to walk from a parking spot to their home will be a lot lower probably for people who are not living in a big city.

The final interesting result is that about a quarter (26,7%) of the respondents with a car is willing to pay less than €20,00. As they currently pay €9,89, their willingness to pay is between €9,89 and €20,00. This means that almost three quarters of the residents who own a car and have a parking permit, are willing to pay at least double the amount they have to pay currently.

6 Perception of entrepreneurs in the Nieuwe Binnenweg

6.1 Introduction

This section is concerned with why parking is important for shops and their revenue. Findings from the qualitative research performed among shop owners and shop managers is presented.

To get an inside into the opinion of entrepreneurs in the area, interviews were held. In total 99 interviews with shop owners or managers were held to get an idea of the option of entrepreneurs. Interviews were held by means of a small survey (see attachment 3).

To get an idea of the perception of the entrepreneurs in the Nieuwe Binnenweg, qualitative research was performed by means of small interviews. During these interviews certain question regarding parking and the area were asked, so this research can also be classified as quantitative research as these questions are sort of a survey too. In total 99 of these short interviews were held in shops in the Nieuwe Binnenweg. The sample of 99 is statistically relevant[8], so it does provide interesting and usable information about things like the share of shoppers that entrepreneurs/managers expect to come to the area by means of e.g. car.

As was explained in chapter 4, the area this research is about can be divided into a part that is not very appealing, the part situated in the Delfshaven district, and the part that is considered quite appealing, the part situated in the Centrum district. As it is hard to say whether the results obtained by this quantitative research are representative of the general perception of entrepreneurs in the shopping area, as the area does comprise of two parts that can be characterized in a different way, the qualitative research was split up in two parts[9]. The interviews itself were no different, as the same questions were asked, however, as the area does comprise of two parts that can be characterized in a different way, the outcomes of the interviews held with entrepreneurs in the Delfshaven district and the Centrum district were split. As the part of the street that runs through Delfshaven is longer and has more shops, 58 entrepreneurs/managers were interviewed here, whereas in the Centrum district 41 entrepreneurs/managers were interviewed. Making this split tries to correct for the different state of the two parts of the area. So, the group of interviewed shop owners/managers is analyzed separately, as well as combined.

In the rest of this chapter the most important findings about the research performed among shop owners/managers is presented. To start, an overview of the results of the quantitative research among businesses in the area is presented below. In the first table, table 6.1, the results are presented for the total number of respondents. In the second table, 6.2, results are presented of the shop owners/managers of the Nieuwe Binnenweg in the Delfshaven district. In the third table, 6.3, results are presented of the shop owners/managers of the Nieuwe Binnenweg in the Centrum district.

Table 6.1: Overview of the results of the interviews held among shop owners/managers (Respondents from the Delfshaven and Centrum district combined)

Subject	Number of respondents	% of total number of respondents
Modal split		
Car	46	46,5
Public transport	7	7,1
Bike	10	10,1
Walking	36	36,4
Priority in the area		
Attractiveness	39	39,4
Accessibility	60	60,6
Price of parking		
High	46	46,5
Reasonable	24	24,2
Cheap	29	29,3
Cars allowed on the street		

Yes	36	36,4
No	63	63,6

Table 6.2: Overview of the results of the interviews held among shop owners/managers of the Nieuwe Binnenweg in the Delfshaven district

Subject	Number of respondents	% of total number of respondents
Modal split		
Car	34	58,6
Public transport	2	3,4
Bike	3	5,2
Walking	19	32,8
Priority in the area		
Attractiveness	14	24,1
Accessibility	44	75,9
Price of parking		
High	15	25,9
Reasonable	15	25,9
Cheap	28	48,3
Cars allowed on the street		
Yes	18	31,0
No	40	69,0

Table 6.3: Overview of the results of the interviews held among shop owners/managers of the Nieuwe Binnenweg in the Centrum district

Subject	Number of respondents	% of total number of respondents
Modal split		
Car	12	29,3
Public transport	5	12,2
Bike	7	17,1
Walking	17	41,5
Priority in the area		
Attractiveness	25	61,0
Accessibility	16	39,0
Price of parking		
High	31	75,6
Reasonable	9	22,0
Cheap	1	2,4
Cars allowed on the street		
Yes	18	43,9
No	23	56,1

6.2.1 Analysis of the modal split entrepreneurs expect

One of the main goals of this research is to get an inside into the way people come to the area. The way people come to the area is very interesting, especially if one compares the actual data, as presented in chapter 4, table 4.1, with the data of the expectations of the entrepreneurs in the Nieuwe Binnenweg. From the actual data we can conclude that the modal split of the shoppers in the area is fairly mixed. We see that walking is the most common way of coming to the area (38,3%). However, we cannot say it clearly stands out, as just over one third of the shoppers come to the area this way. The second largest group of people comes to the area by means of car (24,3%). This group may be the second largest group, however, their importance should not be overvalued as these people account for less than a quarter of the total number of respondents. Least people come to the area by means of public transport and bike (20,0%) and (16,5%) respectively.

From the first table in this chapter, table 6.1, which gives an overview of the results of the interviews held among shop owners/managers of the entire area, we get quite a different picture of the modal split. Do however mind that the tables in this chapter, present data that are *estimates* of the shop owners/managers. The owners/managers expect that almost as much as half of the customers visiting their shops comes by car (46,5%). In chapter 4 in which the actual modal split data was analyzed, it was found that most of the respondents come walking to the area instead of by car. So, entrepreneurs expect almost half of the visitors of their shops to come by car, but visitors that come by car do actually account for less than a quarter of the shoppers. This clearly indicates that entrepreneurs significantly overestimate the number of people coming to the area by means of car. In previous research it was already found that entrepreneurs do overestimate the percentage of visitors that come by car (Sustrans 2003), (Mingardo 2009).

Furthermore, what instantly becomes clear when one compares tables 6.1, 6.2 and 6.3, is that the percentage of people that is expected to come by car, is quite a lot bigger in the Delfshaven district of the street (58,6%) than it is in the Centrum district of the street (29,3%). From this we see that the entrepreneurs in the Delfshaven district of the street raise the percentage of the combined results to almost half of the people (46,5%). This is partly due to the fact that more shop owners/managers were interviewed in this part of the street, as it is larger than the part in the Centrum district. However, there are possibly also more structural reasons for the big difference in expectations. One of such reasons is the Stop & Shop policy that is in place in the Delfshaven district, which makes parking there quite cheap compared to the part of the street in the Centrum district[10]. Another of such reasons could be, that the different character of the shops in the two parts, attracts a different type of shopper. Another of such reasons could be that the area in the Centrum district is more easily reachable by foot or by public transport, as it is more central.

