

# **Football stadiums and urban development**

*Do they provide more for the city than just the classical 'bread and circuses'? –  
A study into the impact of football stadiums in the Dutch context.*



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A study into the impact of football stadiums in the Dutch context.*

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*Cover photo: Stadium Euroborg, Groningen. Photo taken by author.*

## Summary

This research focuses on football stadiums in the Netherlands, as a particular form of cultural amenity, and specifically their relation with and impact on urban development. In general, in recent years some drastic changes in the context for planning and urban development can be observed in the Netherlands, most notably influenced by the economic downturn.

Nevertheless, particularly over the past roughly two decades cultural amenities have gained increasing attention and importance in the modern, post-industrial and consumption-oriented city, and against a neoliberal background emerged as a central element of cultural planning and policy, and development projects. In a similar light, also increasing attention for and commercialisation of football can be observed, in which increasingly stadiums were also seen as a means of achieving broader urban development objectives. This increased public and private interest, combined with ‘problematic’ old venues, led to a wave of new stadium development projects in the Netherlands; often – to varying extents – also combined with broader development objectives, and involvement of local governments. On the other hand, for cultural amenities an ‘age of austerity’ seems to have arisen, in light of this changing context; and, also for football stadiums, since 2008 their developmental wave came to a halt, and new initiatives have not come off the ground. This research will therefore analyse the impacts of recent stadium developments in the Netherlands, as well as the main underlying processes and factors. This may be valuable in two main ways; as an element of evaluation, perhaps also useful for potentially optimising the post-development impacts, while it could also pose useful insights for future stadium (or in fact a similar large-scale entertainment amenity) projects. In light of the scientific debate on these issues, which has also been sparked by the growing attention for culture and football in particular, can be seen as threefold. Firstly, there seem to be hardly any studies that take a comprehensive approach to urban development, and instead focus on just a single element of impact; secondly, there seem to be little, and no comprehensive or systematic analyses of stadium developments and impacts in the Netherlands; and thirdly, an interesting dimension could be this changing context of urban development and planning (‘age of austerity’). The goal of this research deduced from this, is formulated as follows:

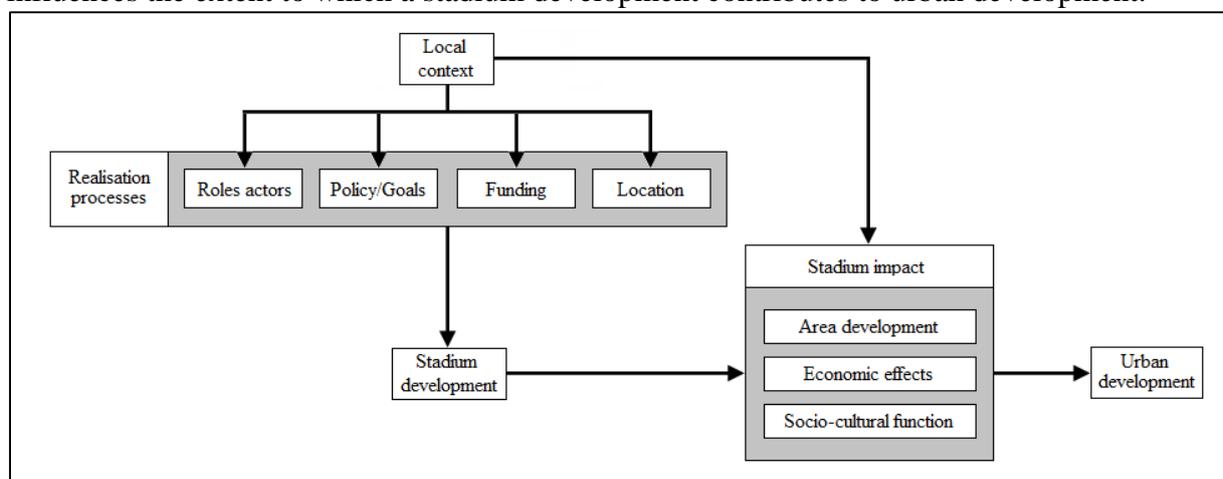
*To contribute to the knowledge regarding the development of football stadia in the Netherlands and what impact these may have on urban development, and what the influence of the local context is on this, by looking into the realisation and decision-making processes (actor involvement, funding and location) and effects of recent Dutch stadium development projects, and to learn from this towards the future.*

Following on that, is the research question of this thesis:

*What is the impact of football stadium developments in the Netherlands on urban development, and what is the influence of the local context on the realisation and decision-making processes (actor involvement, funding and location) and effects of such amenities in a city?*

The theoretical framework constructed to analyse this, is summarised in the conceptual model, presenting the relations between the core concepts derived from existing literature. The ultimate element in this is the concept of urban development, which is understood in broad terms as the overall improvement of the situation of and in a city. Building from a wider framework of the importance of culture and cultural amenities in cities, football stadiums are the central focus of attention, as a particular form of large-scale cultural or entertainment amenity. The core notion behind this research, is that these stadia can produce certain impacts, which subsequently pose a certain form of urban development. According to

the literature, these can be roughly divided into area development, economic effects and socio-cultural functions. A stadium development is in the first place of course defined by its realisation or decision-making processes. These consist of a couple of important elements; first of all, which actors are involved, and to what extent; the specific goals of the actors involved, and particularly the role of government policies; related to this, the funding construction of such a project; and finally the choice of location. These elements all influence the eventual realisation of a stadium, and in that capacity, indirectly also the impacts it may produce. To provide some more theoretical depth to this element of the analysis, theoretical concepts and notions of growth machines, urban regimes, and neoliberal new urban policy are incorporated into this framework. Finally, there is the element of the local context, which consists of various both local and supralocal external factors of influence; these may affect each element of the ‘internal’ realisation processes, and through that indirectly the stadium development and its impacts, but also more directly as more ‘external’ factors directly on the emergence of the stadium impacts. In both ways, the local context poses a factor that influences the extent to which a stadium development contributes to urban development.



The methods used in this research to analyse the issues at hand, consisted of two main elements: a quantitative analysis of neighbourhood statistics, and a qualitative case study. The quantitative analysis used composed data on a neighbourhood (‘buurt’) level, incorporating multiple stadia in multiple observation years. Various ‘stadium impact’ indicators were then regressed (standard GLM) against different ‘stadium area’ variables, i.e. defined by distance buffers, rings and interaction variables around stadium locations created with GIS, together with other ‘controlling’ variables. Main focus of the analysis was a model incorporating a pre-post element, comparing pre-development and post-development stadium areas with non-stadium areas; for which a base model with all selected stadia, and two variations with only recent stadia and a short-term impact period respectively, were carried out. Of course only creating an overall picture ignoring differences between specific cases and contexts, a qualitative case study of the Euroborg in Groningen was carried out. Apart from analysing the impacts, this allowed a more in-depth analysis of the underlying processes, reasons and factors of influence.

The results on stadium impact from this research, combining both analyses, are summarised in the table below:

Dimensions/ Indicators	Interpretation/Conclusion
<i>Area development</i>	
Land use & Other urban functions	Results somewhat ambiguous, but might indicate a limited but certain impact. In the quantitative analysis only reflected in amenity level; the case study reveals certain impact in attraction of other

	functions, some directly (particularly in early stages; e.g. coupled in financial construction), others more indirectly (see factors of influence). Perhaps most evident impact are improvements in infrastructures.
Quality of public space	Both analyses implicate a certain positive impact, comparing pre- and post-development; but as the case revealed, this may still be rather limited, and perhaps not up to a level envisioned or expected; also a highly financial matter; stadium impact seems mainly limited to practical aspects though, i.e. infrastructures.
District formation	Based on only the case study, no clear impact on district formation; perhaps only contributing to the emergence of a more recognised urban district; in general, indicator strongly related to the realisation of other functions or developments.
Development old location	Again only based on the case study, a clear stadium impact can in fact be redevelopment of/on the old location – for example, residential functions.
<i>Economic impact</i>	
Business activity	Ambiguous results; overall quantitative analysis suggests rather slightly negative impact, contrary to the case study; but slightly positive effect directly around recent stadia; confirmed by the Groningen case; stadium coincided with increased business activity, some directly attracted (particularly in (financial) stadium construction), to some additional or indirect factor (e.g. offices in, and around stadium, some non-fixed activity); but attractive force particularly in earlier stages, over time more indirect or flattened out. External, but also internal factors may hinder optimal business climate.
Employment	Looking at the case study, a certain employment effect, but only fraction of what was envisioned; most concrete structural employment effect related to club and stadium itself; other effects related to attraction of other functions, but then in part also redistribution or relocation.
Property values	Contrasting outcomes; while probably unevenly affected by the economic downturn, quantitative findings still seem to indicate negative impact; in the case study though, overall land and property values in the area have increased, an indication of general area development, perhaps indirectly affected by the stadium; however not necessarily increase in individual property values.
<i>Socio-cultural function</i>	
Entertainment function	In Groningen, the new stadium clearly attracts more visitors, and also a broader reflection of the population; no further amusement activities though.
Quality of life	Overall, both indicate a certain positive influence on quality of life; the pre-post development on liveability scores, seems to be reflected in the case study, both as place to visit and live; however, also rather limited, due to different factors no optimal visiting or living environment emerged. The positive social cohesion impact implicated by the statistics, is not so much reflected in the case. On the other hand, the negative impact on safety and security, apart from some inconveniences, in Groningen not so much an issue. Finally, relocation can also improve quality of life on old locations.
Neighbourhood function	No indications for a neighbourhood function; case study revealed this might possibly even decline, when connection with a residential neighbourhood of the old stadium is not reproduced on a new location.
Identification, binding & pride	The quantitative analysis showed a possible impact on social cohesion, but link with stadia debatable; case study showed a certain impact of binding and pride, but for the city as a whole, and in the first place related to the football club.
Image effect & city marketing	Only based on case study, stadium can to some extent be a 'visiting card' for area or city; also as image or branding element in area development (only to some, but overall limited success); on city-wide level, not so much identified, and mainly limited to 'passive' city marketing.

In addition to these impacts, the case study yielded a couple of additional findings, mainly the influence of internal and external factors. The most important internal factors include first of all the involvement of actors, both local government and market actors, forming a particular form of public-private partnership all driven by a particular interest in the project; which is also necessary to arrange the funding construction for the stadium. Furthermore, there seems to be a particularly influential role for the local government; in terms of formulating urban development policy and ambitions, and facilitating and/or stimulating further developments, investments in infrastructures and public space, but also level of support for the stadium development as such, in Groningen eventually even in financial terms (although largely in the form of a loan; nevertheless also adding an element of justification to the broader development objectives). Aside from that, location posed a very important element in the decision-making process, but also in the realisation of stadium impacts. Further internal elements to a project particularly influencing its impact, include both practical and aesthetical stadium and area design, the alignment and coordination of different functions, and further activities taking place in and around the stadium. And while some of those elements have

clearly contributed to the realisation of the stadium and its urban development impacts in Groningen, other aspects explicitly showed room for improvement. The main external factors then, obviously included the economic climate c.q. downturn, clearly affecting financial resources of both public and private actors, and market interest in general. Other factors of influence include city-specific characteristics, such as city size and location, political situation, municipal budget, existing policies and visions, and to a certain extent also location, in terms of availability and locational characteristics. Finally, intrinsically connected to stadium development is the football club, and its characteristics, fan base and performance level, but also the situation around the old stadium (both for the club and the surrounding area). So, what can be derived from this – and more than such general outcomes cannot be given based on this research – is that each specific stadium development project will be different, taking place within its own specific local context; which affects both the realisation processes and impacts a stadium might generate. Therefore, what is crucial, as perhaps the most important conclusion coming from this research in this respect, is to critically consider and examine the internal factors of influence as mentioned above; while the influence of external factors, the ‘context’ formed by both local and supralocal factors, that cannot be influenced itself, should be explicitly taken into account and adapted to in doing so.

## **Foreword**

More than a year and a half since I first started with the actual writing on this very thesis, this is literally the last thing I am writing now before handing in the final version. Before doing so, this foreword provides me with the opportunity to take a moment to look back and say a few final – for the reader, first – words of thanks and reflection.

The process of writing this thesis has been both challenging and interesting for me, but also, almost as often frustrating as it has been satisfying. In the early days, after starting the master ‘Planologie’ in 2014, I have long been struggling with the selection of my topic, actually looking for something more different from my bachelor thesis. However, after other endeavours did not get off the ground, a more pragmatic approach, good talk with my supervisor, but of course also my ever remaining interest in and love for football and its stadiums, steered me in this direction. But also after that was out of the way, it was not always plain sailing from there on. Overall, it has taken me quite some time to get up to this point; and despite the lengthy process, even until the last moments I have had my hands full on it. In that sense, I am afraid that unfortunately whatever time I have, I will ultimately use. Perhaps not so much deliberately, but as I have rather grown to like carrying out such a research project (although I have not always felt that way during the process), some elements of this thesis, whether it is (an aspect of) the theoretical framework, the exact workings of statistical data analyses, or the case study of a specific stadium project, have tempted me to dive deeper into it than perhaps necessary or wise. My biggest pitfall in that respect is probably a rather inefficient but perfectionistic ‘style’ of work, combined with a not so optimal sense of time and planning. Ironically though, I still do not consider this thesis by any means perfect, and there are still elements that I could and would actually like to improve. On the other hand, at a certain moment it is also good to put an end to it – and that end has come now.

Finally, a few words of gratitude are in place here. First of all, of course to my thesis supervisor Peter Ache, for guiding me through the entire process, and sharing his thoughts, comments and feedback along the way. Knowing me a bit, from supervising my bachelor thesis and as ‘employer’ in my capacity of student assistant, he generally gave me the freedom to figure the things out myself, providing some redirections now and then, but, at times when that was needed for me also put up the pressure, and taking a stricter approach on the moments it was necessary.

Regarding the quantitative analysis, I would like to thank Pascal Beckers and Huub Ploegmakers for taking their time to help me with and think along about my – not always clear-cut – conceptual and technical questions on what would actually be the best way for me to carry out such a statistical analysis. Furthermore, special thanks also go to all the interview partners from the case study, for taking their time to speak with me and share their viewpoints and experiences; without their input the case study would not exist.

Outside of the ‘professional’ area, I owe my thanks to all the people closely around me. First of all, my brother, for the hours of chilling (Fifa, large parts of the time, to stick close to the topic), sometimes providing new inspiration but especially the much needed relaxing. The same goes for my parents, friends, football team, housemates; sometimes offering new perspectives, sometimes motivation when needed, but mostly for not having to think about the thesis work for a while.

The only thing that is left for me to say now, is that I hope all the time, effort, thinking, frustration and bright moments that went into it, have at least been worthwhile – for me, and for you to read.

Rowan Kool  
Nijmegen, December 2016

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# **1. Introduction**

This research focuses on football stadiums in the Netherlands, as a particular form of cultural amenity, and specifically their relation with and impact on urban development. In this introduction chapter, the research problem and relevance of this thesis is outlined, both from a societal and scientific point of view, from which subsequently the research goal and questions of this research are deducted.

## **1.1 Research problem – Societal relevance**

### *Changing context for planning*

Demographic decline, economic crisis, future without growth, financial problems and bottlenecks, vacancy rates, degeneration, problematic housing market, et cetera et cetera; the future of the city does not look too bright, it may sometimes seem. Urban problems are not only of this time though, in fact they exist as long as cities do. Something that has been used for centuries to brighten up the urban life, is the provision of culture and cultural facilities. “Governments – local and national – have been interfering in culture for ages. Pharaohs, kings, emperors, dictators, and democratically elected governments have used culture to impress people” (Kloosterman, 2014, p. 2513). In the classical antiquity, under the header of *panem et circenses*, ‘bread and circuses’, was a widespread phenomenon where on a large scale public entertainment was provided. Up until today cultural facilities take an important place in the urban environment: theatres, sports stadia, music venues, cinemas, museums, et cetera still attract huge numbers of people. Especially since the 1990s cultural facilities (re)gained a more prominent position on the political agenda. More and more culture was being seen as an important part of the city, as a goal in itself but also as a means to achieve other goals (Kloosterman, 2014). Against a neoliberal background a clear commercialisation of culture and sport can be observed, leading to the emergence of a genuine economic culture and sports sector (i.a. Evans, 2001; Van Dam, 2000; Miles, 2007; Mulder, 2007). Correspondingly, the central role of the public sector shifted somewhat to a more market interest oriented approach; however culture still remains an important element in public urban planning and policies. In fact, this sparked increasing attention for amenities in urban development strategies, and emergence of a cultural and amenity-led planning – something which seemed to go hand in hand with a shift towards a more neoliberal, project-focused urban governance (i.a. Swyngedouw et al., 2002). Therefore, large investments have been and are continuing to be made in cultural amenities, by both public and private parties. Nevertheless, also in this field the influences of the economic recession are visible. According to Kloosterman (2014) therefore a new era has therefore arrived now, which he identifies as the ‘age of austerity’.

In the ‘climate’ of planning and development in the Netherlands, fairly recently a few major developments can be identified, that rather substantially change the context or circumstances for this. Over the past years an expanding body of research is developing around this; among others, the ‘Raad voor de Leefomgeving en Infrastructuur’ (RLI) has composed two reports devoted to this changing context. Although the nature, scope and impact of these developments are not entirely clear, it can be argued that they may have a significant influence on the practice of spatial development and planning in the Netherlands. A few major shifts or trends can be identified that broadly capture or summarise this changing context. First of all, there is the much discussed economic crisis or downturn, particularly evident from 2008 onwards, which simply stated constrained the financial resources of both public and private actors, entities or persons. Secondly, demographic changes take place, with

overall a decreasing population growth, and in some places even an absolute decline. As a consequence, RLI (2014; 2014b) states that the deeply established idea of unconditional ‘planning for growth’ should be abandoned. This means, in the future more and more we will have to seek for planning and ‘quality’ without growth, both in economic and demographic terms. Of course, this may differ between regions and cities, while it is also unclear how exactly this trend will continue to develop. Along with this, a new shift can be observed in the role of local governments. Against a neoliberal background, in the preceding period municipalities were increasingly taking up a market-oriented, ‘entrepreneurial’ approach in urban development, moving from traditional government structures to a more flexible, network-based form of urban governance; which led to a particular focus on (large-scale) urban development projects, in favour of general plans and policies (i.a. Swyngedouw, Moulaert & Rodriguez, 2002). However, from the classical ‘blueprint’, comprehensive or at least active government planning now there seems to be a shift towards a more ‘spontaneous’ planning; or in other words, from a developmental to an invitational model of spatial planning. The public sector adopts a more cautious or modest role, and municipalities hesitantly but increasingly seem to move away from their (beloved) active land policy to a more facilitating role. And while this creates greater scope for private actors, both market parties and private individuals, they also are dealing with decreased financial resources. That means, both sides are less able and willing to invest, and take risks, while margins for success (that is, profitability) of development projects seems generally decreased; crucial elements in the ‘old’ models of development that had become common over the past decades. Therefore, more and more the tendency in urban development seems to move towards less integral large-scale area developments, and increasing emphasis on ‘organic’ or ‘incremental’ forms of area development. Concepts such as self-organisation, collective private commissioning and other private development initiatives, often of a smaller scale, seem to gain increasing attention (PBL & Urhahn Urban Design, 2012; Van der Krabben, Lenferink, Martens, Portier & Van der Stoep, 2013; PBL, 2014).

Besides this, there may be consequences related to the location of development. As the RLI (2014a; 2014b) notes, less emphasis should be placed on expansion locations and greenfield development, and more on ‘using the existing city’. For a long time development on greenfield locations often posed the most easy and practical option, due to the much lower costs and ‘value leap’ that could be made here; which formed a significant source of income for both developers and municipalities, and in that respect in fact the underlying ‘business model’ for most development projects. The question now is however, to what extent such greenfield developments will still be desirable, and/or even viable. Locations within the city, and especially the inner city, do also offer some advantages, such as accessibility for public transport and slow traffic, ‘centre’ function with proximity of other functions and facilities and agglomeration effects. On the other hand, the coordination with more other urban functions has to be taken into account here, and most notably, projects are generally less profitable due to fragmented land ownership, higher costs and the lack of a value leap (Van der Krabben et al., 2013). Furthermore, actual downtown areas have a few challenges on their own, leaving questions regarding their future functions and attractiveness. So on the one hand these face certain problems and challenges, on the other hand they gain increasing attention with the shift in focus to the existing city, and for example, through concepts such as transit oriented development (i.a. Van der Krabben et al, 2013; PBL, 2014b; RLI, 2014).

### *Cultural amenities*

Coming back to cultural amenities, some developments over the past years can be observed. For example, probably not coincidentally it turns out that since 2008 projects for new football stadia do not come off the ground anymore, and that recently developed stadia are struggling

to fulfill their grand ambitions of additional urban development objectives (Kool, 2013). Furthermore, since the introduction of the economic downturn attendances at stadia in general slightly declined, but also theatres and music venues faced declining visitor numbers (Bockma, 2011; VNPF, 2011; Voetbal International, 2014). On the other hand, there is clearly still a great demand for large-scale cultural amenities; in the form of demand for ‘amusement’, but (and therefore) also on the supply side, i.e. redeveloping or realising new facilities. The longer-term trend towards a consumption economy and consumerist city, and increasing demand for urban amenities, seems to continue regardless (CPB, 2010). Despite the influence of the economic crisis, cultural or entertainment amenities seem to remain large ‘crowd pulling’ functions, heavily invested in through (re)development initiatives, and important elements in public policies and planning. Recently, visitor numbers of theatres and music venues seemed to stabilise again, museums even find their visitor numbers rising, while cinema visits have grown steadily all along, perhaps also due to being a relatively cheap option in the cultural palette (i.a. Ministerie van Onderwijs, Cultuur en Wetenschap, 2014; VNPF, 2014). Furthermore, many re- and new developments in the sector have taken place over the past years. Between 2005 and 2010 800 million euro was invested in music venues, with the latest additions of Doornroosje in Nijmegen and TivoliVredenburg in Utrecht not even included (VNPF, 2010); from 2008 till 2014 another 700 million euros were invested in (re)development of theatres (Van Lent & Kammer, 2014); while also a series of new megacinemas can be identified, e.g. in Tilburg, Eindhoven, Arnhem, and still planned in Nijmegen, Utrecht and Zwolle. Moving back to stadia, particularly since the 1990s the Netherlands have seen a ‘wave’ of new stadium developments; but as said this came to something of a standstill since 2008 (Kool, 2013). However, in short, despite having a clear-cut and often severe impact, the economic crisis has clearly not shut down the ‘entertainment’ functions of and in the city.