6.2.2 Analysis of preferred attribute

During the interviews, one of the questions asked was about the importance of accessibility and attractiveness of the area. Shop owners/managers were asked to make a choice between these two positive attributes of an area on the basis of what would be the more important attribute of the two, in attracting customers to their shop. Again, it is very clear that it was a good thing the interviews were split up in two parts, as the entrepreneurs in the Delfshaven district and the entrepreneurs in the Centrum district reacted quite differently. This indicates that the priorities of the entrepreneurs in the different parts of the Nieuwe Binnenweg are different. Table 6.4 and 6.5, illustrate this finding.

In table 6.4 one sees that accessibility of the area is considered far more important than attractiveness of the area. That is exactly the case for the Nieuwe Binnenweg in the Delfshaven district of the street. As it is easily accessible, as there is the Stop & Shop policy, parking is considered cheap (see table 6.2 and footnote 1). Furthermore, it seems more easy to find a parking spot in the Nieuwe Binnenweg in the Delfshaven district of the street than in the Centrum district of the street, though it is cheaper in the Delfshaven district of the street, than in the Centrum district of the street.

Also, in table 6.4 one sees that attractiveness of the area is considered less important than the accessibility of the area. That is exactly the case for the Nieuwe Binnenweg in the Delfshaven district of the street. As it is not very attractive.

Table 6.4: Which attribute is more important according to entrepreneurs in the Delfshaven district of the Nieuwe Binnenweg

Preferred attribute (Delfshaven district of the street)	Number of respondents	% of Total number of respondents
Attractiveness	14	24,1
Accessibility	44	75,9

On the other hand, in table 6.5 one sees that attractiveness of the area is considered far more important than accessibility of the area. That is exactly the case for the Nieuwe Binnenweg in the Centrum district of the street. As it is more attractive than the part of the street in the Delfshaven district, because it has wide pavements, terrasses etc. (see section 3.2). Furthermore, it seems less easy to find a parking spot in the Nieuwe Binnenweg in the Centrum district of the street than in the Delfshaven district of the street, though it is more expensive to park a car in the Centrum district of the street than in the Delfshaven district of the street.

Table 6.5: Which attribute is more important according to entrepreneurs in the Centrum district of the Nieuwe Binnenweg

Preferred attribute (Centrum district of the street)	Number of respondents	% of Total number of respondents
Attractiveness	25	61,0
Accessibility	16	39,0

Overall, it is clear that entrepreneurs feel that the attribute that is most strongly present in the part of the street they are located in, is most important to their customers.

6.3 Importance of parking to retail business

As became clear in the previous section of this chapter, entrepreneurs tend to overestimate the number of people coming to their shop my means of a car. As the number of people that comes by car is overestimated, the importance of parking is also overvalued. In table 6.1, one could see that when the perception of entrepreneurs from both parts of the Nieuwe Binnenweg is taken together, entrepreneurs expect almost half of their customers to come by car. Since just under a quarter of the respondents shopping in the area claim to have come to the area by means of car, entrepreneurs overestimate the importance of parking to retail business.

No parking, no business?

That the importance of parking is overestimated shows very clearly from the data. Also, when asked what would happen if the Nieuwe Binnenweg would become a restricted area for cars, one of the entrepreneurs said that she, as well as most of the entrepreneurs, would turn in the key of their shop. By which she meant that if the accessibility went down, entrepreneurs would go bankrupt and shops would go vacant. So, in the perception of entrepreneurs, people coming by car spend most. This may be true, however, as was presented in chapter 4, 67,9% of the people coming to the area by means of car, do so less than one a week (table 4.3). On the other hand, the entrepreneurs stressing the importance of parking, are right when accounting for the fact that 38,5% of the respondents spending over €100 came to the area by means of car. This is the largest part of the respondents in the category of the highest spending. This is also the picture that emerges from previous research (Sustrans, 2006). In this research entrepreneurs also overestimate the importance of their customers coming by means of car, and so the importance of parking in the area. Entrepreneurs argue that a restriction on the speed in the area, which is planned as the maximum speed will go down from 50km/h to 30km/h, or less parking places, or more expensive parking, will all lower their revenue. They do have a point, as shoppers coming to the area by means of car have more options than residents do. As mentioned before, residents cannot easily escape high parking charges, as they simply live in the area, but shoppers can. Shoppers can respond to high parking costs by simply reducing the frequency of their visits to the area, shop in a different area, or by which means of transport they come to the area, and for how long they stay (Marsden 2006).

Regarding accessibility, Platform Detailhandel Nederland argues that it is vital for a shopping area to be reachable within 10 minutes from the highway (Platform Detailhandel Nederland 2009). If this is not the case, some people will indeed consider visiting an alternative shopping area.

Willingness to walk

As entrepreneurs stress the importance of availability of parking, it was analyzed how far people coming to the area by car are willing to walk. In the survey it was asked how far a respondent coming by car, was willing to walk from car to destination.

As was already briefly mentioned in the paragraph about the mobility of shoppers, the average willingness to walk of respondents which did come to the area by car was just under 700 meters. In previous research performed in the city of Rotterdam it was found that in the shopping area of the Meent, respondents to a survey question about their willingness to walk, were on average willing to walk slightly more than 700 meters[11] (Mingardo 2009).

Another result is that of the respondents who live close to the area, just 4 were by means of car. This is such a low number because one has to pay to park a car in the area, and why use a car if one lives this close to the shopping area anyway?

One of the questions in the survey, was about the willingness to walk to a destination. In chapter 4 it was found that on average, respondents that did come by car declared to be willing to walk just under 700 meters (686 exactly). The 4 respondents which have a postal code which is close or reasonably close to the area, declare to be willing to walk 20, 25, and two times 50 meters. In a way this result is to be expected, as they live close and come by car, their willingness to walk is low, so they do indeed come by car even though they live close.

7 Conclusions, recommendations, and future research

Goal of the research

During this research, the main goal is to get an inside into how the Nieuwe Binnenweg and the parking policy are experienced. This research focuses on three groups: shoppers, residents and entrepreneurs. In this concluding section, the main research questions will get answered.

The **first research question** is about the **modal split** of shoppers in the area. *What is the relationship between the modal split of shoppers and their shopping behavior (spending and frequency of visiting the area)?*

Table 7.1: An overview of the actual modal split of shoppers

Modal split	
Car	24,3
Public transport	20,0
Bike	16,5
Walking	38,3
Other: electric scooter	0,9

In chapter 4 the way shoppers come to the area is shown. What is apparent is that the modal split of shoppers in the area is fairly mixed, as can be seen above. Though the most common way of coming to the shopping is area is by means of walking, it does not clearly stand out. Shoppers come to the area by car, public transport and bike relatively often as well.

In chapter 6 the expectations of entrepreneurs about the way their customers come to their shop, are compared to the actual percentages that respondents who were shopping gave themselves, and it turns out that entrepreneurs expect a very large percentage of their customers to come by car and that in fact just under a quarter of the shoppers do actually come by this mode of transport.

Table 7.2: An overview of the modal split entrepreneurs *expect*

Modal split	
Car	46,5
Public transport	7,1
Bike	10,1
Walking	36,4

Besides that the share of shoppers coming to the area by means of a car is overestimated, the amount of revenue that they bring in is also overestimated. Shoppers that come by car do indeed spend more than shoppers coming to the area by other modes of transport, but they come less frequently. All in all, one can conclude that shoppers coming by car are important, but their importance is overestimated. Another remarkable finding about the modal split of shoppers at the Nieuwe Binnenweg, is that it is quite similar to the modal split that was found in research performed in the city of Rotterdam in the area of the Meent (Mingardo, 2009).

The **second research question** is about the **parking policy**. *How does the parking policy affect the three groups this research focuses on?*

Parking policy for shoppers, residents and entrepreneurs is fairly different. This is mainly due to the different tariffs that these groups pay for parking in the Nieuwe Binnenweg.

Entrepreneurs and residents can get a permit, but they do not pay the same amount[12]. Residents pay just under ten euro's per month (€9,89), Whereas A business permit entrepreneurs can apply for costs three times as much (€29,67). Furthermore, shoppers can park their car relatively cheaply in the least attractive part of the Nieuwe Binnenweg.

Other findings about the parking policy is that residents with a parking permit are willing to pay more than they actually have to, as a over a quarter (26,7%) of the respondents with a car is willing to pay less than €20,00. As they currently pay €9,89, their willingness to pay is between €9,89 and €20,00. This means that almost three quarters of the residents who own a car and have a parking permit, are willing to pay at least double the amount they have to pay currently (73,3%).

Both entrepreneurs and shoppers are very content with the amount *shoppers* pay to park their car. However, a remark that some entrepreneurs made during the interviews was about the amount they have to pay, which is higher than what residents have to pay. They feel it is unfair that a business permit costs over 350 euro's a year, whereas a residential permit costs just about one third of that.

7.1 Conclusions

Based on this research, several conclusions can be draw about the ways parking and parking policy affect shoppers, residents, as well as entrepreneurs in the Nieuwe Binnenweg area, in Rotterdam.

The first conclusion that can be drawn is that the importance of the car is overvalued by entrepreneurs. Not if one considers spending, but definitely if the frequency of visiting the area and the actual number of shoppers coming by car are accounted for.

The second conclusion is the shops at the Nieuwe Binnenweg are in a large way dependent of the people living in the area. Many respondents to the shoppers survey have a postal code that is close to the Nieuwe Binnenweg.

A third conclusion is that the split up that was made in the street in a part that lies in the Delfshaven district and a part that lies in the Centrum district is a good thing. Tables 6.2 and 6.3 show a large difference in response to the same questions asked in the different parts.

7.2.1 Recommendations

Fairness of the parking policy

This, as well as previous research shows, parking is a sensitive issue for entrepreneurs, shoppers, and residents. Everyone has an opinion, as parking is a costly matter. A city cannot provide unlimited parking capacity, of high quality, for little or no money. It is simply impossible (Shoup, 1999). To quote Donald Shoup:

"But there is no such thing as a free parking space. Someone must pay for it. If motorists don't, than who does? Initially developers pay for parking when they provide spaces to meet the requirements in zoning ordinances. Because the required parking spaces raise the cost of development, the cost of parking is then translated into higher prices for everything else, and everyone pays for parking indirectly. Residents pay through higher prices for housing, consumers pay through higher prices for goods and services, employers pay through higher office rents."

In the quote above, one can read that Shoup specifies how each of the parties this research is about, indirectly pays for parking, if we consider entrepreneurs employers. The Nieuwe Binnenweg is of course a street in which parking has to be paid for by the various parties, however, the amount they pay is different, and differs within the street. One of the recommendations I would like to make, is raising the price of parking, especially for residents, since residents pay just €9,89 for an entire month[10]. This may make up for administration costs, current land costs, the costs of parking poles, and various other costs made by the city council. But, there is no way this makes up for the cost if issues like: pollution, congestion, accidents, less appeal of public space, etcetera are taken into account (Button, 2006). Shoup continues:

"Where the cost of parking a car is included in higher prices for other goods and services, people cannot choose to pay less for parking by using less of it. Bundling the cost of parking into higher prices for everything else therefore distorts consumer choices toward cars and away from other options." (Shoup, 1999)

What this comes down to, is that one of the basic lessons of economics is violated. One of the first things I learned during my studies was that: costs should be internalized in order to improve social welfare.

To illustrate the distortion of the low parking fee for residents with a parking permit, consider the following case: In newly created apartments above the Jumbo supermarket in the district of Delfshaven, residents of these apartments can buy a parking spot in the garage of the building to park their car. Having a privately owned parking spot in a city is a good thing, as it is always available just for you. However, it costs about €14.000. If a resident considers this as too expensive and he wants to have a parking permit to park on the street for just €9,89 a month, he is denied this permit as the opportunity of parking in his own building is offered.

Of course there are parties that will argue that if residents have to pay more to park their car in the city, the richest people that need a car to go to work will leave the city. People owning cars are supposed to have more purchasing power, and they will prefer to live in the suburbs if parking fees for them will get higher in the city. This argument is not valid as if these people have significantly more purchasing power, it will not be a problem for them to pay a higher fee to park their car. Besides, these people might even enjoy living in a more green and safe city if they pay the real entire cost of parking a car. Measures that make residents pay for the entire cost of parking will especially have an effect on people who do not value having a car as much as the cost of having a car.

Another implication of such a policy change will be that less parking space is needed, so more space becomes available to use as a cycle path. In the Nieuwe Binnenweg, there is only a cycle path in a part of the street in the Centrum district. This cycle path could be extend throughout the entire street, if the street would be rearranged in a way that there would only be parking space on one side of the street.

Changing parking policy drastically will probably lead to a negative reaction of the general public. That is due to the way benefits and costs of parking cars divided among residents of cities. It is more easy to generate opposition to such policy changes than it is to generate support (Howitt 1978).

All in all, I recommend searching for a more fair way of paying for parking. The city will be a more pleasant and safe place to live, if more parking space is set-up as either: green space, cycle path or sidewalk. This has to be done by means of making people pay the real cost of parking in cities.