Nevertheless, this changing context poses some relevant and interesting questions for cultural amenities towards the future. In general, the developments described could have major implications and complications for the development, location and function of cultural facilities in cities. Kloosterman (2014) concludes that a phase has arrived in which the prospects for cultural planning have decreased dramatically, rightfully asking the question: what role there might still be for cultural facilities in this ‘age of austerity’? First of all, an important issue is how the financing of such projects is going to be arranged. To what extent will the public sector (i.e. municipalities) still play a part here, like it had become common in the past? And when this is desirable, required and possible in terms of resources, how will this role look like? The flip side of the coin is then of course the role for private actors, and thereby the consequences this may have for the realisation and results of such projects. How and to what extent can large-scale cultural facilities still offer opportunities for broader urban development objectives, compared to before; or should perhaps the primary focus be to just facilitate private actors in constructing the respective building or development project? It should be clear however that large-scale cultural amenities cannot be realised with only concepts as incremental area development, self-organisation and bottom-up initiatives. According to Kloosterman (2014), at least ‘mainstream’ large-scale amenities will remain profitable, and can therefore be left to the market to arrange or realise. However, it might be questionable to what extent this assumption actually holds in all cases; for example, looking into the – rather specific – case of football stadiums, this does not really seem to be the case. So, if this ‘age of austerity’ for both the public and private sector continues to persist, what role will there be to play for large-scale cultural amenities in cities in the future, and to what extent and how is realisation of such facilities viable? And, what would then be the implications of this for their broader impacts on the city?

As for the location aspect, certain types of (large-scale) cultural facilities clearly benefit from – and are mostly located on – more central locations, such as theatres, museums, and to a lesser extent cinemas and music venues. On the other hand, sports stadia and particularly football stadiums, which are the focus of this research, are often considered not to fit in well on such locations. Therefore, they are often found on somewhat more remote locations, while in the Netherlands but also abroad over the past decades stadiums have generally been moved away from old (inner) city neighbourhoods to locations more on the edge of cities, often among large transport corridors (Van Dam, 2000; Mulder, 2007). Generally, such large-scale amenities, aimed at a wide audience, that require large space and good car accessibility, are nowadays often located somewhat isolated outside of the (inner) city (Kloosterman, 2014). However, as found earlier the focus in urban development is shifting more towards the existing city, away from large-scale greenfield developments. The question is then, to what extent issues and considerations of viability, profitability, market interest, urban development policy, positive and negative stadium impacts, relate to each other, with respect to the realisation of such amenities. And while for some amenities inner cities may actually offer distinct opportunities, looking at the recent (transit oriented) amenity-led development projects around the train stations in Nijmegen, Utrecht and Arnhem, for other large-scale amenities this seems less likely.

### *Football stadiums*

This research focuses on stadiums as an example of large-scale cultural facilities. In a certain way stadia are a rather unique or peculiar form of cultural amenity; on the one hand, quite often they are not really regarded as such, or named under the header of cultural facilities, but on the other hand they often form in fact one of the largest public entertainment facilities in cities in terms of visitors. Or as John Bale (1993b, p. 9) already put it, “spectator sports are central features of modern urban society and it is the stadium which is the prime twentieth-century container of the urban crowd”; and “it is in the football stadium, more, I would argue, than in other sports grounds, that the largest crowds are most often found in the modern city”. With football probably being the number one national sport this diagnosis certainly applies to the Netherlands. In this contradiction, lies also an element of the relevance of looking into stadia specifically; because they are in a sense different or ‘controversial’ cultural amenities, that on the other hand pose one of the largest entertainment functions of a city, it might be interesting to see what such large-scale, ‘mainstream’ facilities could mean for a city in a broader perspective, and to what extent this is generalisable for other cultural amenities, or is unique particularly to football stadiums.

In light of the foregoing, football stadiums have seen a major increase in attention in the past two and a half decades in the Netherlands. Especially since the 1990s “professional football (and professional sports in general) has become a booming business and an increasingly marketable commodity; all over Europe, also in the Netherlands” (Van Dam, 2000, p. 133). With the commercialisation of sports football evolved into a consumption good, an economic culture or entertainment sector in its own right (Bale, 1993a; 1993b; Mulder, 2007). Not coincidentally, around this period a ‘wave’ of new stadium developments came on stream. Since 2000, medium-sized stadia (at least 10.000 seats) have been built in Alkmaar, The Hague, Groningen, Zwolle and Kerkrade, and in the five preceding years in Sittard, Enschede, Arnhem, Amsterdam and Breda (Voetbal International, 2014). Already from the 1980s onwards, and in part also due to this renewed interest, it became clear that many stadiums were outdated; increasingly derelict, unsafe, limited in capacity, facilities and comfort, and also a nuisance causing pressure on the urban environment – often inner city neighbourhoods. Football and the stadiums were increasingly regarded as urban problems, whereby “the issues of form, function and location of football stadiums were increasingly

questioned in relation to the problems that these stadiums generated” (Van Dam, 2000, p. 137). The stadia were considered outdated in both economic and physical terms, which poses adverse effects for the club but also for the urban environment (Siegfried & Zimbalist, 2000). After a long period of neglect this also sparked renewed attention from urban policymakers in football stadia (Van Dam, 2000). This renewed interest from both the public, private sector (i.e. businesses and sponsors) and local administrators and politicians put increasing demands and requirements on the football stadium, which eventually culminated in the aforescribed ‘wave’ of new stadium (re)developments. Since “not only the form (interior and exterior) of the football stadium came under scrutiny, but also the location of the stadium became a subject of discussion in the 1980s” (Idem, p. 139), often a new stadium, on the edge of the city, came forward as the preferred option. Where municipalities initially started to interfere to address the increasing problems the stadia caused on their urban environment, subsequently and sparked by the renewed momentum of football and its stadiums, and the fact that from a business perspective a stadium is a rather inefficient and uneconomic facility, “to an increasing degree it (was) recognised that a football stadium can have more functions than were traditionally ascribed to it, from a business-economic (...) as well as from a less tangible symbolic and prestige perspective (the stadium as an urban landmark, the club as a source of local or regional civic pride” (Idem, p. 142). Not only for the clubs the new stadiums would offer new and expanded possibilities or potential, they also increasingly sparked market interest, and local governments now also increasingly recognised their potential wider value for the city, and started incorporating the new stadiums in broader urban development and city marketing objectives and policies. Probably not coincidentally against the earlier described background of neoliberal views on urban development and the new urban policy, in which large scale development projects became a central feature of urban development policy (Swyngedouw et al., 2002). The formerly rather inefficient, single-purposed buildings were replaced by concepts of multifunctionality, with grand ideas for additional functions and developments in but also around the new stadium (Thornley, 2002; Mulder, 2007). In some cases increasing attention to design and location of the stadium was given to create ‘urban landmarks’ for the city. In this capacity, the sources of nuisance and urban problems increasingly became “since the late twentieth century, against a background of worldwide interurban competition, (...) location-supporting, urban representative buildings and (...) driving forces for urban development” (Frank & Steets, 2010, p. 5). These developments were further reinforced by clubs fearing to fall behind their competition, leading them to also pursue new accommodations (Thornley, 2002). In the Netherlands, this started with the on-site redevelopment of the ‘Galgenwaard’ in Utrecht, where for the first time a stadium was combined with office buildings. The largest example has been without a doubt the Amsterdam ArenA, which was incorporated in a major and ambitious area development; while also the GelreDome in Arnhem is a prime example of multifunctional stadium design (Van Dam, 2000; Mulder, 2007).

Within this very aspect, lies in fact the core notion behind this research; the relation between a football stadium and urban development. So, besides the classical ‘bread and games’ function for the city, does it also work beyond that? It seems however, both in practice and in theory, this is a notion almost as often disputed as it is expressed. Nevertheless, undoubtedly it is something that gained increasing attention and implementation over the past period. Those recent stadium development projects, have often been financed by a combination of club, (local) governments and market parties, with funding often supplemented through additional commercial developments and redevelopment of the old location. The core underlying rationale of this is that stadia in itself are highly uneconomic developments (Van Dam, 2000). So even though this in fact concerns the accommodation for a private actor (the football club), and the envisioned impact or value for the city may

sometimes be disputed, doubted or turn out limited, Dutch municipalities often seem to contribute to a lesser or greater extent to such developments. In some cases the stadium may be largely state-financed, either directly or through a loan construction, where the club then rents the stadium from the municipality, in other cases there is only a partial financial contribution from the municipality, to the stadium or surrounding developments, while in a few cases its role is only limited to legal and planning support, where the club and external financiers arranged the funding (Van Dam, 2000; Kool, 2013). Such involvement, then also adds a certain element of justification to (the assessment of) the realisation of broader impacts of such developments for the city. Nevertheless, the actual impact of stadiums has not often, or in fact at all been systematically ‘measured’ or assessed in the Netherlands, neither in a policy nor a scientific context. This while as described, increasingly rather ambitious additional objectives are being attached to such projects; and, although to a varying extent, this often also posed an element of justification for public involvement or even investments, directly or indirectly. So, have these stadia been able to live up to their expectations, or to what extent? So, such an assessment of stadium impacts is what this research primarily will aim to do. Particularly now also the most recent Dutch stadia are in place for a number of years, this seems a rather appropriate moment to do so. Such an analysis could be valuable in two main ways; as an element of evaluation, in which it may also be useful for potentially optimising the realisation of post-development impacts, while it could also pose useful insights for future stadium (or in fact a similar large-scale entertainment amenity) projects.

Following on the latter aspect, as discussed the last new stadium that was realised, already stems from 2008 (Zwolle). Coincidentally or not, probably not entirely, with the economic downturn this development came to a halt. Whereas large-scale cultural amenities in general also suffered the consequences of the recession, these seem to continue to play a role in the development market, while stadium developments on the other hand appear to ‘struggle’ a bit more. And while of course the wave of new developments has reduced the number of clubs potentially seeking a new accommodation, there have still been clubs with – more or less concrete – ambitions for a new stadium. More recently only the football stadium of Heracles Almelo has been ‘renewed’ (‘vernieuwbouw’) on the same location, and in Heerenveen the ice skating stadium Thialf has been redeveloped. However, the fate of most other plans that have come to the fore the past years have been muddling through and so far failed to materialise. At the time of finishing this thesis, end of 2016, plans for a new stadium for Feyenoord in Rotterdam – again – slowly seem to concretise, under the header of ‘Feyenoord City’; plans for a combination of stadium and large-scale urban area development of an unprecedented scale in the Netherlands. And while this is in any case not about to happen in the next few years, it could indicate there is still a future for stadium realisation and stadium-led urban development in the Netherlands. However, especially the funding of stadium projects seems to pose an increasing – and so far insurmountable – stumbling block for new projects. As found a stadium building in itself is not a profitable development, such often inefficiently used large structures cost more than they yield. Football clubs do not have the required financial resources for this, and due to the economic climate market interest in additional developments around a new stadium project (which could then be used as ‘cost carriers’) generally seems to have generally declined in the past years. And while in earlier projects municipalities have stepped in to varying degrees, they also have to deal with cuts in resources. And as the ‘glory days’ of public land development seem to be over, also municipalities seem to adopt a more ‘wait-and-see’ attitude. So in this light the question then arises, could such facilities still be realised in this ‘age of austerity’? And which coalitions of actors and combinations with other developments could be viable or fruitful with regard to this realisation? And, to what extent can stadiums still function as the drivers for urban development that they have at least been perceived to be for the past twenty or so years?

As found, also looking at location stadia are a rather odd sort of amenity. In contrast to most cultural facilities, the past decades they have moved to and can nowadays most often be found on relatively remote locations on the edge of the city. Main arguments pose the good (car) accessibility, and limited disruptive effects on other urban functions, sometimes also related to issues of safety and security. Football stadiums in general thus do not seem to fit very well into the most 'urban' areas of cities. On the other hand, on a too 'remote' location additional developments around the stadium may probably be less fruitful or likely to live up to its billings, as recent cases in the Netherlands have shown (Kool, 2013). Furthermore, large-scale greenfield developments seemed to become less ordinary practice in recent urban development. So the question arises, to what extent do we want to embed such a facility in a broader urban context or development; do we want to maximise their potential in terms of urban development and integration in the urban landscape, or due to their specific characteristics simply be realised on an accessible and more distant location? Can they have a distinctive urban function similar to many other entertainment amenities; as something that despite their nuisances and relative inefficiency, may contribute to a certain urban development, attract large numbers of visitors and have a certain iconic function? Nevertheless, in any case an interesting question is what the role of location is within the development process of a stadium development, and the effect of the relative location of a stadium within a city on its impacts on urban development.

## 1.2 Literature study – Scientific relevance

This research focuses on football stadiums as the concrete outings of culture and cultural amenities within the urban landscape. Culture is a very broad and therefore somewhat vague concept, making it difficult if not impossible to define. Culture in relation to cities has been extensively and in numerous different ways discussed in the existing literature. A first and still rather broad divide has been made by Miles, Hall & Borden (2004) and Miles (2007), into culture as a way of life, thinking and acting of certain (groups of) people on the one hand, and culture as 'the arts' on the other. This research will clearly follow the path of the latter. In general, while it could be argued that culture and cultural amenities have always had an important place within cities, particularly in the post-industrial era there seems to be a renewed and increasing attention for the provision of culture in the city, also in the scientific literature. This became particularly evident in the past few decades, where authors even speak of a 'cultural turn' since the 1990s (Mercer, 2006; Young, 2008; Kloosterman, 2014). Already from the second half of the 1970s, provision of culture moved from a goal in itself increasingly towards a means of achieving other goals, such as stimulating the local economy and city marketing purposes – particularly against the background of an emerging neoliberalism. In that light, even a cultural (and sports) economy started to emerge (i.a. Van Dam, 2000; Evans, 2000; Miles, 2007). Clark (2004) in this respect even strikingly speaks of the city as 'entertainment machine', an analogy to the 'urban growth machine'. These developments thus sparked an increasing attention in the literature for the broader impact of cultural amenities within the urban landscape, and for urban (economic) growth. More recently, this increasingly focused on concepts of the creative city or class, and the important role of culture and cultural facilities in the attraction of human capital, among others by Charles Landry and Richard Florida (Evans, 2009; Florida, 2002; 2005; Franklin, 2010; Landry, 2000; 2006). In this light, cultural amenities were considered important location factors for an 'attractive city' (Ahlfeldt & Maennig, 2010; Marlet, 2009). In the past few years, however, a new phase has emerged, dubbed as an 'age of austerity' which drastically changes the potential scope of cultural amenities and planning, and in which it is not yet clear

– and investigated – how and to what extent this will affect the provision of culture in the city (Kloosterman, 2014).

Nevertheless, what follows from this is that the concrete ‘localisations’ of culture, cultural amenities, are an important object of research. Regarding the concept of urban amenities, this then concerns the ‘constructed’ amenities, in contrast with ‘natural’ amenities (Clark, 2004). Constructed cultural amenities can then still be divided into fixed, localised amenities, or temporal events (Griffiths, 1995). And while in line of the latter there seems to be an increasing attention for particularly large-scale cultural or sports events (e.g. Olympic Games, World Championships), and their relation with and function for cities (i.a. Richards & Palmer, 2010), this is on the other hand also often criticised; and the focus here will be specifically on the constructed, localised cultural amenities. Kloosterman seems to adopt a similar approach, and defines those cultural amenities as “the set of institutions (public and private) which enable the “local” consumption or provision of services with a high semiotic or aesthetic value such as museums, galleries, zoos, theatres, festivals and sport venues” (2014, p. 2512). With a common denominator in a certain ‘entertainment’ element, also in other literature a wide variety of such facilities is understood, from musea to theatres, and cinemas to music venues, but also sports stadia are mentioned throughout (i.a. Evans, 2001; Clark, 2004; Marlet, 2009; Van Aalst, 1997). However, as this still leaves a rather broad spectrum, that has not been uniformly conceptualised, there is a “growing demand for an informed framework for planning arts and cultural facilities has emanated from both local and regional government as well as cultural sectors” (Evans & Foord, 2008, p. 65). An interesting step towards this has been taken by Kloosterman (2014), constructing a typology based on two axes; the supply side characteristic of scale (large versus small scale), and demand side characteristic of the potential market (mainstream versus niche oriented). This creates four ‘standard’ types of cultural amenities, although in reality there is of course more a continuum rather than strictly defined boundaries; but each of those then “has its own socio-economic and spatial logic and, accordingly, its own specific potential impact on the local economy in terms of quality of place. In addition, each ideal-typical cultural amenity can also be related to different configurations of potential sources of income or funding” (Kloosterman, 2014, p. 2515). According to Kloosterman, particularly the large-scale niche-oriented amenities are important in the context of urban development and planning; “typically have more difficulties in generating their own income as they are dependent on larger catchment areas than mainstream-oriented amenities, but they may, on the basis of their more or less unique offerings, contribute to the quality of place. They are already very much part of cultural planning strategies and given their potential for positive externalities this makes sense even in age of austerity” (Idem, p. 2523). Those seem to be then also the main focus of the literature looking into culture and cultural amenities in relation to the ‘creative class’, serving as location factors in the attraction of human capital (i.a. Landry, 2000; 2006; Florida, 2002; 2005; Evans, 2009; Franklin, 2010; Kloosterman, 2014). Also small-scale amenities might play a role in this, but should primarily be left to market expertise rather than state planning; small-scale mainstream amenities, particularly in current times, will probably often move along the axis of either scale or orientation to survive. On the other hand, large-scale ‘mainstream’ amenities, Kloosterman argues “can be left to themselves in terms of funding as they are able to generate their own incomes and generally do not generate much positive externalities in terms of boosting the quality of place (...)” (2014, p. 2523).

Looking deeper into both dimensions, firstly it could be argued based on the literature as well as common sense that particularly large-scale amenities will have a relatively more considerable, or at least tangible impact on cities, simply due to the larger numbers of people they attract. On the other hand, this might also mean that the realisation of such amenities particularly in the ‘age of austerity’ poses bigger challenges, in terms of the roles for public

and private parties, funding, but also location and their broader function or impact. Regarding the other dimension, Kloosterman (2014) argued that particularly the niche amenities offer an added value for an urban environment, and should therefore be mainly the target for cultural urban planning. Contrary to those amenities, the large-scale mainstream facilities seem generally rather often located on more out of town locations; and according to Kloosterman “this relative spatial isolation makes it, on the one hand, much easier to internalise the spill-over effects of spending by visitors, but, on the other hand, diminishes the impact on the city itself. For this reason, and because mainstream offerings do not add much distinction, the quality of place, then, is not much affected by these amenities” (Idem, p. 2521). In that capacity, these should generally be viable to be realised, exploited and managed privately and commercially (i.e. as profitable undertakings), that would not require government support other than legal and planning support and necessary infrastructures. However, this might be somewhat bluntly put. First of all, this distinction between niche and mainstream is often not that clear-cut, as Kloosterman himself argues as well. While for example musea may generally qualify as ‘niche’, but to what extent are theatres, music venues or even sports stadia a form of mainstream culture, or aimed at a large but particular, ‘niche’ audience? This then also blurs the lines as to who should realise and fund such amenities. Furthermore, as seen before also the more mainstream oriented amenities have increasingly been and still are linked to a broader impact for their respective urban environments, in practice but also in academic literature; and in that respect have also been subject to large private but also public investments, and urban development planning initiatives. Therefore, it seems somewhat too simplistic and unfounded to solely focus on niche cultural amenities, perhaps a consequence of a certain preference for ‘higher’ forms of culture and entertainment, and largely ignore other large-scale amenities. And even though their mainstream activity and perhaps larger capacity of internalising spill-overs, also in these sectors the economic downturn and time of austerity poses cuts in budgets and investment potentials. For example looking at the case of football stadia, albeit a rather specific category, even though often also criticised and disputed, even before this period such developments have often received financial support from local governments, in light of their perceived importance for the city, both in the Netherlands and elsewhere (i.a. Van Dam, 2000; Jones, 2002; Baade & Matheson, 2011; Kool, 2013). So, while Kloosterman offers an interesting framework for cultural amenities, it also raises a few questions. Particularly, to what extent a purely private, commercial development of at least those facilities, but perhaps also other large-scale mainstream amenities, would be realistic or viable; but on the other hand, more in line with Kloosterman’s notions of ‘austerity’, also to what extent these previously used models for development may still apply.

Nevertheless, and therefore, this research will particularly focus on such large-scale mainstream-oriented amenities, and more specifically, the case of football stadia. Football stadiums are in a sense a rather particular or peculiar form of cultural amenity; as observed on the one hand they may pose one of the largest entertainment provisions in a city, in terms of visitors, but on the other hand they seem not very often considered as such in the existing literature on cultural amenities and urban development, or placed within such a framework. However, given their large ‘amusement’ function for a city they could well be considered as a prime example of large-scale, mainstream-oriented cultural amenities. Perhaps particularly due to their ‘uncommon’ characteristics within such a framework, they might be an interesting case to look into from such a perspective. Within the framework of Kloosterman (2014), what would be the scope of football stadia as a form of large-scale mainstream amenity, particularly in light of the changing context outlined above – and might that perhaps implicate for or say about other large-scale cultural amenities? As discussed in the previous section, also sports and football have become an increasingly marketable commodity, against

the background of a post-industrial and consumerist society in which increasing importance is attached to provision of culture and entertainment in a city. This commercialisation of sports led to the emergence of football as a full-fledged entertainment industry. The increased interest in football of both the general public and private market parties, also sparked a growing attention for football stadium (re)developments, in which, as a consequence, “to an increasing degree it (was) recognised that a football stadium can have more functions than were traditionally ascribed to it, from a business-economic (...) as well as from a less tangible symbolic and prestige perspective (the stadium as an urban landmark, the club as a source of local or regional civic pride” (Van Dam, 2000, p. 142). Along with this, and according to Van Dam after a long period of ‘academic neglect’, also in the literature more attention became devoted to football stadiums in relation to a broader urban development; particularly since the 1990s onwards, a substantial body of research has formed around this issue.