Awareness

Another recommendation has to do with making people aware of the various options there are of one wants to come by car. I live in the area this research is concerned with, and before I started working on this thesis, I was unaware of the option to for instance park for free the first half hour in the Nieuwe Binnenweg I garage. This can attract many shoppers who come for a short time to quickly do some grocery shopping in the Nieuwe Binnenweg, without having to pay money to park a car. Furthermore, the shopping area has more appeal if there are less cars parked on the sides of the street.

Furthermore, the very existence of the Nieuwe Binnenweg garage I is not known to many people is what I understand from entrepreneurs. The same holds for the Stop & Shop policy in the Nieuwe Binnenweg in the Delfshaven district. This can be used as a tool take market the shopping area, for where else in the city can you come to a shopping area and pay just €0,10 for parking half an hour?

More options to pay

In the parking poles in the Nieuwe Binnenweg one cannot pay with money, contrary to the advice of Platform Detailhandel Nederland, which recommends that more option of paying for parking benefit consumers as people often forget to simply put some credit on their chip card. This has been changed years ago for good reasons like vandalism of parking poles, corruption of controllers, and many others. However, it is not convenient as you always need enough money on your chip card to use the parking poles, foreigners often do not know how to use the parking poles, or do not have a chipcard on their bankcard. So, an answer to this could be 06-parkeren. Especially in a time of smart phones, parking can get more efficient (Markoff 2008). On the website of the city it is already advertised, but it needs to be easier. Another advantages of such an option of paying, is that one only pays the time the car is parked. Estimating how long one will park a car is not needed up front anymore, as one pays only the amount of time the car is parked.

7.2.2 Future research

The area this research was conducted in is an interesting one. Various developments have been realized and many more will follow in the coming years. This means there are plenty of possibilities in this area for future research. This could either focus on parking, on entrepreneurship, or a combination of these two factors, as this research does.

A possibility for future research with a focus on parking could be the Park and Walk policy of the city council. The main idea of this policy is that people visiting the city park their car in one a few enormous new garages located in central places within the city. In this way the city is easily accessible, but parking does not take up too much valuable space. What could be investigated is the effect of the newly opened garage at the Museumpark. As this garage is close to the Nieuwe Binnenweg, entrepreneurs could benefit from a increase in the number of customers. As Platform Detailhandel Nederland found that shopping areas must be easily reached by means of car, preferably within 10 minutes Platform (Detailhandel Nederland 2009), it can also be beneficial to a shopping area if parking spots can be found within a certain number of minutes. If a parking spot cannot be found within a certain number of minutes, potential customers might drive by to the next shopping area, e.g. the Beurstraverse. Specifically the focus of such research could be on how long people are willing to look for a parking spot, and how far they are willing to pay for parking their car. Is there a price per meter people are willing to pay. If one for instance has to walk a kilometer, one might be willing to pay €2,00 per hour, however, if one can park just a few hundred meters away from one's destination in a parking garage located as central as the Museumpark parking garage, the willingness to pay may go up to for instance €3,00. Such knowledge will be valuable to private investors as well as to the city council.

Future research that has more of a focus on entrepreneurship could focus on the number of shops the area can support. As there is quite a high vacancy rate of shops in some parts of the area, perhaps there are actually too many shops for the area. Especially since in the coming years there are many big projects in the region which means a lot of new competition. An example of such a new project is the new shopping boulevard that is created in the Vierhavenstraat that was already mentioned as a threat to the Nieuwe Binnenweg. This will be a boulevard of big shops with hundreds of parking places just a few kilometers away. Even a huge supermarket, AH XL, will be situated here. Another example of a new big project is the creation of the 'Tweede Koopgoot'. Future research could focus on the chances of survival of a retail business located in the Nieuwe Binnenweg area as these big projects are completed. The survival of retail businesses located in the area is especially interesting as there is a really high vacancy rate as according to previous research, there was a vacancy rate of 11% of the shops in the Delfshaven part of the area in 2006 (F_fect and Platform Nieuwe Binnenweg, 2006). Especially compared to an average country wide vacancy rate of 7%, the 11% seems high. In particular what could be investigated is the chance of survival of new shops in the area. Shops could be categorized into the type of business they belong to. An inventory of the types of businesses present in the area could be made and in a longitudinal study it could be reviewed which type of business is likely to go bankrupt, and which of business is likely to survive in this area. With this type of information private investors can decide upon which investment to make in the area in a more informed way. E.g. if it is clear that over a time span of five or ten years, eighteen new hairdressers opened in the street and sixteen hairdressers went bankrupt, than there is probably no market for new ones.

Another option for future research is to analyze the willingness to walk of the various ethnicities that live in the city. As one to the results of this research is that from the respondents who live close to the area, just 4 were by means of car. This is such a low number because one has to pay to park a car in the area, and why use a car if one lives this close to the shopping area anyway? One of the questions in the survey, was about the willingness to walk to a destination. On average, respondents which did come by car declared to be willing to walk just under 700 meters (686 exactly). The 4 respondents which have a postal code which is close or reasonably close to the area, declare to be willing to walk 20, 25, and two times 50 meters. During an interview with one of the entrepreneurs, he suggested that some ethnic minorities use a car for absolutely every trip. No matter how small the distance, they will use their car because it is a symbol of status to them. An option for future research might be to see what the effect is of this behavior on accessibility of a shopping street that lies in an area with a high number of people who belong to an ethnic minority, and if this suggestion, which is interesting, is actually true to start with.

8 References

- Andreu, L., Bigné, E., Chumpitaz, R., Swaen, V. (2006) ‘How does the perceived retail environment influence consumers’ emotional experience? Evidence from two retail settings’, The international Review of Retail, Distribution and Consumer Research, 16(5), pp. 559-578.

- Anselmsson, J. (2006) ‘Sources of customer satisfaction with shopping malls: A comparative study of different customer segments’, The International Review of Retail, Distribution and Consumer Research,16(1), pp. 115-138.

- Bik, M. and Cuneyt, E. (2008), ‘Feitenkaart Bevolkingsmonitor Oktober 2008’, Centrum voor Onderzoek en Statistiek, downloadable at http://www.cos.rotterdam.nl/Rotterdam/Openbaar/Diensten/COS/Publicaties/PDF/08-2785%20Bevolkingsmonitor%203e%20kwartaal%202008.pdf

- Button, K. (2006), The political economy of parking charges in “first” and “second” best worlds’, Transport Policy vol. 13, 2006, pp. 470-478

- CBS, (2009), ‘Recessie ten einde’, downloadable at http://www.cbs.nl/nl-NL/menu/themas/macro-economie/publicaties/dne/economische-groei/archief/2009/2009-23-12-01-ne-e.htm

- CBS, Statline (2010), ‘Oppervlakte, bevolkingsdichtheid en woningdichtheid van de gemeente Rotterdam, 2000 t/m 2009’ downloadable at http://www.cos.rotterdam.nl/smartsite.dws?Extern=1,%201&id=229&goto=2165796&style=2033&substyle=