Looking at the existing literature, and a few attempts to categorise this, among others by Corwin (2011), it seems stadium impacts (studies) can roughly be classified in three categories: economic effects, area development and more socio-cultural impacts. And while findings seem to be far from unanimous, and for most aspects and dimensions there seems to be some form of critique, dispute or doubt, the overall notion remains that stadia might have certain broader impacts on urban development, in a variety of ways. The economic effects are related to the notion of economic growth or spin-offs as a result of a stadium, through the increase of economic activity, the attraction of businesses and visitors, but also employment and tax returns for the municipality. However, as Mason (2012) also concludes, in general most studies seem to find only limited or no evidence of really significant economic benefits (i.a. Ahlfeldt & Maennig, 2010; Baade & Matheson, 2011; Chapin, 2004; Coates & Humphreys, 1999; 2003; Corwin, 2011; Harger, Humphreys & Ross, 2015; Jones, 2002; Propher, 2012; Siegfried & Zimbalist, 2000). Finally, few more recent studies have looked into the effects on property values, some of which by carrying out statistical analyses such as hedonic price models; to somewhat mixed and ambiguous or indecisive results, but some seem to find a certain limited positive impact in this respect (i.a. Ahlfeldt & Kavetsos, 2014; Ahlfeldt & Maennig, 2009, 2010, 2012; Feng & Humphreys, 2012; Dehring, Depken & Ward, 2007; Huang & Humphreys, 2012; Humphreys & Nowak, 2015; Tu, 2005). However, as Jones already concluded, a purely economic justification of stadium developments does not seem sustainable (2002b, p. 168). In general, the understanding seems to be that at least tangible impacts, are more taking place at a lower scale in a rather concentrated area, and less so for a city as a whole (Barghchi, Omar & Aman, 2009; Corwin, 2011). In that light, increasingly the focus has moved towards area development, and stadia as driver, catalyst or ‘flywheel’ for the renewal or (re)development of an urban district. The idea is that a stadium development might breathe new life into a certain – often somewhat derelict – area, directly or indirectly attracting people and businesses, and with that ‘physical’ (re)developments through investments in businesses establishments, other functions and facilities, urban design and spatial quality, as well as infrastructural improvements (i.a. Barghchi et al., 2009; Berry, Carson & Smyth, 2007; Chapin, 2004; Corwin, 2011; see Robertson, 1995). Findings here are also not unanimous, but might indicate a certain ‘mixed but not guaranteed success’. Such an impact might work in two ways: an area development based on a stadium development, or through incorporating a stadium in a broader development and structure of a certain area; in any case, for such an impact it seems crucial that the stadium is incorporated into a broader development strategy (i.a. Ahlfeldt & Maennig, 2010; Chapin, 2004; Siegfried & Zimbalist, 2000; Thornley, 2002). Finally, some research focuses more on less tangible, socio-cultural impacts of stadia. First of all, the classical ‘bread and games’ function within the city is also widely acknowledged for football stadia (i.a. Bale, 1993; Clark, 2004; Eisinger, 2000; Frank & Steets, 2010); in certain cases this might then also have an attractive force on tourism (i.a.

Ahlfeldt & Maennig, 2010; Corwin, 2011; Thornley, 2002). Furthermore, stadiums and its events (i.e. the football club and matches) are considered to have a particular iconic or symbolic value for a city and its culture, perceived to evoke feelings such as civic pride, identification and binding among the population, as well as increase social cohesion, general satisfaction and quality of life (i.a. Ahlfeldt & Maennig, 2010; Bale, 1993; Berry et al., 2007; Thornley, 2002; Van Dam, 2000). Such notions of culture and identification could also result in a particular neighbourhood function, but only if specifically incorporated in a neighbourhood strategy – which is not always the case (Jones, 2001; Lee, 2002; Thornley, 2002). Finally, such an image effect might be deployed in city marketing purposes (see a.o. Thornley, 2002; Van Aalst, 1997; Van Dam, 2000), although for a city as a whole that might be rather limited (Siegfried & Zimbalist, 2000).

The relevance of this research, or added value within this debate, can be seen as threefold. First, there seem to be hardly any studies that take a comprehensive approach to urban development, and instead focus on just a single element of impact. As found, there is quite a lot of research done on the impacts of stadiums, but in almost all cases looking only into one aspect or effect, such as property values, economic spin-offs, business activity, area or district development, socio-cultural functions, a more sport-oriented perspective, or even taking a more ‘negative’ point of view with regard to ‘NIMBY’ sentiments. So where most studies rather narrowly investigated a particular element of impact, this study will aim to incorporate all aspects of stadium effects – categorised in the three general dimensions found earlier, i.e. economic effects, area development and socio-cultural function. This research will try to establish such a cross-section of stadium impact looking into these various subcomponents, or indicators, of stadium impacts as found in the literature, for recent stadium developments in the Netherlands. This may consist of an assessment of impacts of various stadia, combining quantitative and qualitative data, as well as an exploration of underlying processes and reasons in a specific stadium development. Secondly, looking at the existing literature, there seem to be little, and no comprehensive or systematic analyses of stadium developments and impacts in the Netherlands. As discussed, to various degrees and mixed success, the impact of stadia has been assessed by a range of international studies, however such research seems to be absent in the Dutch context. Only a few more explorative or descriptive studies have been carried out, and mostly consisting of academic bachelor or master theses, but these do not seem to make a very systematic analysis of the actual impact of stadia in the Netherlands. Thirdly, an interesting dimension of this research could be the changing context of urban development and planning, as described earlier. Little of the existing literature on large-scale cultural amenities, and football stadia in particular, has in fact already incorporated this element; this while it is something that can be expected to have drastic implications for the context of urban development and planning in general, but also the realisation of large-scale project such as football stadiums, as well as the extent to which these might be able to produce additional impacts. As described, this changing context is mainly related to the economic climate c.q. downturn, and how this will further develop, as well as demographic changes, which increasingly bring to the fore notions of development and quality ‘without growth’, changing roles of actors, less (pro)active stances of local governments, and less focus on large-scale, integral and greenfield urban and area development (i.a. RLI, 2014; 2014b). And while it could be argued that in this context this is of somewhat less vital importance than issues such as the housing market, business areas and in inner cities, as found above cultural amenities are and are continued to be considered as major elements within the urban landscape. In this light, Kloosterman then rightfully asks “what, then, is the scope for cultural planning in an age of austerity?” (2014, p. 2515). Questions that arise are what the influence is of this context on the realisation of (large-scale) cultural amenities, the roles of public and private actors within their development processes,

what the role of government policy and involvement could or would be in this respect, what implications it could have in terms of location, and the extent to which such amenities can produce certain broader impacts for a city. Reflecting back to the theoretical debate, according to Kloosterman the need for a well-founded framework for planning of cultural amenities “has become, arguably, more pressing with the tightening of budgets in the public sector after 2008 which has significantly reduced the scope for cultural planning initiatives” (Idem, p. 2512). Drawing on some of his conceptualisations, in a certain way this research may aim to do so, but by focusing particularly on large-scale ‘mainstream’ amenities, in the form of football stadiums. And while all stadiums in the Netherlands have been realised already before the emergence of this ‘age of austerity’, it could pose an element of influence within the assessment of post-development, ‘post-2008’ impacts, and also an aspect to reflect on with a view towards future projects.

### 1.3 Research goal and questions

#### *1.3.1 Research approach and philosophy*

The research approach and philosophy are aspects that will not be an explicit part of the actual research, but are important to briefly dwell upon beforehand. This research takes an epistemological point of view, which means that the base principle is that it looks at what is acceptable knowledge, rather than an absolute knowledge (ontology). Implicitly that implicates a socially constructed reality, which fits better in the context of a ‘social’ research such as this, as opposed to ontology being a better fit for exact sciences. Within this epistemological approach, the main way of thinking will be based on interpretivism; this means that in the gathering of knowledge this comprises in fact an interpretation of the researcher of that socially constructed reality. The research approach used in this research will consist of both inductive and deductive elements. In the first place, the research will be inductive in nature, meaning that based on certain practical examples, it aims to come to a certain outcome, model or presumption. On the other hand, to a certain extent the research can also be considered deductive, as these practical examples will be observed through a certain pre-determined or -established framework (see further Saunders et al., 2013, p. 103).

#### *1.3.2 Research goal*

Based on the problem definition outlined above, both in societal and academic terms, for this research the following research goal can be distilled:

*To contribute to the knowledge regarding the development of football stadia in the Netherlands and what impact these may have on urban development, and what the influence of the local context is on this, by looking into the realisation and decision-making processes (actor involvement, funding and location) and effects of recent Dutch stadium development projects, and to learn from this towards the future.*

This research goal will be central, and pursued throughout the remainder of this research, by seeking to provide answers to the subsequent main research question, and a set of subquestions. These will be outlined below.

### 1.3.3 Research questions

The main research question of this research logically follows from the research goal formulated above, and reads as follows:

*What is the impact of football stadium developments in the Netherlands on urban development, and what is the influence of the local context on the realisation and decision-making processes (actor involvement, funding and location) and effects of such amenities in a city?*

To make this question somewhat more manageable with regard to the further course of this research, it is broken down into four subquestions. These together will eventually craft an answer to the main research question formulated above, and in that capacity will also provide a certain structure particularly to the analysis sections that will follow later on.

1. What is the impact of football stadium developments in the Netherlands on urban development in broad terms – i.e. in terms of area development, economic effects and socio-cultural function?
2. Which actors and actor structures are involved in the process and funding of Dutch football stadium development projects and in what capacity, and what are the implications of this for the realisation process and eventual impact of the project?
3. What role do policy and the location element play in football stadium development projects in the Netherlands, both in the realisation process and for the eventual impact of the project?
4. What is the influence of the local context on the realisation and decision-making processes and urban development impact of football stadium development projects in the Netherlands, and what are the implications of that for future projects?

These subquestions will not necessarily be answered in this strict order, that is, they are not subsequently handled in separate sections. The first question will be dealt with in a quantitative data analysis in chapter four, which will be the main focus of that section. In a qualitative case study in chapter five this impact question will be issued as well, but this analysis will also go into more depth and underlying reasons and processes, thereby answering the other three subquestions.

## **2. Theoretical framework**

In this chapter a framework will be sketched out of and based on various theoretical notions and concepts. First of all, it is important to discuss and clarify the relevant theoretical core concepts in this research. This ranges from rather abstract or meta-level notions, for example on urban development and decision-making processes, to the more concrete concepts related to stadium developments. Based on that, a conceptual model will be drafted, that incorporates the most important concepts for this research and presents the presumed relations between those. Finally, where necessary those concepts will be further operationalised, which will provide the theory with more specific ‘handles’ to carry out the eventual empirical analyses in the remainder of this thesis. So in short, this conceptual chapter sets out the theoretical foundations of this research.

### **2.1 Core theoretical concepts**

#### *2.1.1 Urban development*

A key concept in this research is the concept of urban development. The central assumption here is that cultural amenities, and specifically football stadiums, can have an important function within a city, and in that capacity contribute to urban development. Therefore, before anything else first this concept will be further elaborated. Rather obvious and often used examples of urban development could be found in area development, redevelopment or renewal; the concrete and physically visible development of a new, or improvement of an ‘existing’ area. However, the concept can also be understood in a broader perspective; in this research, it will be considered in a more literal or general sense, rather simply as a development or improvement of the ‘urban’, i.e. a certain area or the city as a whole. In this section, the main focus will be on the further practical definition of the concept, as it is understood in this research. Some notions as to how urban development may be achieved will be discussed in the following sections; more content wise related to culture and amenities first, but also some more general theoretical notions and concepts regarding the realisation of urban growth and development, and the decision-making processes involved in that context.

In a more general sense, looking at local and regional development – which may then of course also apply to a city (region) – Pike, Rodríguez-Pose & Tomaney conclude that it is rather complex and not clear-cut to exactly define this concept; “defining – saying exactly what is meant by – local and regional development is more complex than might be commonly assumed” (2006, p. 24). Traditionally, the primary focus has been on economic dimensions of growth and development, but over time attention has grown for a broader conception of the concept, incorporating also social, environmental, political and cultural aspects. Broader notions such as quality of life and well-being were integrated with the narrower conventional concerns of economic growth and competitiveness. However, they argue that “there is no singularly agreed, homogenous understanding of development of or for localities and regions”, and that such notions are socially determined and place and time specific (Idem). Nevertheless, the overall understanding seems to be the development of localities or regions (cities) in a broad sense, meaning in economic, social, environmental, political and cultural terms. Finally, describing the varieties of local and regional development by using various distinctions, an interesting division they make is that of a quantitative and qualitative dimension of local and regional development. The former is related to an objective, numeric measure, basically focusing on “how much of a particular something” (Idem, p. 40). The qualitative dimension “is concerned with the nature and character of local and regional development, for example the economic, social and ecological sustainability and form of

growth, the type and ‘quality’ of jobs, the embeddedness and sustainability of investments, and the growth potential and sectors of new firms. (...) [It] focuses upon more subjective concerns that connect with specific principles and values of local and regional development socially determined within particular localities and regions at specific times” (Idem).

Taking a somewhat more specific perspective, and although using the term of ‘urban regeneration’ instead, Roberts (2000) also offers some useful insights in this respect. Firstly, he makes a distinction between on the one hand relatively ‘autonomous’ developments, and on the other hand planned developments (policy); so urban change and urban policy, respectively. In the relationship between those, he more or less provides a description of urban development: “towns and cities change over time, and this process of change is both inevitable and can be viewed as beneficial. It is inevitable because the operation of the political, economic and social systems constantly generate new demands and present fresh opportunities for economic progress and civic improvement. It is beneficial because, although many may deny it, the very existence of these substantial forces of change creates opportunities to adjust and improve the condition of urban areas” (Roberts, 2000, p. 11). He argues that both external and local forces and influences come and blend together in the urban landscape, and that “it is the desire to respond positively to such influences that has caused politicians, developers, landowners, planners and citizens alike to search for an answer to the question of how best to improve and maintain the condition of towns and cities” (Idem). Extending on this, he then defines urban regeneration as “comprehensive and integral vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, social and environmental condition of an area that has been subject to change” (Idem, p. 17).

It should be noted that Roberts does speak specifically about urban regeneration here, rather than urban development. As Stouten (2010) links both concepts to each other, generally urban regeneration would lead to urban development. So, the ‘urban regeneration’ Roberts speaks about seems to be somewhat more area bound, and problem oriented (i.e. a means of tackling decline), that is more specific than a more general urban (re)development. As the focus in this research is on stadium developments, which can be considered a form of project-based urban development (see also Swyngedouw et al. (2002), and discussed later on in section 2.1.6), these notions may be useful as well. However, a few comments should be made here. As seen in existing literature and practice, projects such as stadium developments may in fact affect ‘existing’ urban areas – potentially improving the neighbourhood of the old location by moving away, while new stadia are sometimes also considered area improving projects – but they may also pose entirely ‘new’ (area) developments, creating a ‘new part of the city’ on a greenfield location, so to say. Therefore, the sheer notion of regeneration would perhaps not entirely fit the bill here. Furthermore, looking at urban development in relation to specific development projects (i.e. football stadiums), while some effects of such localised ‘urban development measures’ may be location based, other effects are also expected to exceed its specific area, and to be found on the city (region) wide level. Urban development here is considered as the enhancement of the situation or condition of the city as a whole; which can include localised improvements, but also – often less tangible – city wide effects. In that light, the conception of an overall – local and regional, here urban – development of Pike et al. may be more appropriate. On the other hand, Roberts also emphasises that the urban regeneration concept is not the same as mere area renewal or revitalisation. He also does seem to refer more to an overall and comprehensive – planned – improvement of the condition of a city or urban area, that has been subject to both internal and external influences; this gives the definition such a general character, that in fact it comes close to the notion of urban development adopted by this research. Despite its tendency towards problem solving, to

a certain extent it may be argued that this is always the case for urban development in general; entailing an improvement of a pre-existing situation of a particular urban environment.

To conclude, the described conceptions of urban development all provide some useful insights in light of this research. Although there seems to be no overarching or clear-cut definition for urban development, in general it seems to come down to an improvement in the urban environment, for which economic, social, environmental, political and cultural are common dimensions put forward. In fact, this comes rather close to the three elements of the well-known sustainability triangle. In the absence of an exact definition, based on those theoretical notions an own definition can be formulated, of how urban development is conceptualised in this research: *Urban development is the development of a city, both planned by policy and non-planned developments, in which the urban space or environment – both localised in a specific area or for the city as a whole – in a broad sense improves, meaning in economic, environmental, physical, social and cultural terms, and both quantitatively and qualitatively.*

### 2.1.2 Culture & cultural amenities

A central concept in this research is culture, and more specifically, culture in the city. This rather vague notion will be looked at through the lens of large-scale cultural amenities as the concrete manifestation of culture in the city, for which ultimately stadiums will form the specific focus point. As seen in the literature study, culture however is a very widely interpreted concept, and also in the relation between culture and the city several perspectives and notions are expressed in scientific literature. Some examine culture and its meaning in the city as a very broadly defined and abstract concept, e.g. as a way of life, thinking and acting of certain groups of people (a.o. Miles, 2007; Young, 2008; Miles, Hall & Borden, 2004). Following the distinction by Miles, Hall & Borden (2004) and Miles (2007), this research will clearly follow the path of culture as ‘the arts’ – which still in broad terms could be seen as certain outings of culture posing a certain value for the city, serving the purpose of for example ‘entertainment’ for its people. Such a function of culture has been present in cities for ages, already the classical ‘panem et circenses’ posed an example of this ‘entertainment’ value or function within a city. However, particularly in the more recent post-industrial era, and against a background of increasing consumerism and neoliberalism, increasing attention for culture and entertainment led to the emergence of entertainment industries in their own right, while culture and culture provision increasingly moved from a goal in itself to a means of achieving other goals, such as stimulating the local economy and promoting the city (i.a. Van Dam, 2000; Evans, 2000; Miles, 2007; Pacione, 2009). In general, a renewed and increased attention for the provision of ‘culture’ in the modern city, led to increasing forms of cultural or cultural amenity-led urban planning and development policies; in the literature generally dubbed as a ‘cultural turn’ particularly since the 1990s (Mercer, 2006; Young, 2008; Kloosterman, 2014). More recently, this concept has been increasingly linked to the attraction of ‘human capital’ and ‘creativity’, and the formation of a ‘cultural’ or ‘creative city’ (i.a. Evans, 2009; Florida, 2002; 2005; Franklin, 2010; Landry, 2000; 2006). The underlying notion behind this, is that “that people maximize utility, not income, and that utility equals income plus amenities” (Clark, 2004). Overall, cultural amenities are thus understood to contribute to a value of place, and an attractive city (Ahlfeldt & Maennig, 2010; Clark, 2004; Marlet, 2009).

So in this light, where the city is increasingly considered as an ‘entertainment machine’, a central element are thus the concrete ‘manifestations’ or ‘localisations’ of culture within a city, cultural amenities (Clark, 2004). In general terms Clark (2004) distinguishes two categories within urban amenities: ‘natural amenities’, such as climate, geo(morpho)logy and other natural aspects, and ‘constructed amenities’, all amenities ‘created’ by humans. The

focus of this research clearly lies on the latter category. Within constructed amenities two main types can be identified; ‘fixed’ localised cultural facilities, and temporary cultural events (Griffiths, 1995). Whereas in recent years an increasing amount of research focuses on such events, both on a small local scale and large and even global scale (World Cups, Olympics, et cetera) (e.g. Richards & Palmer, 2010), this research looks at the more traditional form of cultural facilities as actual ‘constructions’. Such constructed, localised cultural amenities are defined by Kloosterman as “the set of institutions (public and private) which enable the “local” consumption or provision of services with a high semiotic or aesthetic value such as museums, galleries, zoos, theatres, festivals and sport venues” (2014, p. 2512). Nevertheless, this still encompasses a wide variety of facilities, all inhibiting a certain ‘entertainment’ element, ranging from musea to theatres, cinemas to music venues, and zoos to sports stadia (i.a. Clark, 2004; Evans, 2001; Kloosterman, 2014; Marlet, 2009; Van Aalst, 1997). In this light, Kloosterman (2014) makes a further classification of these constructed cultural amenities. He identifies two dimensions; scale, characterising the ‘supply side’, and type of audience, which characterises the ‘demand side’. When put together on two axes, along those dimensions four categories of amenities emerge (see table 3.1). Consecutively, small-scale niche oriented, small-scale mainstream oriented, large-scale niche oriented and large-scale mainstream oriented cultural amenities can be identified. The use of axes however already indicates that in reality there is actually more of a continuum, and classification within those categories will not always be that clear-cut. Nevertheless, it offers a useful classification in four basic categories, each of which “has its own socio-economic and spatial logic and, accordingly, its own specific potential impact on the local economy in terms of quality of place. In addition, each ideal-typical cultural amenity can also be related to different configurations of potential sources of income or funding” (Kloosterman, 2014, p. 2515).

		Scale	
		<i>Small</i>	<i>Large</i>
Audience orientation	<i>Niche</i>	Small-scale, niche oriented (1)	Large-scale, niche oriented (3)
	<i>Mainstream</i>	Small-scale, mainstream oriented (2)	Large-scale, mainstream oriented (4)

Table 3.1: Typology of constructed cultural amenities. Source: own table, based on Kloosterman (2014, p. 2517).

This research focuses on large-scale cultural facilities, and specifically football stadiums. What exactly falls under large-scale is not pre-defined, but in general it is safe to say that stadia are large buildings, that attract large numbers of visitors. Implicitly this also means that only ‘professional’ culture or sports are looked at; generally only professional sport venues can be classified as large-scale amenities. While the audience dimension is somewhat arbitrary as well, it could be argued stadia can be classified as mainstream facilities, mainly because not much ‘specific knowledge of the content presented’ is necessary and football is generally not considered ‘high culture’, as Kloosterman in regard to niche facilities puts it. Such large-scale cultural amenities are then often also linked with or seen as drivers for larger developments in and of a city, in multiple respects. As Kloosterman (2014) stated each category has its own specific effects on cities, it might be expected that at least in certain aspects the large-scale amenities will have a more considerable, or at least tangible impact, simply due to the larger number of people they attract – although disputed by some, placing particular emphasis on smaller scale amenities instead (Florida, 2002; Clark, 2004). On the contrary, their larger scale may also imply that for such amenities a bigger future

challenge lies ahead, especially in terms of actor roles and funding, but also location and function (Kloosterman, 2014).

On the one hand, a certain macro effect may be ascribed to such a large-scale facility, in just the mere fact that it attracts people to the city, temporary visitors but also permanent; following also the notion of a shift from production- to a more consumption- and experience-oriented society (Clark, 2004; Marlet, 2009; CPB, 2010; Van Aalst, 1997). On the other hand there are also the effects of or around the amenity itself, i.e. a – more or less ‘visible’ – impact around the specific structure. However, Kloosterman (2014) implies that such impacts on the ‘quality of place’ can particularly be ascribed to niche-oriented amenities, and less so for the mainstream-oriented. The large-scale niche amenities “typically have more difficulties in generating their own income as they are dependent on larger catchment areas than mainstream-oriented amenities, but they may, on the basis of their more or less unique offerings, contribute to the quality of place” (2014, p. 2523). In that light these seem to be also the main focus of many of the ‘creative class’ inspired studies. The large-scale mainstream-oriented amenities, Kloosterman argues are often located on more remote locations, and in that light “this relative spatial isolation makes it, on the one hand, much easier to internalise the spill-over effects of spending by visitors, but, on the other hand, diminishes the impact on the city itself. For this reason, and because mainstream offerings do not add much distinction, the quality of place, then, is not much affected by these amenities” (Idem, p. 2521). These differences would then also have to be reflected in the extent to which they are subject to government planning or support. However, this seems somewhat all too simplistic. As he himself also argued, the distinction between the two is not always clear-cut, and rather a continuum. So the issue to what extent an amenity is a form of mainstream culture, or aimed at a particular or ‘niche’ audience, and with that the extent to which it may produce impacts for the city, cannot be simply classified by two categories; and it will be argued here strongly depends on the specific type, characteristics and context of a particular amenity. Furthermore, in general this seems somewhat rather short-sighted or bluntly put; particularly also looking at the body of research devoted to the impact of sports stadia. The extent to which such facilities actually realise these potential impacts is often questioned or doubted and remains to be seen, but there is little doubt that also mainstream cultural amenities are widely linked to a variety of broader effects on their (urban) environment. This will be further elaborated in some more detail in section 2.1.5; after having discussed first the specific case of football stadiums as large-scale cultural amenity in general, as well as the concept of the local context.

### *2.1.3 Football stadiums*

As said, in this research large-scale cultural amenities are looked at by taking the example of football stadia. Or, put differently, football stadia are looked at through the lens of large-scale cultural amenities. Sports stadia are not cultural amenities in the classical sense of the word. Also in the literature on culture and cultural amenities stadia are scarcely found as an example. Arguably it is not the typical “high” culture we might think of in the first instance; but on the other hand, what would such a facility then be? Also, cinemas and music venues offering popular film and music, zoos or ‘experience-aimed’ attractions can also not exactly be classified as a higher form of art, but are undoubtedly regarded as cultural facilities nonetheless. But, as we have seen, culture is a very broad concept, and the header of cultural amenities comprises a wide variety of activities. Ranging from small and niche to large and mainstream, Kloosterman (2014, p. 2515) describing them as all “activities that enable local consumption of assorted cultural services”; one of which are sports venues. Furthermore, there is no denying that football, and its clubs and ‘supportership’ or ‘fandom’, is also a

cultural practice, a form of culture or even a 'culture' in itself (i.a. Bale, 1993, 1993b, 2000; Frank & Steets, 2010). Just a selection of studies that investigated this include Brown (1998), Finn & Giulianotti (2000) and Frank & Steets (2010), ranging from local to global perspectives, fandom and identification to hooliganism, and traditions to mass consumerism.

As argued in the previous section, stadia are considered as large-scale (mainstream-oriented) cultural amenities, that host professional sports as entertainment for large audiences. That means, stadia are facilities that accommodate a professional football club, that allows for visitors in large numbers to conveniently watch a match, which in turn provides revenue for the club. Such entertainment facilities take an important place in modern cities; as John Bale argued, "spectator sports are central features of modern urban society and it is the stadium which is the prime twentieth-century container of the urban crowd" (1993b, p. 9). Especially those constructed, permanent and regularly used amenities, and in particular the football stadia, are often the most important elements of entertainment provision: "it is in the football stadium, more, I would argue, than in other sports grounds, that the largest crowds are most often found in the modern city. Other crowd events such as rock concerts, the Olympic Games, (...) are irregular occurrences" (Bale, 1993b, p. 9)<sup>1</sup>. And as visually summarised around a stadium project in Perth, Australia, stadia are considered "one of the essential civic buildings forming one of the pillars of culture for the modern city and its communities; they have in effect become the new cathedrals of the 21st century serving our popular culture and environment" (Major Stadia Taskforce, 2007, p. 16).

This has not always been the case, however. Since the end of the 19<sup>th</sup> century football slowly evolved from a participation or folk game into a consumer good; rules were created, clubs were established, and the with a defined pitch, surrounded by stands – growing in time for an increasing amount of visitors, with separation between visitors themselves, sporters and non-visitors for the sake of more comfort and control, eventually the modern stadium emerged (Bale, 1993, 1993b). In line with this, was the commercialisation of sport; sport and football became a major form of entertainment, around which a proper economic sector emerged. Especially since the 1990s, "professional football (and professional sports in general) has become a booming business and an increasingly marketable commodity; all over Europe, also in the Netherlands" (Van Dam, 2000, p. 133).

As already observed in the introduction chapter, from the 1980s onwards this led to an increasing attention for the football stadium in the Netherlands, from visitors and sponsors, the football clubs, and subsequently also municipalities. This increased attention was in the first instance perceived or interpreted in a mainly negative sense, especially by municipalities and residents in the area; "the issues of form, function and location of football stadiums were increasingly questioned in relation to the problems that these stadiums generated" (Van Dam, 2000, p. 137). However, with the ever-growing interest from visitors and sponsors, which combined with the problems this exposed prompted several clubs to actively pursue the development of a new stadium, increasingly also the possible opportunities of such an amenity were recognised. After a long period of administrative but also academic neglect, "to an increasing degree it (was) recognized that a football stadium can have more functions than were traditionally ascribed to it, from a business-economic (...) as well as from a less tangible symbolic and prestige perspective (the stadium as an urban landmark, the club as a source of local or regional civic pride" (Van Dam, 2000, p. 142). Or as Frank & Steets (2010, p. 5) put it, "since the late twentieth century, against a background of worldwide interurban competition, stadia increasingly serve as location-supporting, urban representative buildings and as driving forces for urban development". Stadia more and more thus became important elements in strategies for city marketing or urban development (Thornley, 2002), in which

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<sup>1</sup> It should be noted that Bale speaks mainly about Western Europe here; this diagnosis may not applicable to many other countries, for example the US, where football is not as popular.

“cities invest in sports facilities for a number of reasons, including economic development, tourism, community development, image enhancement, and quality of life” (Mason, 2012, p. 166). However, as we have seen in the literature review, this does not mean opinions on this matter are unambiguous. Nevertheless, a further elaboration and structuring of the possible impacts of a football stadium will be issued in section 2.1.5.

#### *2.1.4 Local context*

As Kloosterman (2014) for cultural amenities in general, and a.o. Santo (2005), Mason (2012) and Propheter (2012) for sports stadiums in particular highlighted, the wider context in which such facilities are located is of major, and often underestimated importance. As Propheter (2012, p. 457) found, “the context that is important is not facility-dependent but rather city-dependent”. Context is a very broad concept, that in the ‘context’ of this research in fact encompasses all external (that is, not facility-dependent) factors that could – directly or indirectly – influence area and urban development in general, and thus also the development of football stadia. These may include very specific and concrete developments, but also more abstract or broad trends and notions. The concept can therefore be seen as twofold; the societal context, containing the broader trends and developments on a larger – regional, national or even international – scale, and the more specific city context, containing the more concrete factors specific for the city, that then also to a more or lesser extent are in a certain way related to the stadium or stadium area. In this light, the term local context will be used here; simply because a development project such as a stadium always takes place within a certain locality – which is then affected by both local and supralocal factors. In her research on cultural facilities in inner city development, Van Aalst (1997) connects the two, as she distinguishes three dimensions for the concept of the broader societal context: socio-economic processes, socio-cultural variations and political and administrative changes. These factors subsequently influence the ‘city context’, within which then the supply and use of cultural facilities takes place.

Looking at it this way, both elements are very important, for urban development but in fact for every policy area. Since contexts are inherently complex and ever changing over time, it will always remain important element to keep critically assessing. For the concrete development of a facility such as a stadium, and particularly assessing its impact, the specific city context is probably more directly relevant (Mason, 2012; Propheter, 2012). However, as we have seen some major changes have occurred in the local and in fact (inter)national context in recent years, that may also have profound implications for cultural amenities and stadiums. Also for that reason also this broader context is interesting and therefore explicitly included in this research. In the following, therefore first an elaboration of the concept of the societal or local context is given, based on the classification by Van Aalst (1997).

For the economic element, a couple of factors can be identified. An important development, that has been going on for some time already, is the general trend towards a service economy. This is of course strongly linked to the shift from a production- to a consumption-oriented society or economy (Clark, 2004; Marlet, 2009; CPB, 2010). More recently also specifically the consumption of ‘experience’ has come to the fore, leading to an increasing ‘eventification of place’ (Jakob, 2012). Due to the growing demand for entertainment and experiences an increasingly important place within this service sector is reserved for the cultural and entertainment sector, and therefore also cultural amenities (a.o. Van Aalst, 1997; Clark, 2004, Kloosterman, 2014). As we have seen, with the commercialisation of sport also an economy of entertainment sports in its own right emerged (Bale, 1993; 1993b; Mulder, 2007). As a consequence of this shift towards a service-oriented economy an increasing inter-urban competition can be observed, in which cultural facilities

are perceived as important location factors or business conditions (Van Aalst, 1997), and considered important for contemporary urban economies (Kloosterman, 2014).

On the other hand however, we can see of course the economic crisis, which has had and continues to have a major impact on area and urban development in the Netherlands. Both governments, on all administrative levels, and the private sector have to deal with drastic cuts in their financial resources, strongly limiting their possibilities to initiate new developments. Although it is uncertain how the economic situation will develop towards the future, it is expected the effects will be long-lasting, and that to a certain degree the effects are of a permanent nature. Among others RLI therefore calls for new ways of thinking about and realising ‘quality without growth’, and how to deal with decreased financial resources in urban planning in general (RLI, 2014; 2014b). In relation to cultural amenities Kloosterman (2014) acknowledges this as well, speaking in this respect of an ‘age of austerity’, emphasising that in the near future the scope for such amenities may be limited.

The socio-cultural processes are mainly related to the need and demand for cultural amenities. With the abovementioned increasing demand for (consumption of) entertainment and ‘experience’, and the ‘eventification of place’ it is thought that both potential visitors and residents put higher demands on the quality of place, in which cultural amenities play an important role, in a practical but also more symbolic sense (Van Aalst, 1997).

Another, important factor that can be observed here are demographic developments; the Netherlands experiences a declining population growth, and in some areas already a demographic decline, a trend which seems to be only continuing in the future. Although it is uncertain how this will evolve over time, and the trend is not evenly distributed across the country – rural areas will suffer the most, while (larger) cities may even continue to experience considerable growth – it is clear such developments will leave their mark on urban and area development of the future. In combination with the declining economic climate, this means more and more a planning ‘without growth’ may have to be found (a.o. RLI, 2014; 2014b). While posing radical changes in thinking about urban and area development in the Netherlands of the future, for the case of large-scale amenities such as football stadia the economic trends seem for the time being somewhat more far-reaching – due to the fact that such facilities are most often found in the larger cities.

Also political and administrative stands form an important element of the broader societal context. Van Aalst (1997) noted for example that the economic and societal trends discussed above have led to an increasing competition between cities, in which terms like ‘place making’ and ‘city marketing’ are important aspects. City officials and developers try to make their city stand out, and in doing so often use cultural amenities as a visiting card for the city. This is consistent with findings in section 2.1.2 and 2.1.3, and will also be further elaborated in the next section. More recently, some other policy-related trends or notions developed, particularly in conjunction with the economic climate, that might as well be of influence. In the Netherlands in the past years we have seen a clear shift from an active to a more facilitating municipal land policy (Buitelaar, 2010; Van der Krabben & Jacobs, 2013; RLI, 2014b). Other notions that came to the fore in recent years include the move away from ‘blueprint planning’ to a more incremental, ‘organic’ way of area development (PBL & Urhahn Urban Design, 2012; Van der Krabben et al., 2013; PBL, 2014), and a shift in focus from urban expansion to more ‘infill’ development, or in other words utilising the existing city (RLI, 2014; 2014b).

As Van Aalst (1997) conceptualised, this broad, high-level societal context subsequently influences the more specific city context. In compliance with findings by Santo (2005), Propheter (2012) already concluded that particularly the city-dependent context is important for understanding the (economic) impact of sports stadiums. Mason (2012, p. 166) concludingly summarises that “each city possesses unique characteristics – such as history,

weather, location, and the combinations of other amenities – that may ultimately influence the success or failure of a given sport facility-anchored urban development project”. For the success of basketball arenas Propheter (2012) names the pre-existing economic strength and sports infrastructure of the city as the main explanatory factors. Although this obviously refers to another type of sports stadia, and the American context, there is no reason to suspect differently for the case of ‘our’ football stadia. One additional remark should be made here though; usually the football stadia in the Netherlands are found in ‘single-team’ cities (Van Dam, 2000). That means impacts can be relatively high (undivided, at least), which might also be an argument for municipalities to support such a development. On the other hand the Dutch clubs (and in most Western-European countries) are not as ‘footloose’ as in the US, and fandoms are rather local and locally bound (Idem), so there is no inter-city competition for sports teams and stadia.

This whole set of factors is different for every city, and therefore their needs and expectations, but also the kind of impacts they seek for with such a facility, can vary considerably between specific cities. For that reason Mason concludes that “perhaps a more appropriate way to view sport facility development is in terms of how each facility fits into a much broader context in each city, and how that broader development meets the aims of that given city. Thus, future research should continue to explore the ways in which sports-related infrastructure is integrated into the other development occurring in cities, how it fits into overall city strategy, and how the infrastructure combines with other civic amenities to impact tourism, quality of life, and/or community development” (Mason, 2012, p. 166-167). Integration in the existing city context is thus crucial, for both determining the aims and objectives beforehand and the realisation of certain impacts.

### *2.1.5 Stadiums and urban development impact*

The focus of this research lies on deliberately planned urban development. As found earlier, in the academic literature but also in the notion of policy makers the potential of cultural amenities in the endeavor for urban development is increasingly recognised (i.a. Kloosterman, 2014; Mercer, 2006; Van Aalst, 1997; Young, 2008). Taking a broad definition of urban development, many different effects may be and have been ascribed to such cultural amenities within a city. This research obviously only focuses on the specific case of football stadia, following the notions of section 2.1.2 and 2.1.3, a rather particular and in some ways peculiar category. But also for stadia it seems widely understood – however by no means agreed upon – they could have a certain impact on urban development. In general, “the relationship between sport, sporting infrastructure, and cities endures as city leaders and other stakeholders continue to embed the hosting of sporting events and teams – and the construction of related infrastructure – within broader discourses of competitiveness, quality of life, city image, branding, and other economic and intangible benefits. While sport remains only a small part of what makes a city unique, vibrant, or economically sustainable, investing in sports stadiums and arenas can be among the most expensive infrastructure decisions that city leaders can make” (Mason, 2012, p. 165). In that light, quite some research has also been devoted to describing such effects, mostly to a particular (category of) impact. A couple of studies also attempted to categorise such amenity-driven effects; some for cultural amenities in general, while others focus specifically on stadiums. Despite their differences, with the general scope of cultural amenities deployed in this research both might be useful here. Those will shortly be summarised, after which a categorisation of effects outlined based on that. And while overall the body of research into stadium impacts is rather extensive and still growing, this section will probably not be exhaustive or a full overview of this, the most important notions and findings in terms of impacts will be discussed here.

Van Aalst (1997) identifies four motives for using cultural amenities as urban (development) strategy; (in)direct economic goals, tourism and recreation interests, spatial and physical renewal, and city marketing. For sports stadiums, Ahlfeldt & Maennig (2010, p. 636) developed a typology with direct and indirect economic impact (on both the local and metropolitan level), location desirability (local level) and intangible/public good effects (metropolitan level), in which they divide the 'source' of the effect between the function (sport), form (architecture) and other additional elements. Berry et al. (2007, p. 83) focus primarily on tangible aspects, and speak about regeneration, economic, infrastructure and business perspectives, thereby leaving out the more 'soft' elements. In a literature review Corwin (2011) distinguishes between economic effects on the one hand, and all other effects on the other hand, such as a catalyst function for (area) development or the more social or cultural impacts. Concludingly, although different in terminology and emphasis on certain elements, all more or less cover, in a combined effort bring to the fore, three elements: economic effects, physical/spatial or area development, and socio-cultural functions.

The most traditional category are probably the economic effects. The assumption is that cultural amenities and also sport stadiums are engines of (urban) economic development. As Mason (2012) states, the majority of the studies however, contrary to what policy makers often expect, come to the conclusion that fairly little or no evidence is found that sport stadia produce significant economic benefits (a.o. Ahlfeldt & Maennig, 2010; Chapin, 2004; Coates & Humphreys, 1999; 2003; Corwin, 2011; Jones, 2002; Propheter, 2012; Siegfried & Zimbalist, 2000; Baade & Matheson, 2011). According to Chapin, investments in stadiums often offer not enough (economic) returns, and on city level have little effect on economic growth, while Lee (2002) in this respect even speaks of a myth. Using the case of basketball stadia, Propheter (2012, p. 457) goes into somewhat more explaining detail, concluding that "(...) context is important for understanding the economic impact of sports facilities (Santo, 2005). However, the context that is important is not facility-dependent but rather city-dependent. The pre-existing economic strength and sports infrastructure are key predictors of the success of basketball arenas. Basketball arenas are not primary catalysts of economic development but are instead economic complements. The present research is generally consistent with the notion that professional sports are not the cause of development so much as they are the effect (Coates, 2007)." Concludingly, in short it is fair to say that "a purely economic justification is not sustainable" (Jones, 2002b, p. 168).

Nevertheless, some assumptions and in some cases proof has been found in support of certain economic effects. Thornley (2002) argues that some positive 'spin-off' effects may occur; a stadium might stimulate economic activity in the area, and a better image for the city. This in turn might then also be able to attract businesses and visitors or tourists (Siegfried & Zimbalist, 2000). A stadium, possibly with additional economic activity, might then also add to the level of facilities in an area, for both businesses, visitors and also residents. Furthermore, some state that a new stadium could enhance employment, and yield more tax revenues for municipalities (Jones, 2001; Chapin, 2004). However, according to Eisinger (2000) such possible economic effects mainly benefit private investors. A last potential impact that received some attention is the effect on local housing or real estate values (i.a. Coates & Humphreys, 2003; Mason, 2012), for which a few studies have found some evidence of value appreciation of the real estate in the surrounding area. Quite recently, a growing number of studies have been looking into this element, some of which through quantitative methods such as hedonic price models. To somewhat mixed and ambiguous results, and within certain boundaries or radiuses of varying magnitudes and patterns, some seem to find a certain limited positive impact in this respect (i.a. Ahlfeldt & Kavetsos, 2014; Ahlfeldt & Maennig, 2009, 2010, 2012; Feng & Humphreys, 2012; Dehring, Depken & Ward,

2007; Huang & Humphreys, 2012; Humphreys & Nowak, 2015; Tu, 2005). Nevertheless, the evidence base thus seems not yet fully conclusive on this aspect. In any case, if present, economic effects generally thus take mostly place on a lower scale. More and more expectations and hypotheses are focused on more local impacts, and are somewhat more reserved on city level (Corwin, 2011; Barghchi et al., 2009).

Secondly, stadiums are sometimes considered as drivers for (physical) area development. After results on the economic impact turned out somewhat disappointing/limited, the focus in research shifted somewhat towards urban renewal and the 'physical' restructuring of a certain district (Chapin, 2004). As Barghchi, Omar & Aman (2009) conclude, "cultural sports and entertainment facilities are considered as catalytic facilities which receive public support in order to spur development in the immediate surrounding area". The main idea is that with the construction of a new stadium also the surrounding area can or will be further developed, for which the stadium functions as a 'catalyst'. The assumption is that a stadium might have the power to breathe new life into an urban quarter, by causing renewed interest in an often somewhat 'forgotten'/neglected area, and creating a large influx of people. This idea is thus based on the fairly simple notion that stadia have an attracting force on people, something which then creates a support base for public and private investments in that certain area. These may include investments in other facilities, improvements in the quality of space/place, urban design, but also infrastructural and accessibility improvements, et cetera (Chapin, 2004; Berry et al., 2007; Corwin, 2011). In general, Robertson (1995) identifies in his 'Special Activiy Generator' three indicators to 'summarise' this catalytic function, or to measure the extent to which it is realised; the re-use of existing and unused space and buildings, new building projects in the surrounding area, and the emergence of a new entertainment- or sport-oriented district.