- CBS, (2010), ‘Omzet detailhandel opnieuw lager’, downloadable at http://www.cbs.nl/NR/rdonlyres/CBA7E234-07AB-403AA10CA4D2AACD356F/0/pb10n018.pdf

- Cityportal Rotterdam (2010), ‘Stop&shop parkeertarief’, downloadable at http://www.rotterdam.nl/Stop_Shop_parkeertarief

- Droogh Trommelen en Partners (2008), ‘Markt kansen Nieuwe Binnenweg dl3’

- F_fect and Platform Nieuwe Binnenweg (2006), ‘Visie Nieuwe Binnenweg 060710’ downloadable at http://www.deelraadinfo.nl/dsresource?objectid=26060&type=org

- Gemeente Rotterdam (2009), ‘Verorderning parkeerregulering en parkeerbelastingen 2010’. Gemeenteblad, 185, 1-7, downloadable at http://www.rotterdam.nl/STZ/Document/BenO/Microsoft%20Word%20%20Gemeenteblad%202009185%20Verordening%20parkeerregulering%20en%20parkeerbelastingen%202010%203-12-09.pdf

- Gemeente Rotterdam (2010), ‘Bouw Museumpark parkeergarage’, downloadable at http://www.rotterdam.nl/museumparkgarage

- Howitt, A.M. (1980), ‘Downtown auto restraint policies’, Journal of Transport Economics and Policy, May 1980

- Hooft, T. and Duren, van A. J. (2007), ‘Parkboulevard, verbindende schakel in werelds Rotterdam, eindrapport’, ECORYS, downloadable at http://www.rotterdam.nl/DSV/Document/Bestemmingsplannen%20in%20procedure/Delfshaven/bijlage5-Eindrapport-Parklane_12juli.pdf

- Kirby, D.A. (2003), ‘Entrepreneurship’, Mc Graw Hill Education, published 2003, Berkshire

- Markoff, J. (2008), ‘Can’t find a parking spot? Check smartphone’, The New York Times, July 12 2008

- Marsden, G. (2006), ‘The evidence base for parking policies – a review’, Transport Policy vol. 13, 2006, pp 447-457

- Mingardo, G. (2009), ‘Parkeren en detailhandel in Rotterdam, Een onderzoek naar het belang van parkeren voor het economisch functioneren van de binnenstad van Rotterdam: de case van de Meent’, Euricur

- Ommeren, van, J., Wentink, D., and Dekkers, J. (2009), ‘The real price of parking policy’, Tinbergen Institute discussion paper, 2009

- Platform Detailhandel Nederland (2009), ‘Nationale parkeertest 2009’, downloadable at http://www.dedetailhandel.nl/images/pdf/PDN_parkeertest_web.pdf

- Shoup, D. (1999), ‘Instead of free parking’, Access 15, 1999

- Stadstoezicht (2010), ‘Tarievenoverzicht’, downloadable at http://www.rotterdam.nl/STZ/Document/BenO/parkeertarieven%202010/Tarievenoverzicht%20Stadstoezicht%202010%20versie%2015%20juli%202010.pdf

- Still, B., Simmonds, D. (2000) ‘Parking restraint policy and urban vitality’, *Transport Reviews,* 20(3), pp. 291-316.

- Sustrans (2003), ‘Traffic restraint and retail viability’, information sheet FF39, downloadable at http://www.sustrans.org.uk/assets/files/Info%20sheets/ff39.pdf

- Waerder van der, P., Borgers, A., Timmermans, H. (1998) ‘The impact of the parking situation in shopping centres on store choice behaviour’, *GeoJourna*l, 45, pp. 309 -315.

- Wijk, van, M. (2009), 'Omzet e-commerce groeit', Centraal Bureau voor de Statistiek, downloadable at http://www.cbs.nl/nlNL/menu/themas/dossiers/ondernemingsklimaat/publicaties/artikelen/archief/2009/2009-12-23-ecommerce-tk35.htmhttp://www.cbs.nl/NR/rdonlyres/CBA7E234-07AB-403A-A10CA4D2AACD356F/0/pb10n018.pdf

Footnotes

[1] Stop & Shop policy. (Cityportal Rotterdam, 2010)

In the part of the Nieuwe Binnenweg in the Delfshaven district there is a policy that makes parking at the Nieuwe Binnenweg relatively cheap. It is called the 'Stop & Shop' policy. The aim is to develop the economy in local shopping areas by means of temporarily lowering the parking tariff in a shopping area. In the part of the Nieuwe Binnenweg in the Delfshaven district one has to pay only €0,10 for the first half hour, and €0,50 for every additional 20 minutes of parking time. The payment is made by means of chipknip at the parking poles in areas that have this policy. This 'Stop-and-Shop' policy is still quite new at the Nieuwe Binnenweg; as it was introduced in the beginning of 2010. According to Frank Belderbos and some of the entrepreneurs, it is not so well known among shoppers yet.

[2] Sample size calculator: http://www.surveysystem.com/sscalc.htm

Confidence level: 95%

Confidence interval: 10

Population: large (too large to matter)

Sample size needed: 96

[3] Representativeness of the quantitative research among shoppers

The fact that these surveys were distributed in July 2010 could have a biasing effect on some of the results that were obtained. For instance that facts that in this period many people are on holiday and that the weather conditions were warm and dry, could have an effect on for instance the mode of transport used by shoppers.

Furthermore, to make the quantitative research as representative as possible, it was minded that the number of respondents in the Delfshaven district of the street and the Centrum district of the street, was about equal. Especially since the shopping area stretches over the length of the entire street, which is over 2 kilometers, it was assumed that not all respondents would visit the entire area. However, it was decided to not split the respondents on the basis of the location the survey was held, as some respondents visit the entire area.

[4] Respondent with electric scooter

The only respondent which used an electric scooter was eliminated from data to construct the table. The respondent that came by means of electric scooter is excluded in tables about the mode of transport chosen by respondents. That is except for the overview of the results of the survey held among public in table 4.1.

[5] Postal codes determined as close or reasonably close to the shopping area: 3014, 3015, 3021, 3022, 3023, 3024, 3025, 3026, 3027.

[6] Statistical relevance of the quantitative research performed among residents of the Nieuwe Binnenweg

Sample size calculator: http://www.surveysystem.com/sscalc.htm

Confidence level: 95%

Confidence interval: 10

Population: large (too large to matter)

Sample size needed: 96

The survey that was distributed among residents was filled out by 47 residents. This number is too low to give a statistically relevant result, however, the information will be interesting and so it is used in this research as it is interesting. 47 Might seem like just a low number of respondents, however, if one keeps in mind that only 100 surveys were distributed, it is a pretty high response rate. In attachment 2 one can see the survey, and from that it might become clear why the response rate is remarkably high. The main reasons for this are probably that it was printed in just one A4 paper, the questions were of a closed form, residents probably feel it is of interest to them because the topic affects them, and last but not least no costs had to be made to respond as a stamped envelope with my address written on it was included. Out of these 100 surveys, 5 were already filled out while distributing them. So, 42 were actually send back. 42 Out of 95 is response rate of 44,2%.