Although neither here opinions are unanimous or undivided, Chapin speaks of a 'mixed success', concluding that "evidence indicates that sports facilities offer opportunities to catalyse redevelopment, defined as the development of vacant land, the reuse of underutilised buildings, and the establishment of a new district image, but that district redevelopment is by no means guaranteed by these investments" (2004, p. 193). Ahlfeldt & Maennig (2010) see two possible ways this can unfold; the district develops as a consequence of or formed around the new stadium, or the stadium is being incorporated into the development and structure of the environment or district. Either way, as many studies on this area concluded an important condition for such an impact to be realised is that the stadium development is incorporated in a broader development strategy (i.a. Ahlfeldt & Maennig, 2010; Chapin, 2004; Siegfried & Zimbalist, 2000; Thornley, 2002).

Finally, a somewhat overlooked element is the old location that is being left behind, and the possibilities for redevelopment on those locations. This element is not often specifically mentioned in the literature, probably because it is not so much a direct effect of a new stadium, but looking at the concept of urban development on the scale of a whole city it is something that should not be ignored. Such locations, and especially of many older stadia are often – densely built and populated – (inner) city areas; either they have been there from the start or they have been 'caught up' by expansion of the city (Van Dam, 2000). In many cases over time this started to cause some major problems in terms of nuisance, parking et cetera, making stadia 'urban problems' and devaluating the surrounding area. However, with the relocation of the stadium suddenly such a location becomes vacant, which due to its often good location, and considerable size, offers interesting possibilities for inner city redevelopment, such as for residential functions (Idem). Although only a more indirect effect of the development of a new stadium, not directly related to the new building or area, but on

the other hand also due to emerging as a consequence, this is however also something to consider in looking at the impact on urban development for the city as a whole.

Finally, some effects can be identified that are neither economic nor development-oriented in nature, but touch more on social and cultural aspects. Those include all the somewhat less tangible effects, sometimes also described as the more 'soft' factors. As Lee (2002, p. 861) stated, "stadia on the whole are ineffective in fostering direct economic spin-off effects, but from a socio-cultural perspective are a key factor in producing significant intangible benefits, while enhancing the status of a city". Or, as Baade & Matheson summarised it, "sports may make a city happy, but they are unlikely to make a city rich" (2011, p. 18). First of all, a stadium is an important element of 'panem et circenses' (bread and games) within a city, i.e. the supply of entertainment. In that capacity they can have an important societal function; providing entertainment for a large group of citizens, and thereby enhancing the quality of urban life (Bale, 1993; Clark, 2004; Eisinger, 2000; Frank & Steets, 2010). Furthermore, the stadium might not only attract people from the city itself, but also visitors from outside; in that case the stadium may also serve as an important tourism attraction (i.a. Ahlfeldt & Maennig, 2010; Thornley, 2002). This will be in the first place for the football activity, but in the larger stadium cases may perhaps also include other events, or architectural quality. As Corwin (2011, p. 7) summarises, "stadium benefits may include the creation of civic amenities/civic icons in order to boost quality of life and/or attract tourists and a qualified workforce".

Secondly, stadia might have the potential to become iconic elements within and for a city; grow into a symbol or determinant in its own right of the city and its culture (i.a. Berry et al., 2007; Jones, 2001), and possibly also evoking feelings of pride, cohesion and satisfaction among the population, contributing to an overall quality of life (Ahlfeldt & Maennig, 2010; Baade & Matheson, 2011; Bale, 1993, 2000; Frank & Steets, 2010; Thornley, 2002). As Van Dam puts it, the stadium "as an urban landmark, the club as a source of local or regional civic pride" (2000, p. 142). The symbolic value is what is important here, of the place (stadium) and the event (the match of the team) (Ahlfeldt & Maennig, 2010; Berry et al., 2007; Thornley, 2002). This notion of culture, membership, identification and belonging to a place relates to an iconic function, either on city-wide level or on lower neighbourhood scale. If properly integrated in an appropriate strategy, for the latter a stadium might then also specifically serve a community function (Thornley, 2002; Jones, 2001; Lee, 2002). So, a stadium might pose an element of local community binding and pride, but on the other hand, also potentially evoke nuisances or NIMBY sentiments (Bale, 2000; Frank & Steets, 2010).

Outwardly, in this iconic and image-creating aspect there is also the element of using such an amenity for city marketing purposes (as highlighted by a.o. Thornley, 2002; Van Aalst, 1997; Van Dam, 2000). Although it might be argued that this also has an economic aspect (marketing), or is in fact a separate category (Van Aalst, 1997), I view the use of stadia in city marketing here as a socio-cultural factor. In this research this is predominantly seen as something that adds to the image of the city, used to 'profile' the city in a certain way (i.a. Thornley, 2002). This is something that touches more on 'soft' and cultural aspects; creating an image for the culture of the city, or the city culture, so to say.

Also those socio-cultural effects have been met with some critiques, as we have seen before. First of all are such impacts less tangible and measurable than economic and development effects, which makes it harder to actually assess to what extent a stadium has actually produced these effects. Furthermore, a.o. Siegfried & Zimbalist (2000) already stated that the 'image' impact on a city as a whole is rather limited. Furthermore, for impact on a lower scale stadia are often not enough linked to their respective neighbourhoods; better incorporation in a neighbourhood strategy is often necessary in order to really create a

community-oriented facility, and a substantive impact on a local level (Thornley, 2002; Lee, 2002; Jones, 2001).

Having discussed the theoretical notions on potential stadium impacts, a further specified elaboration of these dimensions into indicators, i.e. the specific effects measured in this research, will be given in the operationalisation section (2.3).

#### *2.1.6 Realisation and decision-making processes*

The preceding sections have mainly dealt with defining the concepts of culture and stadia as cultural amenities in general, and the possible impact this may have on urban development. Also the concept of context was further elaborated. However, taking a step back, before such impacts may be realised, the project must of course come off the ground first, with often complex and extensive realisation and decision-making processes and issues that come along with that. Furthermore, the context is not only expected to influence a stadium its impact, but also to have a profound effect on the realisation and decision-making processes of such projects. And while the primary focus of this research is on the impact aspect, and not so much undertaking a full process or actor analysis, this is a crucial element though in better understanding the extent to which certain impacts have or have not emerged, and the underlying reasons for that. Therefore, the remaining part of this theoretical framework will briefly go into some more detail on this aspect of the story. Linking the concept of urban development to the more practical aspect of the realisation of large-scale projects such as stadiums, some notions touching upon the realisation and development processes, and the roles of various actors, should be discussed here. This section will first discuss some meta-theoretical notions on the realisation and decision-making processes regarding ‘urban development’, looking into concepts such as growth machines, urban regimes and the more neoliberal ‘new urban policy’ perspective. Following that it will briefly zoom in on the somewhat more specific manifestations of this – for area development in the Netherlands in general and stadium development in particular – by looking at notions of actor structures and divisions of roles, project funding and choice of location (section 2.1.7 and 2.1.8). As this research is not a solely theoretical contribution nor will it comprise of a full process analysis, this may not be a full reflection or cross section of the vast theoretical landscape on all these issues; but a couple of key notions are picked out that are expected to offer some useful insights in light of this research.

A first interesting ‘meta’ theory is the ‘urban growth machine’ approach, for which the foundation was laid by Harvey Molotch and John Logan. The main focus of this approach is the importance of ‘growth machines’ as the driving force of the development of urban areas. Pacione (2009) describes those as “a local pro-growth coalition of businesses, commercial landowners and rentiers (persons who profit from rental income) that dominates urban politics”. Being the main entities that in practice operate ‘to foster urban development’, he defines the growth coalitions as “partnerships of mutual advantage that may involve both private and public-sector interests to promote and implement strategies that enhance the economic development of cities” (Idem). This indicates a strong focus on economic development; a central assumption of the theory is that urban development is achieved by continuous economic growth. As Clark (2004, p. 295) summarises the essence of Molotch’s metaphor, “the city is a machine geared to creating ‘growth’, with growth loosely defined as the intensification of land use and thus higher rent collections, associated professional fees and locally-based profits”.

In part also because it is originally mainly U.S.-oriented, the theory is particularly emphasising the role of the private sector. The theory is predominantly market oriented, centralising maximisation of growth, and value (increase) of place, through intensification of use of land or buildings (Pacione, 2009). This is in particular the case for the United States, where the planning system (a.o. reflected in the tax system) is more aimed towards inter-urban competition, in which cities merely try to attract people and businesses, with a flourishing local economic climate. In this thinking where economic growth is at the center of attention, Logan & Molotch highlighted the importance of industries and businesses; “(...) the activism of entrepreneurs is, and always has been, a critical force in shaping the urban system (...)” (1987, p. 52; In: Van Aalst, 1997, p. 68). On the other hand though, Pacione (2009, p. 419) stresses that the urban growth machine model “envisaged a broad coalition of groups with a common interest in urban growth including business leaders, public officials and politicians, and organised labour”. And while this is still specified to particular growth ‘elites’ or ‘coalitions’, “since local-government bureaucracies are also sensitive to citizen demands (for reasons of political legitimisation), the pro-growth stance can (also) be modified by popular pressure” (Idem, p. 154). In the Dutch system, there is traditionally also a large role for (local) governments, in policy and strategy making, but also initiating and financing developments, and with a prominent position on the land and property market. In such a context of a more centralised political and planning system and with a stronger position of the public sector, the power of pro-growth business coalitions is generally somewhat more limited (Pacione, 2009). Nevertheless, also in Europe and the Netherlands in recent years we have increasingly seen developments such as ‘city marketing’ entering the urban landscape. Against a neoliberal background – which will also be discussed somewhat further later on, following e.g. Swyngedouw et al. (2002) – the underlying ideas of the ‘growth machine’ have presented itself twofold in the Dutch context; where on the one hand we have seen an increasing role for private parties in urban planning, on the other hand also municipalities increasingly sought for (economic) growth and positioning in the ‘urban market’ (Van Aalst, 1997). Which, according to the ‘new urban policy’ issued by Swyngedouw et al. (2002), increasingly takes place through large-scale urban development projects.

Despite being a new – and since then influential – concept when first introduced by Molotch in the 1970s, the idea of ‘growth machines’ as driving force for urban development is not particularly new; the supposition that cities and urban land are good places to create revenues traces back already a few centuries, and although the main focus shifted from mainly investment in infrastructure in the nineteenth century towards a new, wider palette of growth strategies, still such strategies are developed and investments made to realise local economic growth as a means of improving the urban environment or climate. “Although cities differ in their economic foundations the same goals are pursued, namely intensification of land use and growth of local revenues” (Van Aalst, 1997, p. 70; translated by author).

However, more and more also the cultural sector, as addressed in earlier sections, is linked to this line of thinking, and it is increasingly recognised that investments in culture and cultural facilities can contribute to (economic) growth strategies and goals. Van Aalst cited Whitt stating that “art is a means of bringing (...) people into the city, of raising profits, and of replenishing the municipal offers (Whitt, 1987; In: Van Aalst, 1997, p. 71); and as she summarises it, “art and culture are becoming an increasingly important part of the ‘urban growth machine’ (Logan & Molotch, 1987; Whitt, 1987; 1988)” (Van Aalst, 1997, p. 71). Making a bit of a wordplay, similarly Clark (2004) in this light is looking ‘beyond the growth machine’, and instead stresses the city as ‘entertainment machine’. He concludes that the classical growth machine approach is outdated, and lost much of its power over time. In turn, he argues that not anymore purely economic notions of production, capital and value

maximisation are the core elements of ‘growth machines’, but that also cultural and entertainment amenities are key drivers of urban growth.

Building on the original ‘growth machine’ concept, Clark finds that “an ideology of growth at any cost, via land use intensification, is not a given. In many locations, ‘smart’ or ‘managed’ growth strategies have replaced the growth machine as the driving civic ideology” (2004, p. 296). In the light of the shift from production towards consumption in the post-industrial city, he particularly emphasises the importance of amenities in the attraction of human capital (i.a. also linking to Florida’s ‘creative class’), which then subsequently causes urban growth. The underlying rationale, learned from economics, is that people do not so much maximise income, but rather utility, which is income plus amenities. And while some focused primarily on creative or ‘informational’ sectors, and on the other hand amenities may and often are conceptualised rather broadly, according to Clark this ‘informational city’ in fact implicates a ‘city of leisure’, materialised in the important function of entertainment amenities. With this, he stresses a reversal of the traditionally assumed causal processes; cultural amenities do not only follow urban development or growth, but are also key factors in realising growth – or at least as a multicausal or reciprocal relationship (Clark, 2004). So linking back to some of the notions discussed earlier in this chapter and previously in chapter one, with the shift towards consumption in the post-industrial and postmodern city, the cultural sector and entertainment amenities play a crucial role in the contemporary ‘urban growth machine’ (a.o. Idem; Pacione, 2009). So, although Clark takes a somewhat broader definition of cultural amenities and entertainment, and it is the question to what extent specific notions regarding the attraction of human capital are actually relevant for and applicable to this research and the specific case of football stadia, this does in any case raise the importance of entertainment amenities in contemporary urban development policy.

Finally, Mason (2012) on the other hand does even link the specific case of sports stadia to the underlying notions of the ‘growth machine’ approach. As he states, “some would argue that sports stadiums and arenas, like many other large scale urban infrastructure projects, are a necessary investment in order to promote a broader growth agenda. Civic growth results in opportunities for businesses such as construction companies, banks, law firms, and other entities to advance their own interests, while allowing city governments to expand the local tax base” (2012, p. 165). It should be noted this latter element particularly applies to the American context, but might also apply to the Netherlands for example in terms of property taxes. Nevertheless, this emphasises the relevance of some of the underlying notions of the ‘growth machine’ concept – in fact more the classical ‘growth machine’ rather than the ‘entertainment machine’ – also in relation to entertainment amenities, and in the particular form of sports stadia.

To conclude, as Van Aalst (1997) and Clark (2004) already concluded the ‘growth machine’ model is not completely satisfactory however. There is a rather strong, and deterministic focus on the economic side of the story, and within the local economy especially on land and property development, and it also ignores factors from outside the local context. As described earlier, urban development (i.e. growth) is considered as a much broader concept than only in economic terms in this research. Also, the strong focus on the private sector (i.e. capital, business elites) does not seem to really fit the (current) Dutch context, with generally a more centralised political and planning system, and a large role of the public sector and (local) governments in planning and urban development, limiting the influence of private pro-growth coalitions (see Pacione, 2009). Another, and recent development in the Dutch context that we have seen and that somewhat contradicts and thereby limits the power of the ‘growth machine’ approach, is that increasingly situations may occur in which we will have to seek for quality and planning without growth (see i.a. RLI, 2014; 2014b). This is caused by the simple fact that demographic and economic growth may increasingly take place

at a much more moderate rate, if at all, than we have come to expect over the past few decades; and thus growth and value increase may become less obvious elements in urban development. Although some areas will be affected more than others, and cities probably less so, an approach driven by the assumption of continuous growth may therefore be somewhat outdated. Finally, among others Clark (2004) does shift the focus from purely economic growth to cultural amenities as driver for urban development; and while it is the question to what extent his notions regarding human capital relate to the case of football stadia, Mason (2012) illustrates the concept does (still) apply also in this context. So despite its limitations, the underlying notions of urban growth and development, and the related goals formulated in urban policy, and particularly also the more recent links made with the cultural sector, entertainment amenities and even sports stadiums, may still be relevant in the light of this research.

Dealing with some of those issues, is the theory of 'urban regimes'. Pacione describes this in general as "a variant of the urban growth machine model that develops the concept of fluid, overlapping alliances among local business and political leaders in order to achieve desired solutions to particular problems" (2009, p. 419). Compared to the 'growth machine' model, a first notable difference of this approach is that it has more attention for the public sector, and the interrelations between governments and non-governmental institutions (i.e. private actors). As John Logan himself also concluded, "after two decades of research, we are still unsure whether growth machines make a difference to urban development. Much greater attention needs to be given to consideration of the efficacy of local regimes and formal policies. Researchers should probe variations in regimes, explore how growth coalitions are brought together and operate, investigate the sources of opposition, and determine how policies are implemented or obstructed" (Logan, Whaley & Crowder, 1997). In this light, Stone – one of the pioneers of this regime thinking – identifies also the changing role of governments, with the decentralisation of power and increasing competition between cities (1993; In: Van Aalst, 1997). Central in this approach is the fragmentation and complexity of administrative and political decision-making processes, in which actors are interconnected within a complex and unclear web of relations, and where often also unexpected or unintended effects may occur. Although the local government is placed more at the center of attention and seen as mobilising and coordinating body, it can therefore not function as the authoritative body, deciding on (spatial) societal issues on its own (Stone, 1989; Stoker, 1995; In: Van Aalst, 1997). "In order to be able to function effectively the government should link up with different actors that do not belong to the government apparatus" (Van Aalst, 1997, p. 71).

This brings us to the concept of 'regimes'. Stone (1989, p. 4) described those as "an informal yet relatively stable group with access to institutional resources that enable it to have a sustained role in making governing decisions"; and within such an arrangement, "public and private interests function together to make and carry out [those] governing decisions" (Pacione, 2009, p. 419). Such regimes form "through a meshing of the interests of a number of groups co-operating behind an agenda to achieve a set of policies" (Idem). This implicates that (urban) decision-making processes are not only a matter of capital-driven decisions or developments, reserved to specific 'growth elites' (as was understood earlier in the debate), nor a sole task of governments, but in fact comprise cooperations between various political and administrative actors, business (and industry) parties, and organised interest groups, all with their own goals and interests (Stone, 1989; Van Aalst, 1997; Pacione, 2009). So, "while not all members will necessarily want the same outcomes from the regime, all perceive it as in their interest to remain within the coalition" (Pacione, 2009, p. 419). While decision-making thus occurs mainly through such regimes, the central role of local governments also means a

certain indirect influence of the general public; "(...) generally, local governments must be responsive to public opinion, group demands and electoral imperative" (Idem).

The main added value of the 'urban regimes' theory therefore lies in the attention given to coalitions between public and private actors – with possibly also interests besides economic motives – in decision making processes, and their role in urban policy and development. In contrast to the economically deterministic line of thinking, the 'regime theory' thus also acknowledges the importance of policy, and politics, for urban development. What is then important for understanding decision-making processes, is to analyse the conditions for such cooperations, and the relations and differences between the different actors. With this the theory makes a more specific link to the well-known concept of public-private partnerships, in urban development. Especially in the light of the changes observed earlier in the role and functioning of local governments (decentralisation, increased inter-urban competition, more 'entrepreneurial' and stakeholder-oriented governance approach, and recently the economic downturn), this emphasis on public-private coalitions is interesting and useful for this research. Furthermore, the regimes theory also incorporates a more specific context element; which is also considered a crucial element in this research. For example, Pacione states that "the intensification of social and economic change in the post-industrial city and construction of new socio-political groupings (...) has served to make urban regimes more complex and volatile. Local political cultures defining the 'proper' role of local government may also limit the range of possible local policy action" (2009, p. 419). Adding to that, besides local influences, "indeed 'regimes' function in a broader regional and national context. Non-local forces also have an impact: they constrain, enrich and influence the 'regimes'" (Van Aalst, 1997, p. 72).

Finally, even a specific link with the stadium debate has been made. While Mason started off with relating stadia to notions of the 'urban growth machine', he subsequently also relates this with 'urban regimes': "this [civic growth] agenda provides a common ground for both political and business elites to align their interests (cf. Elkin, 1987; Logan & Molotch, 1987; Stone, 1989). And although many among the local regime or coalition may not even be sports fans, they likely understand how interest in sports teams can be leveraged in order to attain broader development goals" (2012, p. 165). This highlights that while stadia are considered interesting projects for a pro-growth agenda, in that capacity they also seem to be effective in bringing together coalitions of various actors, with different and/or broader development goals. However, aligning those interests, as well as creating (public) justification and support for such projects, may be rather complicated and nuanced; "garnering widespread support for sports facilities can be a highly contested process. However, while proponent groups may agree upon the utility of building state-of-the-art sports infrastructure, persuading local citizens that using public funds for said use is another issue altogether" (Mason, 2012, p. 165). As Mason (2012) reviews some earlier studies on this issue, it seems that resources and organisational advantages are not necessarily decisive, and that purely economic arguments of benefit of such a development may also be challenged by opponents. Instead, a "more interactive and engaged process of arguing for the merits of a stadium development project, where economic development arguments [are] less widely employed by proponents (and therefore less challengeable)", may prove more fruitful (Idem).

Making this a step more concrete, Swyngedouw, Moulaert & Rodriguez (2002) take a neoliberal perspective on urban governance and urban development processes, and in particular related to large-scale urban development projects. Looking at both the changing planning context found earlier, and that the focus of this research is on stadium developments, which can be regarded as large-scale urban development projects in itself, while especially more recently those are often also coupled with some even broader (area) development

projects, this perspective might add some useful insights in light of this research. In their research, they speak of a shift towards a neoliberal view on urban development, dubbed as the ‘New Urban Policy’, derived from ‘New Economic Policy’ and conservative liberalism; this approach “seeks to reorient state intervention away from monopoly market regulation and towards marshaling state resources into the social, physical, and geographical infra- and superstructures that support, finance, subsidize, or otherwise promote new forms of capital accumulation by providing the relatively fixed territorial structures that permit the accelerated circulation of capital and the relatively unhindered operation of market forces. At the same time, the state withdraws to a greater or lesser extent from socially inclusive blanket distribution-based policies and from Keynesian demand-led interventions and replaces them with spatially targeted social policies and indirect promotion of entrepreneurship (...)” (Swyngedouw et al., p. 552). This trend is driven by various economic, social, political and ideological changes, and with a particular emphasis on the local level, is strongly related to a fundamental shift from traditional government to more diffused and flexible forms of governance. Looking at urban development, or renewal, this is mainly regarded as a ‘mediated objective’, a ‘necessary precondition’ for economic and competitive growth or regeneration, which form the core objectives of the new urban policy (Swyngedouw et al., 2002).

Within this context, main focus seems to be on (large-scale) urban development projects. Against such a neoliberal background, local governments take up a more proactive, entrepreneurial style of governance, with policies shifting from a universalist to more specific, place based, and project focused approach. The comprehensive plan has been replaced by the spatially targeted, strategic and emblematic project as the main focus and instrument of urban development policy. It is in this light, that also culture became an increasingly important element; “(...) culture became more of an instrument in the entrepreneurial strategies of local governments and business alliances (...) This shift was related to deep-rooted changes whereby modernist cities gave way to “postmodernist” cities (Harvey, 1989) and which occurred against the backdrop of the unravelling of the Keynesian welfare state and the emergence of neoliberalism. (...) In many European cities, culture came to be seen as an instrument to strengthen the local economy, brand the city, and as a crucial plank in the strategies for inter-urban competition” (Kloosterman, 2014, pp. 2513-2514). However, this should not so much be seen as a causal process in this particular order: “it is exactly this sort of new urban policy that actively produces, enacts, embodies, and shapes the new political and economic regimes that are operative at local, regional, national, and global scales. These projects are the material expression of a developmental logic that views megaprojects and place-marketing as means for generating future growth and for waging a competitive struggle to attract investment capital. Urban projects of this kind are, therefore, not the mere result, response, or consequence of political and economic change choreographed elsewhere. On the contrary, we argue that such UDPs are the very catalysts of urban and political change (...)” (Swyngedouw et al., 2002, p. 551). Nevertheless, it seems that such large-scale urban development projects have become one of the most clear and widely used urban (re)development strategies by city elites, aiming at ‘economic growth and competitiveness’. These projects often combine specifically targeted physical improvements with socioeconomic development objectives, while they are also considered to have a distinct symbolic impact; they are a form of intervention that “goes hand in hand with an eclectic planning style where attention to design, detail, morphology, and aesthetics is paramount” (Idem, p. 567). As this contrasts, or moves aside from the statutory planning norms and processes, the ‘framework of exceptionality’ that is often attached to such projects is justified by (local) governments based on different factors: “scale, the emblematic character of the operation, timing pressures, the need for greater flexibility, efficiency criteria, and the like.

'Exceptionality' is a fundamental feature of the new urban policy, based on the primacy of project-based initiatives over regulatory plans and procedures" (Idem, p. 577).

Despite this distinct neoliberal and project-focused approach, however, still there remains an important place for a strategic and planning aspect. Governments often still seem to play a central or even leading role in urban development projects. Nevertheless, within the urban policy- and decision-making process some drastic changes have occurred. As discussed local governments adopt a more entrepreneurial attitude, and in general a more fragmented, pluralistic and 'stakeholder' urban governance has emerged. As Swyngedouw et al. found, "a complex range of public, semipublic, and private actors shape an interactive system in which different, but allied, views and interests are 'negotiated'. Public-private partnerships epitomize the ideal of such cooperative and coordinated mode of 'pluralistic' governance" (2002, p. 566). While this may suggest a more non-hierarchical, collaborative and participatory approach, and these UDPs are often legitimised as such, in fact these projects are often mainly associated with and include networks or coalitions of various technical, economic and political elites. Limited further participation gives those projects a rather socially exclusive character, even described as a 'democratic deficit' (Idem).

The agendas behind those projects may differ from case to case, and range from mainly economic growth driven objectives to more integral projects focusing also on social issues and conditions. However, while "the official rhetorical attention to social issues is mobilised politically to legitimise projects, (...) the underlying and sometimes explicit objective is different" (Swyngedouw et al., 2002, p. 569). In all cases the core underlying principle for the formation of such coalitions of stakeholders in order to realise these large-scale development projects, is to create an increase of value – and specifically, a viable (i.e. profitable) venture. In general, "the main objective of these projects is to obtain a higher social and economic return and to revalue prime urban land. The production of urban rent is central to such urban redevelopment strategies" (Idem, p. 557). For local governments, an increase in land value c.q. rent is an important possibility to raise its financial resources, particularly through tax returns. On the other hand, through the real estate-based character of such development projects, private actors also reap the benefits of value increases of land and the built environment. In this light, inherent to these UDPs is also a clear element of risk, as their economic viability depends on such an anticipated 'value leap'. Although risks are taken by both public and private sector, also here governments often take a central role – which is then justified by the various arguments mentioned above. For the private sector, "such projects provide opportunities to extract from the state (at a local, national, or EU level), in addition to its direct contributions, further resources in terms of public investment for infrastructures, services, and buildings. Most of the project's development costs are supposed to be met from the sale or renting of land or buildings – rents the value of which has been jacked up through state support, re-regulation, zoning changes, infrastructure investment, and the like" (Idem, p. 572). Whether such a value increase is actually realised, depends on the local or wider-level context and economic conditions; apart of course from the characteristics of the project itself. As a consequence, these projects also often target the more high-end (i.e. higher income-yielding), and thus more profitable residential or economic functions or developments. Other functions, for example social housing (or, in fact, amenities such as football stadiums), are less profitable and therefore would often require substantial public funding or subsidies in order to include them.

This neoliberal, project-focused approach, explicitly or implicitly, links back to notions of both the concepts of growth machines and urban regimes. In this light of the new urban policy, versions of both growth machines and regimes still seem to be observable in the urban landscape and development processes; and in this context, these are then primarily geared

towards large-scale urban development projects. As also discussed, “the imagin(eer)ing of the city’s future is directly articulated with the visions of those who are pivotal to the formulation, planning, and implementation of the project. Consequently, these projects have been and often still are arenas that reflect profound power struggles and position-taking of key economic, political, social, or cultural elites. (...) As such, the UDPs can be considered as ‘elite playing fields’ (...)” (Swyngedouw et al., 2002, p. 568). Thus, these development processes are led by rather highly exclusive, pro-growth coalitions; in which a city’s elites promote and legitimise development projects with a ‘developmental view’ and ‘boosterist’ discourses of regeneration, innovation and success, highlighting the importance and ‘milestone’ character of the project for the future of the city. Together with the particular emphasis on land value increases as the main objective of those projects, this actually comes close to the notions of the ‘growth machine’ approach. In fact, as Swyngedouw et al. summarise, “growth machines, elite coalitions, and networks of power are centrally important in shaping development trajectories (...)” (2002, p. 570). As the particular focus is on economic growth and value increase this seems to be more in line with the classical ‘growth machine’ approach of Logan and Molotch; the ‘entertainment machine’ of Clark (2004) does not seem to be directly reflected, apart from perhaps the broader development goals and symbolic value attached to the large-scale UDPs. On the other hand, within this new urban policy perspective there is also a strong focus on the governance and policy element, and the differences of this new form of stakeholder, network-oriented, collaborative governance versus more traditional, statutory government structures and institutions. Important understanding in this context is also that still a central and often even leading position is taken by (local) governments in development projects. However, as these take a more entrepreneurial attitude, there is particular attention for the formation of urban (growth) coalitions, or, in fact, regimes. Within those, although rather exclusive and reserved to a city’s elites, various public and private actors and interests come together, aiming at shaping urban policy and development (through these UDPs).

To wrap it up, within this neoliberal context of the new urban policy in fact the UDPs are considered as the ultimate growth machines for urban development, around which then coalitions, or regimes, of a combination of public and private actors are formed to realise such developments. Relating back to this research, while perhaps not explicitly mentioned in the literature as such, stadiums are of course also large-scale urban development projects in itself, and especially more recently sometimes combined with even larger (area) development objectives. Furthermore, the changes in urban governance processes and structures, the neoliberal and ‘New Urban Policy’ perspective, are interesting with regard to the context element, and especially the recent stadium developments seem to fit well into this context. On the other hand though, the observed recent developments in the context of urban and area development, seem to pose a potential shift away from or at least changes in this context, leaving the question to what extent these notions of the new urban policy and large-scale urban development projects still apply. As Kloosterman (2014) already concluded with regard to cultural amenities, an ‘age of austerity’ seems to have emerged in this respect.

### *2.1.7 Stadium developments: Roles of actors and funding*

In the previous section, some more ‘meta’ theoretical concepts regarding urban development processes have been discussed. What can be taken from that in light of the football stadium developments that are the subject of this research, among other things, is that culture and sometimes even stadia are considered important elements of a pro-growth agenda, particularly against a neoliberal ‘new urban policy’ background in which large-scale urban development projects are at the centre of attention, and that the realisation and decision-making processes in this respect generally involve the formation of coalitions of various public and private

actors. The latter aspect, brings us closer to the more concrete level of specific development projects. And although this element has already been touched upon above, a few more brief notes on this concept of public-private partnerships can be made here. Large bodies of research are devoted to more extensive and detailed understandings and analyses of actor structures, e.g. taking institutional or network approaches, and while such notions are not ignored and may also apply here, they will not be extensively elaborated upon in this place. This research does not so much encompass a fully comprehensive actor analysis, but is in the first place looking into the impact element. But, as the realisation and decision-making processes of a project are crucial in understanding the extent to which impacts may be realised, and the underlying reasons for that, it is an important element to take into account.

Traditionally, cultural amenities and in particular stadiums have been public matters, developed by governments for the city's population; in fact this already started with the ancient Olympic Games and arenas and theatres under the notion of 'panem et circenses', but also looking at football stadia in more modern times these have long been mainly municipal facilities. This has changed somewhat over time, with the described commercialisation of sport, increasing market interest in football and the emergence of an economic sector in its own right. At the same time, against a background of an emerging neoliberal perspective on urban development and policy, (local) governments also adopted a more market-oriented entrepreneurial attitude in urban planning policy and projects. However, also in this context still an important role for governments and planning appeared to be present, but increasingly through urban development projects and in cooperation with private actors. As found before, within that context, cultural planning, amenities and specifically also sports stadia emerged as promising and often-used strategies for local governments; such projects have widely been actively supported and deployed by governments in terms of policy, but often also encompassed financial involvement. What should be noted in this respect, is that stadia are inherently uneconomic developments, as they form a particularly inefficient use of land (a.o. Van Dam, 2000). Therefore, especially in the more recent cases often combinations are sought with other developments, functions and private parties (investors, developers, et cetera), to make these developments financially viable. However, as seen stadiums are still heavily invested in by local governments, all over the world and also in the Netherlands (i.a. Van Dam, 2000; Kool, 2013; Mulder, 2007). The underlying rationale is always the importance for the city attached to those facilities; previously simply as entertainment provision for the city, but more recently and against a neoliberal background increasingly also broader impacts are ascribed to it, consisting of various tangible and intangible effects (as described in detail above). However, on the other hand, such state support is as often criticised as it is deployed, and the justification of such involvement is a major point of debate. More recently, of course the Dutch context of urban planning and development has seen some drastic changes; and in this 'age of austerity' as Kloosterman (2014) described it, in which both public and private actors have to deal with generally lower financial resources, and the pro-active developmental attitude of local governments seems to be in decline, it is the question how the divisions of tasks, also in terms of funding, between the various actors in stadium developments may take shape. For one, despite the aforementioned, Kloosterman argues that in fact large-scale mainstream-oriented cultural amenities should not be part of a state-led cultural planning in this context, as they should look to be self-supporting – although this may of course also be an issue of preference and debate.

Nevertheless, what is clear, is that stadium development projects involve a form of public-private partnerships. This is also in line with the earlier found notions of the urban regimes, as well as the neoliberal urban development project structures. A lot of research has been devoted to the concept of 'PPP', and its central role in contemporary urban planning; internationally, but also in the Dutch context (i.a. Kenniscentrum PPS, 2006; Klijn &

Teisman, 2002; Klijn & Van Twist, 2007). And as Thornley (2002) concluded, it is also considered as the common instrument in stadium development projects. But as he also emphasises it is a rather broad concept, which is also exemplified by the case of stadia. For example, the involvement of actors strongly depends on the role and purpose of the stadium; as a stadium for a particular football club – a private company seeking an accommodation for its economic activity – is different in that respect from national or event-aimed venues. Furthermore, “public–private partnerships will also vary according to the relative strength of the actors involved. Who is acquiring the land, who is paying for the construction costs, who is responsible for the running costs, how are the ancillary needs such as infrastructure being dealt with, how is it being integrated into the physical and community fabric of the city?” (Thornley, 2002, pp. 816-817). The role of different actors in such a process is thus strongly affected by their power and resources they can ‘bring into the arena’. These in any case include the football clubs (in all cases the beneficiaries of the stadia investigated in this research), often other private parties and market interest, and from the public side this may include local and, particularly in European cases, higher level governments. As Thornley concludes, “often the result is a complex network of actors including many private sector agencies and many levels of government. These networks can also change over time through the planning, building and operating stages” (2002, p. 817).

Within these networks, and similar to the findings of Swyngedouw et al. (2002) related to large-scale UDPs, Thornley finds that “the public sector appears as a significant actor, in one form or another, whatever the surrounding political and ideological environment” (2002, p. 817). This is particularly the case in the United States, but also in the rest of the world, (local) governments taking up a more entrepreneurial approach made that those also became increasingly involved in such development projects. In the least place, the involvement of governments is necessary in terms of facilitating such a development; but as described earlier, increasingly stadia were also seen as interesting and important elements in urban development policies, which not rarely, then also led to financial involvement of local and/or higher level governments. Apart from the justification of such financial support, which as described earlier is often heavily questioned or criticised, whether combined with broader development objectives or not, it is in any case the task of the public sector to balance such competition and growth driven pressures, and the local effects of such developments. As Thornley states, “stadia developments should not be regarded as isolated projects but integrated into broader visions of local regeneration and strategic city policy, over issues such as social inclusion, sustainability and public transport” (2002, p. 818).

The recent developments in the Dutch context of planning and development, as described earlier, call for different ways of thinking about these issues. For both the division of tasks between actors and the funding of development projects this may have major consequences (TU Delft, Deloitte & Akro Consult, 2011; De Zeeuw, 2011). Governments have to deal with shrunken resources, possibly impeding the deployment of financial support in the manners that we have seen before. This may seem to shift the focal point somewhat more towards private actors, but these also have to cope with a new reality of financial constraints. While this may implicate stadia may not, or in a more sober fashion come off the ground, it could also pose an increasing necessity of combining with other private actors or functions. This leaves the issue, what the future of both new stadium developments and stadium impacts may be, and whether, how and/or to what extent these may still be realised in the future – something the existing literature has not yet been able to address. If so, in any case a certain form of PPP seems inevitable also in this context. In general, a growing body of research is looking into a ‘new mode of area development’, eagerly looking for new models and constructions for cooperation and funding. However, this also strongly depends on various factors, such as the context, type and location of the development (TU Delft et al.,

2011). Van der Krabben et al. (2013) for example look into various possibilities for new and innovative models, although particularly focused on transit-oriented developments, while in the research of TU Delft, Deloitte and Akro Consult (2011) also a couple of potentially useful models are discussed; for example a 'joint venture light', 'construction claim new style', 'concession model' or 'coalition model' are discussed. Among some more recent stadium studies, for example Humphreys & Nowak (2015) also discuss 'new' models of funding, like the concept of Tax Increment Financing (TIF), but not yet to unqualified success. However, as this research is primarily focused on the impact element, this aspect will not be elaborated much further. The scope of this research will only be to take a more shallow exploration of the future implications of this changing context for stadium developments and their potential impacts, based on a recent existing case, in terms of the possible roles of the different actors, funding constructions, combinations with other functions, et cetera – or in other words, what form of public-private partnership.

#### *2.1.8 Stadium developments: Location*

Location is of course not a concept that in itself needs further explaining; however, the way as to how it is considered and applied in this research, and some theoretical notions on the concept related to stadium developments, will be briefly discussed here. In this research, location will be mainly regarded in terms of the locational choice in the decision-making process, and what the consequences of this are for the impact of the stadium for the city. As Mason also highlighted the importance of this, "given the size of sports facilities – which can take up a considerable development footprint – and the types of events that are held there – which can result in different usage patterns, traffic, and other effects – deciding where to place these venues can influence land use in urban areas for decades" (2012, p. 165). Looking at the impact element in relation to stadium location, Corwin (2011) concludes from his study on different stadium impact researches, that location is in fact one of the key factors for success. Location seems to be important in realising additional developments, such as economic effects and additional functions. Furthermore, the location of a stadium is also an important element in social terms, both in terms of community, binding and pride effects of existing stadia (Bale, 2000), and the creation of regional pride and identification through the creation of iconic imagery of new developments (Ahlfeldt & Maennig, 2010). On the other hand, location is of course also a crucial factor in play in 'NIMBY' sentiments, something that should thus also be taken into account (i.a. Bale, 2000; Ahlfeldt & Maennig, 2012). Finally, a growing number of fairly recent studies take a quantitative approach to stadium impact (see also section 2.1.5), in particular also looking at an element of proximity c.q. distance to a stadium location, to define 'stadium impact areas'. In doing so, they try to control for locational characteristics in order to determine the 'pure' impact of a stadium, but with that thus also underline the influence of location. It could therefore be that certain effects observed may in fact (partly) be caused by characteristics of the location, rather than the stadium development (e.g. Huang & Humphreys, 2012; Humphreys & Nowak, 2015). Either way, in terms of overall urban development this does emphasise the importance of location. Furthermore, defining an impact area also highlights the importance of taking the scale of impacts into account in relation to locational choice and broader urban development objectives.

For the choice of location, Thornley (2002) in general distinguishes four possibilities, all with different implications; city centre, inner-city location, edge of city location, or deprived neighbourhood. For each location type pros and cons can be identified, and of all examples in practice can be found. Important arguments for more edge of town locations are that often the space available is relatively large, development there also relatively cheap, and

to a lesser extent potential conflicts with other urban functions have to be taken into account (Idem). As Kloosterman states regarding large-scale mainstream-oriented cultural amenities, particularly in Western Europe, these are often found on isolated out-of-(inner-)city locations, as they generally require a relatively large space and good car accessibility. As a consequence, he argues “this relative spatial isolation makes it, on the one hand, much easier to internalise the spill-over effects of spending by visitors, but, on the other hand, diminishes the impact on the city itself” (2014, p. 2521). Inner-city or city centre locations, have the advantage of the possibilities to connect with the dense network of existing infrastructures and facilities in such locations, while it is sometimes also considered as a way of revitalising such inner-city districts (Idem). Particularly in the US some examples of this exist and are investigated, although outcomes do not seem universally positive (a.o. Lee, 2002; Chapin, 2004). In Europe, the Millennium Stadium in Cardiff is a prime example, that is generally regarded positively (a.o. Jones, 2002; Davies, 2008). Also in a European context, in a study for a new multifunctional stadium in Belfast Berry et al. even find “overwhelming support for in-town sites as the most advantageous location for multi-purpose sports stadiums. The evidence stems from the worldwide body of knowledge and in addition, the vast majority of Northern Ireland stakeholders consulted expressed strong support for a city centre location. The research found limited support for an out-of-town location” (2007, p. 8). Summarising the advantages, they argue “the economic viability of a stadium is greatly enhanced when it is located within a critical mass of population such as a city centre. Its convenience in terms of proximity ensures regular and frequent use. Large stadiums also create an iconic presence amongst a city population, whereby citizens have pride in belonging to a city with such an icon in its midst” (Idem, p. 85). On the other hand though, undoubtedly large sports stadia are a potential source of nuisance, probably even more evidently manifested in inner-city locations (i.a. Thornley, 2002). Finally, a location in a deprived neighbourhood, is sometimes chosen as a means of revitalising such an area by bringing new development and ‘life’ to the location. However, in such cases often the developments remain rather isolated from their surroundings; for this to work properly it is therefore necessary to integrate the facility in a broader, by the local government led or guided development strategy (Idem).

Nevertheless, contrary to many other cultural amenities, and more in line with the large-scale mainstream amenities Kloosterman (2014) speaks about, stadiums are not very often found on inner-city locations, particularly also in the Netherlands. Similar to earlier findings, also in this respect stadiums take a rather exceptional position in the domain of cultural amenities, that are more often considered also as potential sources of nuisance for their location than other amenities. Generally, stadia thus do not particularly seem facilities for inner-city locations, something that is exemplified by the football stadia in the Netherlands, which are predominantly found more on the edge of cities. There have been and still are some examples of stadia in more inner-city, or at least rather dense urban residential areas, however these are mainly older stadia that once also were edge-of-town locations, but that have been caught up by a growing urbanisation (Van Dam, 2000). So, this is more the effect of the historical development of the cities, and apart from perhaps a socio-cultural ‘neighbourhood function’, these stadia have been or are often also considered as elements of nuisance – in fact in some cases even an argument for moving to a new, more remote location – rather than that they have been deliberately placed there as an inner-city stadium. Looking at the more recent ‘wave’ of newly developed stadia, these have, although to a varying extent, also related to the balance between safety issues on the one hand and additional impact objectives on the other, clearly also been placed on locations more on the edge of cities (Van Dam, 2000; Kool, 2013; Mulder, 2007). To what extent the described changes in the Dutch context, for example in terms of a general shift from ‘expansion’ to ‘infill’ oriented development, and related to that seemingly more limited possibilities for ‘growth’ and ‘value

leaps' in greenfield developments (as the common financial model for large-scale integral development projects) (i.a. Van der Krabben, 2011), affect the realisation, funding and impacts of stadium developments is an interesting issue, that remains to be seen.

## 2.2 Conceptual model

Based on the previous discussion of the core relevant theoretical concepts and notions a conceptual model has been drawn up, in which schematically the relationships between the core concepts from this research are presented. This conceptual model can be found in figure 2.1.