[7] **Table 5.2**: Overview of the results of the survey held among residents of the Nieuwe Binnenweg (only respondents with and a car).

One of the residents had multiple answers on the question about where the car is most often parked. This respondent was counted as someone who parks at a garage in the Nieuwe Binnenweg, as this is the cheapest way to park for residents, so probably the most often used way by this resident with multiple answers.

[8] Statistical relevance of the quantitative research performed among residents of the Nieuwe Binnenweg

Sample size calculator: http://www.surveysystem.com/sscalc.htm

Confidence level: 95%

Confidence interval: 10

Population: large (too large to matter)

Sample size needed: 96

As 99 surveys were filled out during the interviews with the owners and managers of the businesses located in the Nieuwe Binnenweg, the result is statistically relevant.

[9] Representativeness of the qualitative research among shop owners/managers

As the area in which this research is performed can more or less be divided into two parts, one is more attractive and has a higher price of parking, the interviews held among shop owners/managers analyzed separately, as well as combined.

As the area has hardly any shops that belong to a chain of shops, it was quite easy to get to speak to the owner of the shop in most cases. This is partly due to the fact that many shops are owned by people of ethnic minorities which do own the shop as well as manage the shop, entrepreneurs of the 'owner-manager' type (Kirby 2003). If the owner was not available, the person in charge of the shops at that moment was interviewed.

[10] Price of parking in the Nieuwe Binnenweg area. (Gemeente Rotterdam 2009), (Stadstoezicht, 2010)

There are several ways to pay for parking in the Nieuwe Binnenweg area. The most common one for shoppers in the area is paying by means of chipknip at the parking poles. Simply said, this means one can pay with a bankcard and park in a garage or on the side of the road in the Nieuwe Binnenweg or in the area. Tariff varies per area. The overall pattern is that parking is more expensive closer to the Centrum district. Besides that, the part of the Nieuwe Binnenweg in the district of Delfshaven has a policy that allows cars to be parked at the nieuwe Binnenweg for just €0,10 the first half hour.

[11] In similar research performed in the city of Rotterdam it was found that in the area of the Meent, people are willing to walk on average about 700 meters. This calculation was made on the basis of the table below, which was taken from Mingardo, 2009 (tabel 4.1: Waar parkeren de bezoekers en hoeveel zijn ze bereid om te lopen).

Willingness to walk in the Meent area

Wat is de maximale afstand die u bereid bent om te lopen?	Aantal	% van het totaal
0 - 300 m.	6	8.7
300 - 650 m.	28	40.6
650 – 1000 m.	22	31.9
Meer dan 1000 m.	13	18.8

If the average of the first three categories is taken, and the last category is set as 1250 meter average, multiplied with the percentage of people in this category the following average willingness to walk is obtained: 150x0,087 + 475x0,406 + 825x0,319 + 1250x0,188 = 704.1 meter.

This calculation gives a rough estimation of the willingness to walk in the Meent area, as the average is taken from the first three categories, and the last category is estimated.

12 Price of parking in the Delfshaven and Centrum district

Number of minutes parking time for €0,50 Nieuwe Binnenweg Delfshaven district (part 1)	Monday/ Tuesday/ Wednesday/ Thursday	Friday	Saterday	Sunday
morning 09.00 - 12.00h.	20	20	20	0
afternoon 12.00 - 18.00h.	20	20	20	0
evening 18.00 - 23.00h.	0	20 (untill 21.00h)	0	0
night 23.00 - 09.00h.	0	0	0	0

Number of minutes parking time for €0,50 Nieuwe Binnenweg Centrum district (part 2)	Monday/ Tuesday/ Wednesday/ Thursday	Friday	Saterday	Sunday
morning 09.00 - 12.00h.	17	17	17	0
afternoon 12.00 - 18.00h.	13	13	13	17
evening 18.00 - 23.00h.	13	13	17	17
night 23.00 - 09.00h.	0	0	0	0

For residents and entrepreneurs there is a permit system. This implies that a permit can be applied for if a car is registered on the name of someone living in the area, or if a car is registered on the name of someone owning a business in the area. Than a monthly fee has to be paid. The size of the fee varies per applicant as can be seen in the table. The overall pattern is that entrepreneurs pay more to park in the Nieuwe Binneweg area than residents do.

Type of permit	Yearly fee 2010	Monthly fee 2010
Residential	€118,68	€9,89
Business	€356,04	€29,67

13 Residents willingness to walk is obtain in the same way the average willingness to walk of the shoppers of the Meent was calculated. If the average of the first three categories is taken, and the last category is set as 1250 meter average, multiplied with the percentage of people in this category the following average willingness to walk is obtained: 150x0,60 + 475x0,333 + 825x0,0 + 1250x0,067 = 331.9 meter.

Distance willing to walk between home and car	Number of respondents	% of total number of respondents
0 - 300 meters	18	60,0
300 - 650 meters	10	33,3
650 – 1000 meters	0	0,0
Meer dan 1000 meters	2	6,7

Attachment 1

Survey held among people shopping in the Nieuwe Binnenweg

1. Hoeveel keer per *week* bezoekt u dit winkelgebied gemiddeld?
- ☐ Minder dan 1 keer
- ☐ 1 of 3 keer
- ☐ 3 tot 5 keer
- ☐ Bijna dagelijks

2. Met welk vervoersmiddel bent u hier vandaag gekomen?
- ☐ Auto
- ☐ OV
- ☐ Fiets
- ☐ Lopend
- ☐ Anders____

3. Wat is uw postcode? (alleen 4 cijfers, zonder letters)________

4. Kunt u aangeven hoeveel geld u vandaag ongeveer in de omgeving uitgeeft?
- ☐ €0-25
- ☐ €25-100
- ☐ Meer dan €100

5. Nieuwe Binnenweg autovrij/autoluw?
- ☐ Ja
- ☐ Nee

Einde enquête indien niet met de auto

6. Indien met de auto, waar heeft u geparkeerd?
- ☐ Op straat op de Nieuwe Binnenweg
- ☐ Op straat in de omgeving
- ☐ In een garage aan de Nieuwe Binnenweg
- ☐ In een garage in de omgeving
- ☐ Op een P&R parkeerplaats

7. Hoever wilt u maximaal lopen van uw auto naar de winkels?___________meter

Attachment 2

Survey held among residents of the Nieuwe Binnenweg

Geachte bewoner van de Nieuwe Binnenweg,

Mijn naam is Léon van den Bulk en voor mijn afstudeeropdracht ben ik benieuwd naar UW MENING.
Deze enquête is opgesteld zodat u slechts enkele vakjes hoeft aan te kruisen, dus het kost u slecht 1 minuut.