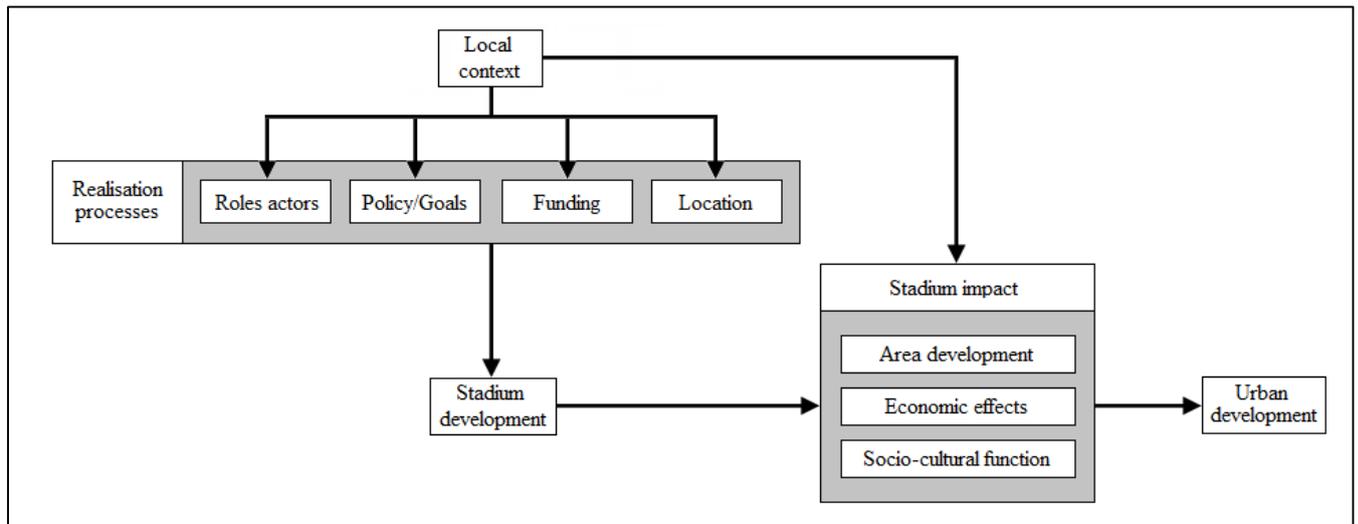


Fig. 2.1: Conceptual model.

In the model first of all of course the central element of this research can be found, the stadium development, along with the other core concepts of urban development, local context, realisation processes and stadium impact. The latter two comprise of a couple of subconcepts, that are displayed in the grey boxes. The arrows represent the connections and relations between those concepts, which will be briefly discussed below. First of all, a stadium development is defined by its realisation or decision-making processes; whether it is realised in the first place, but also how, by whom, where and in what form and capacity. The realisation process thus consists of a couple of elements. First of all, which actors are involved, and to what extent – thus what roles do which actors play. Each of those actors, will then have their own specific goals within the process; particular attention in light of this research is attached to urban development policy, mainly of the local government. Also related to the involvement of actors, is the funding of the stadium, and which actors contribute to what extent to the funding of the stadium; this might be arranged by the core actors, but could also pose the involvement of other actors particularly in light of this funding. Finally, the element of location, or choice of location, is also an important element within the decision-making process around a stadium development.

Moving on in the model, beyond the stadium development, in the bottom half of the model, lies in fact the core notion behind this research: a stadium development producing certain impacts, which subsequently pose a certain form of urban development. The arrows indicating these links could thus very much be regarded as presenting a simple sequential and causal relationship. These impacts of the stadium can then consist of three main aspects, the dimensions of stadium impact defined before: area development, economic effects, and socio-cultural function. Effects or improvements on those dimensions, are thus considered as urban development.

Finally, moving back to the top of the model, an important factor of influence is the local context. First of all, it is understood the local context affects all elements of the realisation processes of a stadium development; the involvement of various actors, the roles they want to, could and will play in the process, the goals they formulate in doing so, and particularly the urban development objectives the local government formulates, the extent to which various actors are able and willing to contribute to the funding of the stadium, and finally, the availability, suitability and desirability of potential stadium locations. So, the 'external' element of the local context thus affects the internal elements of the stadium development process, and thus through this indirectly also the realisation of the stadium, and eventual impacts it might produce. In addition to this, the local context is expected to also have a more direct effect on the stadium impacts, as a more 'external' factor of influence, on the three dimensions. In both ways, the local context may thus pose a factor that affects the extent to which a stadium development contributes to urban development.

### 2.3 Operationalisation

Following the theoretical framework of analysis outlined above, based on the existing literature, a couple of the core concepts will be further operationalised here. With this the still somewhat abstract or general theoretical concepts will be provided with some more concrete and 'measurable' indicators, that will serve as the grips for the eventual analyses in this research.

First of all, a central element of this research, stadium impact, should be further operationalised. As discussed, three main dimensions have been identified, area development, economic effects and socio-cultural function; which based on the existing literature as described in section 2.1.5 can be divided into the following indicators:

- Area development:
  - Urban land use & other urban functions;
  - Quality of public space;
  - District formation;
  - Redevelopment old location.
- Economic effects:
  - Business activity;
  - Employment;
  - Property values.
- Socio-cultural function:
  - Entertainment function;
  - Quality of life;
  - Neighbourhood function;
  - Identification, binding & pride;
  - Image effect & city marketing.

For area development, the first basic and most obvious indicator is the attraction of other urban functions, and with that an increase in the share of urban land use in a particular area or city district. This may include offices and other business establishments, retail, residential functions, but for example also infrastructures. The quality of public space, is related to the idea that as a consequence of a stadium development, more attention and resources are devoted to the enhancement of the quality of public spaces. Thirdly, district formation means whether a certain recognisable, or even thematised (e.g. sports-, leisure- or business-oriented) district emerged around the stadium. Finally, and least commonly referred to in the literature, is the redevelopment on the vacated old stadium site, which on the level of the city as a whole can then also be considered as urban development.

The economic effects consist of three indicators. First of all, an important element in this is the increase in business activity, in and around and directly or indirectly attracted by the new stadium. This can be the establishments of businesses in or outside of the stadium, as well as more footloose conference ‘business-to-business-like’ activities. Somewhat related to this, stadia are sometimes considered to have a positive effect on employment temporal but also structural, both in the area and for the city as a whole, mainly related to an increase in business activity and visitors coming to the area and city. Finally, following particularly some more recent studies, the understanding is that a stadium might contribute (or at least affect) property values in its surroundings, within a certain impact zone.

The most basic element of the socio-cultural function of a stadium for a city, is of course the entertainment function it provides for the city; or in other words, the number of visitors it attracts. Furthermore, and still a rather broad term, the understanding is that a stadium might contribute to the overall quality of life; this might be related to a number of factors, such as environmental quality, amenity level, entertainment function and a more intangible social or symbolic value. Somewhat more specific, is a potential neighbourhood function of the stadium. This means, whether the stadium – apart from the city-wide entertainment function – also functions particularly as an element or amenity of importance for its surrounding neighbourhood; as something of a meeting place or community centre, or in more symbolic terms. Finally, such a social effect is also sometimes mentioned more outwardly directed; the stadium as an ‘icon’, ‘symbol’ or ‘visiting card’ for the city, or even more concretised deployed in city marketing.

For the concept of the local context, the following operationalisation is defined, based on the existing literature as described earlier on (see section 2.1.4). Note that this incorporates elements both ‘internal’ to the local context (e.g. city-specific characteristics) and ‘external’ or wider aspects that influence the local context (e.g. economic downturn). These are all considered under the header of the ‘local context’, simply because a development project such as a stadium of course always takes place within a certain locality. Furthermore, the specific focus of this research on football stadium development projects, means that the local context here includes all elements relevant in that particular light; so both general aspects such as the economic climate and municipal policy, but for example also characteristics of the football club.

- City characteristics:
  - Relative location;
  - Size (population) & demographic situation and trend;
  - Historical & cultural characteristics;
  - Location availability.
- Political and administrative situation:
  - Political colour and culture local government;
  - Municipal policies and strategies (general, spatial, land, development projects);
  - Financial position local government;
  - Other governments involvement.
- Local economic climate
  - State of business, property & development markets;
  - Presence & characteristics of developers and commercial parties;
  - Financial positions market actors.
- Football club:
  - Characteristics (size, performance level, tradition & history, fan base);
  - Financial position;
  - State of old stadium (area).

### **3. Methodology**

In this chapter the methodology of this research is further elaborated and clarified. Consecutively the research strategy, research design and methods, and data collection, management and analysis methods are discussed here, and the chapter will be closed off with some reflections on the methodological choices made in this research. These methodological parts will mainly rely on the general formats and concepts as discussed by Saunders et al. (2013) and Verschuren & Doorewaard (2007).

#### **3.1 Research strategy**

The research goal and questions of this research indicate that the general objective of the research is mainly descriptive and explorative in nature. Descriptive in the senses that it will seek to describe the impact of football stadia in the Netherlands on urban development, to what extent and how this is established. Furthermore, this research will try to describe the influence of the (changing) local context on the realisation of such amenities and its impacts; but within this there also lies a more explorative element, as it looks into fairly recent developments, as well as with a view towards the future development, which means that this can only with a certain degree of certainty be determined or ‘measured’. Aside from that the research is explorative because so far only limited research has been devoted to such particular issues, which makes it to a certain extent also an exploration of potential influences and relations. Furthermore, not all Dutch stadia will be analysed, meaning that in a sense the research will remain somewhat explorative. In short, the realisation processes and impact parts of the questions are predominantly descriptive in nature, while the influence of the (changing) local context also inhibits a more explorative nature.

What all the foregoing has further shown is that the research will be a combination of theory and practice oriented research. On the one hand it will use theoretical resources, and seek to expand the scientific knowledge around the topic and its notions and concepts. On the other hand, it will be aimed at a certain practical problem, and will gain knowledge based on empirical evidence from practical examples.

The research strategy adopted in this light will consist of both a quantitative and qualitative part. As will be explained in the following, first of all a quantitative data analysis will be carried out, to try to actually ‘measure’ certain stadium effects, for example by looking into statistical data on business establishments or property values. This will thus be mainly concerned with the impact element of the research question. Subsequently, this will be supplemented with a qualitative analysis, which could shed more light on the realisation processes of a stadium development, how these look like and function, to what extent certain ‘urban development’ effects are realised by that, and particularly what the underlying reasons are for that. In this also the element of the local context and its influence will be further analysed; and thus link up with these aspects of the research questions.

Finally, as briefly discussed earlier this will comprise an inductive, but in a sense also deductive research approach. The inductive element can be found in the fact that based on certain practical examples the research aims to find some outcomes, models or suppositions. This is particularly the case when in the qualitative analysis a specific example will be used to come to certain conclusions, that might perhaps have a certain wider scope or application. But to a lesser extent this also applies to the quantitative data analysis. The deductive element encompasses that these practical examples will be analysed through a certain pre-established framework (see chapter two). The quantitative analysis also has a more deductive side; with statistical data all observations will be taken together, from which then conclusions might be drawn for ‘the stadium’ in general.

### 3.2 Research design & methods

To make the foregoing a bit more concrete, this will be translated into research design, and research methods. As already mentioned, this research consists of a quantitative and qualitative part. For the quantitative element an analysis will be carried out based on statistical data related to various indicators for stadium impact. These data will not be self-collected with this research, but consist of a compilation or composition of pre-existing data. This will be done based on the general classification of the Netherlands into aggregate spatial or data levels of districts and neighbourhoods ('wijken' and 'buurten'), from which data on the smallest 'buurt' level will be used. These data are derived from 'Kerncijfers wijken en buurten' from CBS (Centraal Bureau voor de Statistiek – Statistics Netherlands) and the 'Leefbaarometer' platform (Ministry of the Interior and Kingdom Relations) – but this will be discussed in more detail below. In any case, this can be regarded as a combination of a survey and desk research; it aims to draw a broad and generalisable picture, by quantitatively processing and analysing large quantities of data, but on the other hand these data are not so much gathered 'in the field' but acquired from existing data sources. This part of the analysis is therefore also particularly concerned with the impact aspect of the research questions.

For the qualitative part, a case study design was chosen, in combination with some desk research. The more in-depth and detailed analysis of a particular case can provide more insight in the underlying processes and reasons, and with that linking up with all the aspects of the research questions. In this respect, a single case study has been selected; apart from the obvious practical considerations for doing so, this will not so much be focused on comparing different cases, but serve as a more in-depth follow-up and complement to the quantitative analysis. In this statistical analysis different stadia are included to draw a more general, and generalisable picture, for the (recently developed) football stadiums in the Netherlands overall. What does not come to the fore in this quantitative data analysis, are the underlying processes and contexts of specific projects, and the reasons why and to what extent they have (not) been able to produce certain impacts. This is where the case study comes into play; analysing a case in more depth, enables this research to shed more light on those aspects as well. Because only a specific case will be observed here, it is of course crucial to incorporate and take into account its specific context. As usual in a qualitative case study design the research methods here will consist of conducting in-depth interviews with the relevant actors or stakeholders, and a document study in which policy and other documents will be analysed. A somewhat minor but perhaps complementary element in this could be the observation as research method, although this will not be conducted in a very substantial way. These methods do, following and contrasting the quantitative analyses, fit well with the qualitative, inductive character of the case study, by which a deeper 'plunge' can be made into a specific situation.

### 3.3 Data & data analysis methods

This section will further elaborate on the data gathered and used in this research, and will explain the sources, collection, management, analysis methods and interpretation of these data. As discussed earlier, the analysis in this research consists of a quantitative and a qualitative analysis; therefore this section is also split into two subsections discussing the data for both analyses separately. Especially with regard to the quantitative analysis this section is important, clarifying and justifying the compilation of the data set, the statistical tests run with this, how results should be interpreted, but also what the possible limitations are of the models/analyses carried out and presented.

### 3.3.1 Quantitative analysis – neighbourhood statistics

#### *Description of data and indicators*

The quantitative element in this research will comprise of an analysis of statistical data on various indicators, related to stadium impact, on the statistical entity of ‘buurten’ in the Netherlands. This neighbourhood level is the lowest level or statistical entity available in the Netherlands, and is based on the classification of ‘wijken en buurten’ by CBS (Statistics Netherlands) for the whole country. Each entity has an own unique area code, on which data can be combined, merged or sorted. While most quantitative studies on stadium impact analyse lower level or individual unit data, such as individual property values, there are also others who do analyse aggregated data (e.g. Feng & Humphreys, 2012).

For this analysis one large dataset is used, which is composed of different data sources. Main source of data is the ‘Kerncijfers Wijken & Buurten’ by CBS. CBS publishes various data on the level of ‘wijken’ and ‘buurten’, from 1995 until 2003 biannually and from 2003 onwards every year. As said taking the lowest aggregate level of the ‘buurt’, for all years available the relevant variables are incorporated in the dataset. A second data source is the ‘Leefbaarometer’, which provides a couple of indicators or scores on the field of ‘quality of life’, composed of various indicators; also on the level of the ‘buurt’. The ‘Leefbaarometer’ scores are available for 1998, 2002, 2006, 2008, 2010 and 2012. These data provide information on various characteristics of the ‘buurten’, some of which are used as stadium impact indicators, while other are incorporated into the analysis to be able to control for other factors. These data are then combined with GIS data, to incorporate the stadia and stadium areas; mainly the designation of ‘buurten’ as ‘stadionbuurten’. This is done with the help of geographical buffers and radiuses or distance rings around the stadia, subsequently combined with specific secondary stadium information. For this a topographical map of the Netherlands of 2012 and a shape file of the ‘wijk- en buurtindeling’ of 2014 by CBS are used, and overlaid in a GIS interface (although the division in ‘buurten’ may change over time, for the ease of this research just one year is used). The stadium data is then self-created, by manually locating the stadia on the map and creating point data for those, and then adding specific stadium information (derived from Voetbal International, 2015) such as stadium name, capacity and year of completion. For these, only stadia with a capacity of at least 10.000 seats are included, which is considered as a basic threshold for stadia to have a certain impact. An overview of the stadiums included in this analysis is presented in table 3.1.

<b>Municipality</b>	<b>Stadium</b>	<b>Capacity</b>	<b>On location since</b>	<b>Football club</b>	<b>Competition</b>
Amsterdam	Amsterdam ArenA	53.052	1996	Ajax	Eredivisie
Rotterdam	Stadion Feijenoord (De Kuip)	48.206	1937	Feyenoord	Eredivisie
Eindhoven	Philips Stadion	35.000	1913	PSV	Eredivisie
Enschede	De Grolsch Veste	30.014	1998	FC Twente	Eredivisie
Heerenveen	Abe Lenstra Stadion	26.100	1994	SC Heerenveen	Eredivisie
Arnhem	GelreDome	25.500	1998	Vitesse	Eredivisie
Utrecht	Stadion Galgenwaard	23.750	1936	FC Utrecht	Eredivisie
Groningen	Euroborg	22.550	2006	FC Groningen	Eredivisie
Breda	Rat Verlegh Stadion	19.000	1996	NAC Breda	Eerste Divisie
Kerkrade	Parkstad Limburg Stadion	18.936	2000	Roda JC	Eredivisie
Alkmaar	AFAS Stadion	17.023	2006	AZ	Eredivisie

Den Haag	Kyocera Stadion	15.000	2007	ADO Den Haag	Eredivisie
Tilburg	Koning Willem II-Stadion	14.500	1924 (1995)*	Willem II	Eredivisie
Doetinchem	De Vijverberg	12.600	1954	De Graafschap	Eredivisie/Eerste Divisie**
Nijmegen	Goffertstadion (De Goffert)	12.500	1939 (1999)*	NEC	Eredivisie
Zwolle	IJsseldelta Stadion	12.500	2007	PEC Zwolle	Eredivisie
Almelo	Polman Stadion	12.400	1999 (2015)*	Heracles Almelo	Eredivisie
Rotterdam	Sparta Stadion (Het Kasteel)	10.599	1916 (1999)*	Sparta Rotterdam	Eerste Divisie/Eredivisie**
Sittard-Geleen	Fortuna Sittard Stadion	10.300	1999	Fortuna Sittard	Eerste Divisie
Leeuwarden	Cambuur Stadion	10.000	1936	SC Cambuur	Eredivisie/Eerste Divisie**

*Table 3.1: Overview of stadia stadia incorporated in quantitative analyses; sorted by capacity. Source: Voetbal International (2015). \*: year in brackets indicates stadium redevelopment on the same location. \*\*: league at the moment of carrying out the analyses/league at the time of finalising this research.*

Subsequently, the ‘buurten’ are then designated as ‘stadium areas’ by drawing geographical buffers and radius rings around these stadia points. A main impact zone of 1500 metre was defined, based on existing stadium impact literature taking a comparable quantitative approach (Ahlfeldt & Kavetsos, 2014; Ahlfeldt & Maennig, 2009, 2010b, 2012; Feng & Humphreys, 2008, 2012; Harger, Humphreys & Ross, 2015; Humphreys, & Nowak, 2015; Huang & Humphreys, 2014; Tu, 2005), using their findings in impact zones, corrected for city and stadium size (see also appendix 1). Although this is of course not flawless, and does not take into account further case-specific contexts, this served as a rather basic way to interpret and apply findings of earlier studies in this respect. To create some broader or more varied results, up to 1000 metres above and below that buffers are identified with steps of 500 metres. While these buffers form a kind of ‘impact zone’, also non-overlapping distance rings, with a radius of 500 metres each, up to a distance of 2500 metre, are identified, to be able to incorporate a certain distance element into the analysis (see e.g. Tu, 2005). In case a ‘buurt’ falls into more than one distance ring, it is assigned to the ring in which the largest surface area of the ‘buurt’ falls. Given the aggregate character of the data units of ‘buurten’, which thus not necessarily (and often will not) fall entirely within their respective distance ring, this of course poses a certain limitation in this respect that should be taken into account. To add to this distance element, also a more instrumental distance measure is created, using an interaction effect. This is done by first computing the absolute distance from the centroid of all ‘buurten’ to the nearest stadium (point); this distance is then multiplied by the stadium dummy variable (taking the largest impact zone radius). This means, the interaction or distance term then only comes into play when the stadium dummy is or turns ‘1’; otherwise the interaction term equals 0. By regressing this interaction term with the different indicators a more specific measurement of the effect of distance, within the defined impact zone, for the impacts of the stadia might be identified. To elaborate on that, finally also a squared variant on this is created, which might then indicate whether a potential pattern of distance is perhaps non-linear (see also Tu, 2005). A clear limitation of this, is that the data units used in this research comprise an the aggregate level of ‘buurten’. That means, distance here is not so much that from an individual unit, such as buildings, something which is often used in such analyses on property values, but rather that of (the centroid of) a particular area, which represents an aggregate level of data often for smaller units (buildings, people) within that area. Therefore, the outcomes of this distance term in the regression models should be viewed

with some reservation. Finally, then, these GIS data are coupled together and with the statistics dataset based on the unique area codes.

All the data mentioned above are then merged into a single comprehensive dataset, of ‘long’ panel data. That means each entity, that is each ‘buurt’ for each data year, is a separate observation. To come to a fully balanced and workable dataset, first the data had to be cleaned and adjusted, variables had to be merged, recoded or newly created. Special attention had to be given to the GIS or stadium variables. Firstly, the buffers and rings were turned into dichotomous dummy variables; meaning a value of ‘1’ for stadium areas, and ‘0’ for non-stadium areas. Furthermore, a so-called distance interaction variable – based on Tu (2005) – is created by multiplying the absolute distance to stadium measure by the dichotomous dummy variable for the largest impact buffer (2500 metre); this gives the distance of a ‘buurt’ within a stadium impact area to the stadium, while for all the non-stadium areas it gives a value of zero. With this variable then the possible influence of distance to the stadium on the various indicators might be examined. As a final variation to this a squared version is produced, which might be able to give an indication on whether a distance effect is (non-)linear (Tu, 2005).

Subsequently, all these ‘stadium’ variables were then also transformed into year-specific dummy variables; first all the ‘stadium areas’ observations were – based on their area codes – assigned as ‘stadium area’, regardless of the year of the observation (i.e. not taking into account whether the stadium was actually already in place at that moment). By coupling the observation year to the year of completion of the stadia, year-specific stadium dummy variables were created, resulting in separate ‘pre-development’ and ‘post-development’ stadium neighbourhood dummies. Below in table 3.2 a very general overview is shown of the division of ‘buurten’ into stadium and non-stadium areas, for the different distance buffers and years – to give an indication of the scale of things in this respect.