Ik hoop dat u zo vriendelijk zou willen zijn mij te helpen door het geven van uw mening. Ik heb een envelop met postzegel bijgesloten, zodat het u niets kost.

Hartelijk bedankt en vriendelijke groet,

Léon van den Bulk
Pupillenstraat 110a
3023VZ Rotterdam

Enquête parkeren aan de Nieuwe Binnenweg

1. Hoe is uw algehele indruk van het winkelaanbod en de omgeving aan de Nieuwe Binnenweg?

- ☐ Goed
- ☐ Voldoende
- ☐ Matig
- ☐ Slecht

2. Hoe vaak koopt u iets bij een winkel aan de Nieuwe Binnenweg?

- ☐ (Bijna) dagelijks
- ☐ Enkele keren per week
- ☐ (Bijna) nooit

3. Bent u voor een autovrije Nieuwe Binnenweg?

- ☐ Ja
- ☐ Nee
- ☐ Geen mening

Heeft u geen auto? Dan bent u nu klaar met invullen van de Enquête. Bedankt!

4. Hoeveel auto's heeft uw huishouden?

- ☐ 1
- ☐ 2 of meer

5. Hoeveel parkeervergunningen heeft uw huishouden?

- ☐ Geen
- ☐ 1
- ☐ 2 of meer

6. Als u thuis bent, waar heeft u uw auto dan meestal geparkeerd?
☐ Op straat in de Nieuwe Binnenweg
☐ Op straat in de omgeving
☐ In een van de garages aan de Nieuwe Binnenweg
☐ Ergens anders, namelijk____

7. Staat uw auto meestal ook *overdag* hier in de omgeving?
☐ Ja
☐ Nee

8. Wat is de maximale afstand die u bereid bent te lopen van en naar uw auto?
☐ 0-300 meter
☐ 300-650 meter
☐ 650-1000 meter
☐ meer dan 1000 meter

9. Hoeveel zou u maximaal bereid zijn *maandelijks* te betalen om altijd een eigen parkeerplek 'voor de deur' te hebben?
☐ Minder dan €20
☐ €20-€50
☐ €50-€100
☐ €100-€250

Attachment 3

Guide on what to ask shop managers and owners

1. Mijn meeste klanten komen met

☐ Auto

☐ OV

☐ Fiets

☐ Lopend

☐ Anders____

2. Welk percentage van uw klanten komt hier met de auto schat u?

____**%**

3. Klanten die het meest *uitgeven* komen over het algemeen met

☐ Auto

☐ OV

☐ Fiets

☐ Lopend

☐ Anders____

4. Als de Nieuwe Binnenweg auto vrij zou worden dan zal mijn omzet waarschijnlijk

☐ Dalen

☐ Stijgen

5. Mijn klanten vinden het belangrijker dat het winkelgebied hier

☐ Aantrekkelijk is (veilig, brede stoep, terrassen, etc.)

☐ Goed bereikbaar is (veel en goedkope parkeerplaatsen, etc.)

6. Mijn klanten vinden parkeren hier aan die Nieuwe Binnenweg

- ☐ Duur
- ☐ Redelijk geprijsd
- ☐ goedkoop

7. Ben u voor of tegen een autovrij Nieuwe Binnenweg?

- ☐ Voor
- ☐ Tegen
- ☐ Anders

Attachment 4

Parking in Rotterdam

An investigation of the importance of parking for the functioning of the inner city of Rotterdam:

The case of the Nieuwe Binnenweg

Meeting with Frank Belderbos, program manager Revitalization of the Nieuwe Binnenweg

May 25th 2010, Nieuwe Binnenweg 356A

Reason

Parking is a sensitive issue for **residents**, **shoppers**, as well as for **entrepreneurs.** Parking has an influence on the **economy**, **accessibility**, and **attractiveness** of a city. That is exactly why more knowledge is needed about parking policy and the effect it has on making a city attractive for the various parties involved.

Goal of the research

It is key to get an inside on how shoppers experience the shopping area and the price of parking in the area. Of particular interest will be the comparison of the perception of these various groups. Do shoppers for instance think that parking is very expensive, whereas residents mainly think that the area should be made more attractive.

So, this research will focus on three groups:

1: For the **residents**:

*Tariff and general policy of parking

*Attractiveness of the area

*Acceptable walking distance to their destinantion

2: For the **shoppers**:

*Tariff of parking (They think it is expensive, but do they know how much they pay)

*Attractiveness of the area

3: For the **shop owners and shop managers**:

*Revenues (No parking no business?)

*Attractiveness of the area

So, in this research we do focus especially on the *willingness to pay* and on how people *perceive the area*.

The **final goal** of this research will be to get an idea of the **modal split of the shoppers** in the area. It will be very interesting to see whether to mode of transport does predict the amount of spending in the area. We might get an idea on how to influence the modal split by means of for instance pricing of parking.

Method of conducting the research

Quantitative research is done by a survey among shoppers, and a different survey among residents of the Nieuwe Binnenweg. The surveys will be constructed in a way that gives us an idea about their opinion on various matters concerning parking in the area.

Furthermore, *qualitative research* is done by means of interviewing managers and owners of shops located in the Nieuwe Binnenweg.

An additional way in which *qualitative research* is done, is by means of interviewing policy makers.

Questions to Frank Belderbos

* How would you describe the current parking policy for residents as well as for shoppers in the Nieuwe Binnenweg area?

* How does in your opinion parking policy effect the retail business?

* What would be the optimal price of parking in the area these days? And would it be welfare improving to charge residents as well as visitors the same?

* What initiatives are there to discourage people to come by car?

* How did the city come up with the drop in demand of 30% once a parking zone becomes a paid parking zone?

* I have heard about initiatives like ‘stop and shop’, is this really the way to go about in the area?

* What about P&W and P&R policy? What are these exactly and how will they be used in the future?

* Could you tell about parking in the future? 06-parking, smart parking, etc.

* What would make the Nieuwe Binnenweg a so called C-area?

* Do you perhaps have any interesting resources I could use for my thesis? (Europese winkelstraten – Niet bij steen alleen!)

* Do you have any tips, recommendations, or suggestions?

*	Last but not least, I would like to thank you very much for this interview!

Attachment 5

Parking in Rotterdam

An investigation of the importance of parking for the functioning of the inner city of Rotterdam:

The case of the Nieuwe Binnenweg

Meeting with Frank Belderbos, program manager Revitalization of the Nieuwe Binnenweg

August 26th 2010, Nieuwe Binnenweg 356A

Reason

Parking is a sensitive issue for **residents**, **shoppers**, as well as for **entrepreneurs.** Parking has an influence on the **economy**, **accessibility**, and **attractiveness** of a city. That is exactly why more knowledge is needed about parking policy and the effect it has on making a city attractive for the various parties involved.

Goal of the research

It is key to get an inside on how shoppers experience the shopping area and the price of parking in the area. Of particular interest will be the comparison of the perception of these various groups. Do shoppers for instance think that parking is very expensive, whereas residents mainly think that the area should be made more attractive.

So, this research will focus on three groups:

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*Attractiveness of the area

*Acceptable walking distance to their destinantion

2: For the **shoppers**:

*Tariff of parking (They think it is expensive, but do they know how much they pay)

*Attractiveness of the area

3: For the **shop owners and shop managers**:

*Revenues (No parking no business?)

*Attractiveness of the area

So, in this research we do focus especially on the *willingness to pay* and on how people *perceive the area*.

The **final goal** of this research will be to get an idea of the **modal split of the shoppers** in the area. It will be very interesting to see whether to mode of transport does predict the amount of spending in the area. We might get an idea on how to influence the modal split by means of for instance pricing of parking.

Method of conducting the research

Quantitative research is done by a survey among shoppers, and a different survey among residents of the Nieuwe Binnenweg. The surveys will be constructed in a way that gives us an idea about their opinion on various matters concerning parking in the area.

Furthermore, *qualitative research* is done by means of interviewing managers and owners of shops located in the Nieuwe Binnenweg.

An additional way in which *qualitative research* is done, is by means of interviewing policy makers.

Questions to Frank Belderbos

* Now that we have discussed some of the results of this research, what is in your opinion the most **surprising finding**?

* What is going to **change** in the Nieuwe Binnenweg the coming year?

* What will be the **effect** of such changes?

* What is the **general reaction** of entrepreneurs and residents to the plans?

* What about the type of businesses, will this be different in say **five years**. (If the economic downturn is behind us, the area is revitalized, etc.)

* In the end of next year the **shopping boulevard** in the Vierhavenstraat will be finished. This will contain a AH XL, and there will be hundreds of parking places. Some entrepreneurs are already unsatisfied with the competition they face from the Dunya supermarket which was newly opened some time ago. What about competition for entrepreneurs in the Nieuwe Binnenweg?

* I heard some entrepreneurs mention a parking garage under the **Heemraadplein** was considered an option. What about it?

* Will the **Museumpark garage** be beneficial to the shopping area, or will there be no effect of it whatsoever?

***** What about the **parking garages located in the Nieuwe Binnenweg**? Some residents indicated to me that they use garages located in side streets of the Nieuwe Binnenweg, but others also indicated they use some located in the Nieuwe Binnenweg. Which ones are available to them, as I wonder whether the one located in the part of the street in the centre is closed.

Attachment 6

Parking in Rotterdam

An investigation of the importance of parking for the functioning of the inner city of Rotterdam:

The case of the Nieuwe Binnenweg

Interview with Hans Oost, chairman of the entrepreneurship association of the Nieuwe Binnenweg.

July 20th 2010, Nieuwe Binnenweg 357B

Reason

Parking is a sensitive issue for **residents**, **shoppers**, as well as for **entrepreneurs**. Parking has an influence on the **economy**, **accessibility**, and **attractiveness** of a city. That is exactly why more knowledge is needed about parking policy and the effect it has on making a city attractive for the various parties involved.

Goal of the research

It is key to get an inside on how shoppers experience the shopping area and the price of parking in the area. Of particular interest will be the comparison of the perception of these various groups. Do shoppers for instance think that parking is very expensive, whereas residents mainly think that the area should be made more attractive.

So, this research will focus on three groups:

1: For the **residents**:

*Tariff and general policy of parking

*Attractiveness of the area

*Acceptable walking distance to their destinantion

2: For the **shoppers**:

*Tariff of parking (They think it is expensive, but do they know how much they pay)

*Attractiveness of the area

3: For the **shop owners and shop managers**:

*Revenues (No parking no business?)

*Attractiveness of the area

So, in this research we do focus especially on the *willingness to pay* and on how people *perceive the area*.

The **final goal** of this research will be to get an idea of the **modal split of the shoppers** in the area. It will be very interesting to see whether to mode of transport does predict the amount of spending in the area. We might get an idea on how to influence the modal split by means of for instance pricing of parking.

Method of conducting the research

Quantitative research is done by a survey among shoppers, and a different survey among residents of the Nieuwe Binnenweg. The surveys will be constructed in a way that gives us an idea about their opinion on various matters concerning parking in the area.

Furthermore, *qualitative research* is done by means of interviewing managers and owners of shops located in the Nieuwe Binnenweg.

An additional way in which *qualitative research* is done, is by means of interviewing policy makers.

Questions to Hans Oost

* How would you describe the current parking policy for residents as well as for shoppers in the Nieuwe Binnenweg area?

* How does in your opinion parking policy effect the retail business?

* What would be the optimal price of parking in the area these days? And would it be welfare improving to charge residents as well as visitors the same?

* What is your opinion about ‘stop and shop’?

* Is the policy for residents fair?

* What about the garage here at the Nieuwe Binnenweg? Even though parking there is free the first half hour, it is half empty most of the time. What is the story behind that?

* What about P&W and P&R policy? What are these exactly and how will they be used in the future? What concrete measures is the city council taking to implement these policies?

* Could the garage with 1500 parking spots at the Museumpark be any good for the area here of is it simply too far away?

* What initiatives are taken to make the part between the Lage Erfbrug and the ‘s Gravendijkwal more attractive?

* What would be the ideal parking policy in this area if it was up to you?

* Could you tell about parking in the future? 06-parking, smart parking, etc.

* What would make the Nieuwe Binnenweg a so called C-area?

* Will the part of the Nieuwe Binnenweg we are now, look like the part next to the Oude Binnenweg in ten years?

* Personally I feel this area has got a great deal of potential. Think of the Hoboken area, the harbor of Delfshaven, the new apartments around the Lloydpier, the new shopping are near Marconiplein, the creativeness on the Coolhaveneiland etc. I feel the Nieuwe Binnenweg will profit very much from all these developments and it will be a great area to shop and live in a decade. What is your opinion on it?

* Do you perhaps have any interesting resources I could use for my thesis? (report about the changes on the Nieuwe Binnenweg perhaps?)

* Do you have any tips, recommendations, or suggestions?

* Last but not least, I would like to thank you very much for this interview!