Year	Area type	Buffer 2500m	Buffer 2000m	Buffer 1500m	Buffer 1000m	Buffer 500m
1995	Other ‘buurt’	10305	10334	10351	10363	10373
	Stadium ‘buurt’	75	46	29	17	7
1997	Other ‘buurt’	10320	10369	10401	10431	10451
	Stadium ‘buurt’	151	102	70	40	20
1999	Other ‘buurt’	10528	10591	10638	10680	10709
	Stadium ‘buurt’	209	146	99	57	28
2001	Other ‘buurt’	10664	10764	10843	10919	10972
	Stadium ‘buurt’	361	261	182	106	53
2003	Other ‘buurt’	10768	10870	10949	11025	11078
	Stadium ‘buurt’	364	262	183	107	54
2004	Other ‘buurt’	10766	10876	10968	11062	11126
	Stadium ‘buurt’	424	314	222	128	64
2005	Other ‘buurt’	10813	10940	11043	11147	11216
	Stadium ‘buurt’	473	346	243	139	70
2006	Other ‘buurt’	10879	11006	11109	11213	11282
	Stadium ‘buurt’	473	346	243	139	70
2007	Other ‘buurt’	10812	10977	11110	11237	11325
	Stadium ‘buurt’	594	429	296	169	81
2008	Other ‘buurt’	10803	10990	11144	11289	11386
	Stadium ‘buurt’	674	487	333	188	91
2009	Other ‘buurt’	10896	11085	11240	11386	11483
	Stadium ‘buurt’	678	489	334	188	91
2010	Other ‘buurt’	10967	11165	11334	11487	11592
	Stadium ‘buurt’	722	524	355	202	97
2011	Other ‘buurt’	11042	11245	11416	11572	11679
	Stadium ‘buurt’	736	533	362	206	99
2012	Other ‘buurt’	11156	11361	11533	11690	11797
	Stadium ‘buurt’	740	535	363	206	99
2013	Other ‘buurt’	11263	11468	11640	11797	11904
	Stadium ‘buurt’	740	535	363	206	99
2014	Other ‘buurt’	11262	11469	11642	11799	11906
	Stadium ‘buurt’	743	536	363	206	99
2015	Other ‘buurt’	11506	11709	11876	12031	12138
	Stadium ‘buurt’	731	528	361	206	99

Table 3.2: General overview of observations for stadium and non-stadium areas, per year.

To experiment with this, and to create some differentiation in the regression models in order to see either changing or robust outcomes, also two variations on this are created, based on the year of completion of the stadia. Firstly only recently developed stadia are considered (year of completion  $\geq 2000$ ); the rationale behind this is that especially the stadia developed in recent years can be identified with the notion of certain additional economic, area or urban development objectives coming with it. Also, this definition ensures that all stadia have at least some observations before and after the development; for the base variables this is not necessarily the case (areas around stadia developed before 1995, the earliest data year, only have ‘post-development’ observations). Using these model variation variables thus might make for a somewhat more balanced outcome, i.e. a more equal distribution of observations of pre- and post-development, and thus perhaps a somewhat better pre-post comparison. The second variant limits the ‘post-development’ to a period of five years (year of completion +  $\leq 5$ ), specifically with the idea to look into the short-term impact of stadium developments. These areas after five years are taken out of the equation here as missing values.

The variables that will be used as indicators for stadium impact in this quantitative analysis of this research, are displayed in table 3.3. Note that for the variables the names are as used in SPSS, hence the unusual (and Dutch) formulation. The indicators are classified by the three main dimensions of impact defined in this research. These indicators do not fully or exactly reflect the indicators previously defined in the operationalisation in chapter two. That is of course due to constraints in the availability of data; not all of those indicators are readily available or measured at all, or long enough to include. Therefore, a pragmatic approach had to be taken: while based on the theoretical framework, the data available on the ‘buurt’ level, from CBS, and additionally the Leefbaarometer, were taken as starting point; from there on indicators were selected that best match the pre-defined indicators, or reflect or represent the three dimensions of impact derived from the literature.

Indicator variable	Description	Data years
<i>Economic impact</i>		
Bedrijfsvestigingen_Samengevoegd_Klassen	Business establishments (in categories)	'95 '97 '99 '01 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14
Ln_Bedrijfsmotorvoertuigen_km2	Business vehicles (vehicles/km <sup>2</sup> )	'03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
WOZwaarde	Average property value (in €)	'97 '99 '01 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14
Ln_HogeInkomens_p	High incomes (%)	'95 '97 '99 '01 '03 '04 '05 '06 '07 '09 '10 '11 '12 '13
Ln_LageInkomens_p	Low incomes (%)	'95 '97 '99 '01 '03 '04 '05 '06 '07 '09 '10 '11 '12 '13
<i>Area development impact</i>		
Bevolkingsdichtheid	Population density (people/km <sup>2</sup> )	'95 '99 '01 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
Ln_Woningvoorraad	Housing stock (absolute value)	'95 '99 '01 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14
Omgevingsadressendichtheid	Address density (addresses/km <sup>2</sup> )	'95 '97 '99 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15
Stedelijk_Bg_Totaal_p	Total urban land use (%)	'01 '03 '06 '08 '10
Leefbaarometer_Score_PubliekeRuimte	Liveability – ‘Leefbaarometer’ score: Public space	'99 ('98) '03 ('02) '06 '08 '10 '12
Leefbaarometer_Score_Voorzieningenniveau	Liveability – ‘Leefbaarometer’ score: Level of amenities	'99 ('98) '03 ('02) '06 '08 '10 '12
Leefbaarometer_Score_Woningvoorraad	Liveability – ‘Leefbaarometer’ score: Housing stock	'99 ('98) '03 ('02) '06 '08 '10 '12

<i>Socio-cultural impact</i>		
Leefbaarometer_Score_Klassen	Liveability – ‘Leefbaarometer’ score: Overall score (in classes)	’99 (’98) ’03 (’02) ’06 ’08 ’10 ’12
Leefbaarometer_Score_Bevolkingssamenstelling	Liveability – ‘Leefbaarometer’ score: Population structure	’99 (’98) ’03 (’02) ’06 ’08 ’10 ’12
Leefbaarometer_Score_SocialeSamenhang	Liveability – ‘Leefbaarometer’ score: Social cohesion	’99 (’98) ’03 (’02) ’06 ’08 ’10 ’12
Leefbaarometer_Score_Veiligheid	Liveability – ‘Leefbaarometer’ score: Safety	’99 (’98) ’03 (’02) ’06 ’08 ’10 ’12

Table 3.3: Overview of indicators used in quantitative analysis, including description and data years available.

Regarding the interpretation of those variables; for most indicators this is rather straightforward, but for the variables that use scores instead of absolute values, a legend is displayed in table 3.4. Data on business establishments was (partially) only available measured in classes; being a rather crucial indicator, these data have been used regardless, and in fact those from the data years in absolute values, have also been converted into the same classes. Note that these classes are also not of the same size, and thus further limiting the potential outcomes – that in any case could not be interpreted in a literal sense, and only as a more comparing measurement. Due to these limitations, the variable of business vehicles is added, as the second best approximation of the indicator of business activity, to provide a somewhat more varied and nuanced picture. The Leefbaarometer main score provides an overall or combined score on liveability in general, classified into seven categories. Subdimensions, which also consist composed scores, of this overall score are then also included, to see what image emerges on some specific aspects within this in particular. These are measured in scores ranging around a value of zero, indicating a difference from the national average (although not necessarily the average of the data of the ‘buurt’ observations). For all Leefbaarometer variables, the outcomes can also not be interpreted literally, and only as a means of comparison. Furthermore, note that four variables start with ‘Ln’; this means the variable is a natural log transformation of the actual variable. Derived from a similar study by Tu (2005), this is a method to correct a variable in case of a non-linear distribution. Based on earlier testing of the different models, for those variables a natural log transformation improved the normality of the distribution, also increasing the overall explanatory power of the model as indicated by the R squared. For the interpretation of these variables this means the outcomes cannot be taken literally, but the correct coefficients can be derived by putting the model outcomes in the formula ( $Exp(coefficent) - 1$ ).

Indicator variable	Values
Bedrijfsvestigingen_Samengevoegd_Klassen	1: 0-10 2: 10-20 3: 20-50 4: 50-100 5: 100-200 6: 200-500 7: 500-1000 8: 1000-2000 9: $\geq 2000$
Leefbaarometer_Score_Klassen	1: very negative 2: negative 3: moderate 4: moderately positive 5: positive 6: very positive 7: extremely positive
Leefbaarometer_Score_ [...]	Score ranging from -50 to 50; 0 is national average (not necessarily data average)

Table 3.4: Legend for indicators including non-absolute values.

These variables will be the main focus of this quantitative analysis; for each of those various statistical tests will be carried out, ultimately with the objective to find out what the influence of a stadium is on those indicators; i.e. to see whether ‘stadium areas’ show a significantly different development on those variables than non-stadium areas over time. To be able to determine the impact of the stadia more exactly, or purely, it is important to be able to control for other possible explanatory factors. That means, in case of observed differences ‘making sure’ that these are not caused by other characteristics or developments/trends (i.e. that those are controlled for). Therefore also other possibly relevant variables from the ‘Kerncijfers Wijken & Buurten’ data from CBS are added to the composed dataset, and will be included in the regression models as well. This includes also variables that in other models serve as the dependent variable; not so much to look at the correct coefficients or correlations, but more so to control also for those factors/variables, and thereby seeing each model as a separate analysis. The full model setups, can be found in the appendices and additional data files.

### *Analysis – statistical models*

With the dataset and indicators described above, a number of statistical models will be carried out, consisting of three main elements: descriptive statistics, non-year-specific regression models, and – most importantly – year-specific regression models. These elements of the analysis will be pointwise further outlined below.

- Descriptive statistics: This first element will provide a general and comparative overview of ‘buurten’ in the Netherlands; and specifically, compare ‘stadionbuurten’ versus the other ‘buurten’. Firstly, these descriptive statistics describe the situation in those areas at a certain moment in time (the ‘current’ situation, 2014 or 2015, and the earlier or base line situation, the first data moment of 1995 or 1997). To compare means on various characteristics or variables between both groups, a t-test for equality of means will be conducted, which indicates whether observed differences are in fact significant. Furthermore, to create a very basic ‘controlling’ element in this, the statistics will also be carried out only taking observations of ‘buurten’ in municipalities with a ‘degree of urbanity’ between 1-4; this is a variable in classes, indicating the ‘urbanity’ of an area based on address density, with 1 being very strongly urban and 5 non-urban. As all stadiums in the Netherlands are situated in cities that meet this criterion, with this the stadium areas will be compared only to ‘buurten’ in somewhat more similar municipalities in terms of urbanity – i.e. at least not with observations of less (or non-)urban municipalities. So, this first analysis will provide some background information and context on the ‘buurten’ we are talking about and that will be analysed in further detail later on.
- Regression models: The second part of the quantitative analysis consists of regression models. Simply put, this will regress various impact indicators with the ‘stadium area’ variables described earlier, also including various and data-wise all possible other characteristics, to control for as much other explanatory factors as possible. For this, the ‘standard’ generalised linear model (GLM) is used. The regression models section is split in two main elements; the first looking into the stadium versus non-stadium areas overall, regardless of time of opening, the second also incorporating a pre- and post-development element, to which also two model variations are added, as described earlier on:
  - o Model I (non-year-specific): this first regression model basically provides a general overview of stadium areas versus non-stadium areas, in a more advanced fashion than the descriptive statistics. As it does not yet incorporate the time of development of the stadia (an area that eventually gets a stadium is considered as stadium area, regardless of when it was actually developed), it

will not yet so much represent stadium development impacts, but more so more so whether there is a significant difference between stadium areas, over the past twenty years, and non-stadium areas.

- Model II (year-specific): Model II in fact forms the business end of the quantitative analysis. Compared to Model I, this model now also incorporates a before-after element; that means, non-stadium areas are compared to pre-development stadium areas, and post-development stadium areas. The core element here is then the difference between the latter two; differences in outcomes between pre- and post-development, might then be an indication of stadium impact. Simply put, with this the average levels on certain variables before and after the introduction of the stadium are compared, relative to the areas without a stadium. As said, apart from a base model two model variations are added to this analysis:
  - Model II-1: this is the base Model II, which as described above is looking into all pre- and post-development stadium area observations.
  - Model II-2: To investigate whether recent stadium developments show different outcomes, a recent or '2000 stadiums' model is created. : only looking into stadia and stadium areas developed since 2000. The underlying notion is that, also based on findings from chapter one and two, particularly recent stadiums have been increasingly coupled with broader development initiatives, which might thus produce different results. The year 2000 seems an appropriate threshold conceptual- and data-wise. Furthermore, as described such a setup might provide a somewhat more balanced or equal distribution of pre- and post-development observations, and therefore perhaps a better pre-post comparison.
  - Model II-3: Finally, a short-term impact model is added as an extra variation. This model will only look into an impact period (i.e. post-development stadium areas) of five years after the stadium opening. After five years these areas are then excluded from the analysis. Partly also based on the findings of the first chapters, it might be an interesting addition to observe whether stadia may perhaps also, or especially, produce certain impacts on a short term.

For both Model I and II, three different models with regard to the way the stadium-related variables are incorporated, are then carried out. As already described in the data section, 'stadium areas' are defined in this research by distance buffers, distance rings, and distance interaction variables:

- Model I/IIa: Impact zones/buffers. The basic element of impact, by looking at 'stadium areas' within a certain impact zone. The models are then conducted for different distance buffers, with a standard impact area of 1500 metres, ranging from 500 to 2500 metres. The magnitude of a stadium effect, is then reflected in the matter of until or for which buffers a significant difference can be observed. Theoretically, when assuming effects decay with distance (which they not always do, according to the literature), from where the difference is not anymore significant, that highlights the 'impact' distance of that particular aspect.
- Model I/IIb: Distance radius rings. To see whether there is a certain pattern related to distance, the buffers are then transformed into non-overlapping distance rings (i.e. 0-500, 500-1000, 1000-1500 metres, etc.). Each 'buurt' falls within the distance ring in which its largest surface area lies. Similar to the

impact buffers, for each distance ring a dummy variable is created, which are then – together – regressed with the different impact indicators. Comparing outcomes of the different rings, may result in some further insights into the role of distance to a stadium in terms of the different indicators.

- Model I/Ic: Distance interaction variables. The final model, takes the absolute distance between the centroid of ‘buurten’ and the nearest stadium, and thus incorporates distance more as an absolute or continuous value. This distance element is then analysed using an interaction effect, multiplying this value by the stadium dummy. That means, the distance interaction term only applies for those areas within the largest impact buffer, thus highlighting the possible effect of distance to the stadium on values for certain indicators within a stadium impact zone.

### *Notes and reflections*

Based on the aforescribed methodology of a quantitative analysis, a couple of notes and reflections should be made. The quantitative analyses that will be carried out in this research, form a certain method to create an overall image of the state of football stadia (areas) in the Netherlands in general; this ignores or overlooks of course details of and differences between individual cases and their contexts. However, it is merely an instrument to see whether an overall picture emerges for stadia and stadium areas in the Netherlands. So, the purpose and scope of this analysis for this research should also be seen in this light. This has of course its limitations, in general conceptually but also the way it has been set up in this research; these will be briefly discussed in this section, and have been taken into account in carrying out the analyses, and should be in interpreting the results. Nevertheless, the expectation is that it might still provide some useful insights in light of this research; and, in a more practical sense, it also fits best the data and resources at hand.

First of all, a couple of limitations regarding the data can be identified. A main aspect in this respect, is the fact that this research will use data on the aggregate level of ‘buurten’. To start, this means the distribution of values within such an area is not taken into account. Generalising differences in values within a certain area, especially when looking into distance effects, this may cause inaccurate or incomplete results, particularly when for example looking into property values, values which in reality exist on a more localised scale of individual entities, the true distance effect cannot be established with these data. Furthermore, this has some consequences for the definitions by which observations are considered (within stadium impact areas). For example, when incorporating ‘stadium areas’ through drawing an impact buffer with a certain radius, some ‘buurten’ fall in entirely, some just within, while others may just be excluded, while ‘overall’ they might be closer to the stadium. This is perhaps even more the case for the distance rings; as here the ‘buurt’ is included in the ring in which the largest share of surface area is located, while these distance rings are non-overlapping and included in the same model. A ‘buurt’ could thus fall within multiple distance rings, and as a consequence, might not entirely, or even half, fall within the ring it is assigned to. Therefore, even though in general it is expected to reflect a certain distance pattern, given the data level of the ‘buurt’ it is not an ideal or flawless distance measure. A further aspect of the rather large entities of ‘buurten’, and as these rings only have a width of 500 metres, is that in some models the number of observations per distance ring might be rather limited. The distance interaction variables then, also have their limitations. These incorporate an absolute distance measure, however the level of data provides only distance from stadium to ‘buurt’ centroids, and does not entail distances e.g. from individual addresses. So these outcomes in a sense do not reflect ‘actual’ distances, but again only an ‘aggregated’ measure of distances in reality. Therefore, these types of variables are probably not ideal in

this context, and actually more fit for data with individual units of measurement (houses, for example), rather than for data on aggregate level; however given the data available it seems the best alternative possible to incorporate a certain element of distance. So, although not unprecedented and compelled by data availability, using aggregated data levels does bring some points of discussion. Finally, coupling the dataset of neighbourhood statistics with the GIS-created 'stadium area' variables, only the shape file of these 'buurten' within the Netherlands of one year has been used. That means, the 'stadium areas' are only based on the division in 'buurten' of the most recent year (2014); so, there is no 'real time' link made between GIS-data and the dataset of variables used in this research, for each year. For that there might be some discrepancies in this, as this division of 'buurten' may in some cases have changed over time due to certain border reorganisations; however, this was decided simply for the ease of this research regardless, and also a quick scan of the stadium areas over the years learns that at least for those areas nothing too radical seems to have changed.

Another element related to the data available is that, as mentioned before, not all indicators are ideal representations of the pre-determined framework of stadium impacts, while not all of the pre-determined indicators could be matched with variables (with enough moments of measurement) in the available datasets. However, taking a pragmatic approach, at least for each dimension a few indicators could be identified representing most elements of impact. Moving forward, also within the set of variables, the availability of data posed some constraints. Not for all variables, data on all or the same years were available, both for the impact indicator variables and the 'controlling' area characteristics. That means, in the analyses the 'N' may differ per model, or indicator, due to the different years of measurement of the various variables. However, it was ensured that for each model there are enough, at least a few data years available, for both pre- and post-development. This also meant that certain potentially interesting variables, could not be included in the analyses due to only limited availability. It was also ensured that all 'controlling' variables incorporated in the models, do not limit the model too much, data-wise – i.e. that these are available for the same years as the indicator variable. This may not be ideal, as there may be differences between the various models within the whole analysis; however, again taking a pragmatic approach was taken here. For the exact specifications of each model that is run, see the full output documents and tables in the appendix and additional data file.

Furthermore, some reflections can be made more specifically regarding the regression models. First of all, the models incorporate multiple stadiums, and multiple observation years combined; this is done to be able to provide a broader or overall image of stadia in the Netherlands, but ultimately also to obtain enough 'buurt' observations to purposefully run such models in the first place. In any case this means that differences between and contexts of specific individual cases are not taken into account, nor fluctuations over time; and results will always remain an aggregated outcome, that can only be interpreted as an overall picture emerging from all (included) Dutch stadia together. Aside from that, in rather general terms, it is also the question to what extent outcomes derived from those models, can really be ascribed to the stadium developments? Even when outcomes are significant, and while other factors as good as possible are controlled for, this may be rather difficult and ambiguous to determine exactly. Aside from differences between cases, for example certain effects could also happen 'alongside' a new stadium development, although not (directly) caused by it; or to a greater or lesser extent related to certain other locational characteristics. This seems to be an even more plausible possibility given the sometimes limited explanatory power of the models (i.e. the R squared values); despite the inclusion of additional 'characteristics', the models generally cannot fully explain the variations in the indicator variables. Depending on the variable, this is the case to varying degrees, ranging from variations not entirely to largely not being explained

by the independent variables added to the model. This is in any case something to take into account in the analysis of the results.

On a more technical note, a clear limitation is that in many of the models one or more of the statistical assumptions are not being met (e.g. non-normality, independence of errors, autocorrelation, et cetera). Most notable in this respect, might be the occurrence of serial autocorrelation in many of the models. This is a consequence of the inclusion of multiple observation years for each 'buurt' together, and basically means that there are observations that are dependent on other observations – in this case the observation of that particular 'buurt' in the previous data years. And while these aspects can often to a certain extent be corrected for, technical (i.e. knowledge) but eventually also time constraints have prevented this. That means, the outcomes found in the analyses should be regarded with some (more) reservation.

Finally, a couple of remarks can be made regarding the definitions and relations between the three variants of Model II. First of all, Model II-1 is somewhat unbalanced in the division of pre- and post-development stadium areas. In this model all stadium areas are included, similar to Model I. So, with regard to the dataset used in this research, that means the pre-development 'stadionbuurt' observations only include stadia developed after 1995 (first data year; so older stadia do not get 'pre' observations), while the post-development observations include all stadia, and thus also those developed long before 1995 (since the most recent stadium was developed in 2008, every stadium will have some 'post' observations). This means the 'after' observations differ largely in terms of the time the stadium has been in place, much more than the 'pre' observations, and thus consist a much larger group of stadia and stadium areas in this model. Therefore, it might be possible that the base Model II is not always able to accurately describe the stadium impacts; for example, when it turns out an impact lasts only a certain amount of time (short-term effects). Another possibility in which the model might fall short, is that there is a difference in impact between older stadiums and the more recently developed ones, something which seems plausible also with regard to the findings in chapter one and two. Also for this reason the two additional variations to Model II are carried out, one which takes only stadia developed since 2000, and the other utilises an impact period of five years. These probably do improve on this aspect, as these recent stadia are more likely to include both pre and post observations within a dataset spanning (at most) between 1995 and 2014, while a short-term impact period of course excludes the much older stadia (at least those in place more than five years before the first data year). Nevertheless, also here there is still no 1:1 ratio or divide between 'stadionbuurten' pre- and post-development. Ideally of course would be an equal amount of pre and post stadium area observations for each stadium, however this is not viable given the dataset and setup of this analysis. In any case, this is an important element to critically consider in analysing and assessing the outcomes of the models. Furthermore, in this light particularly the influence of the economic downturn in the Netherlands since around 2008, as described earlier, might be affecting the model outcomes. This factor is not specifically corrected for in an explicit way in these models. As all stadia incorporated in the analysis were already developed before 2009, virtually all the pre-development stadium area observations (in all models) are from before the emergence of the economic downturn, i.e. not affected by its complications. The post-development stadium area observations after 2008 then of course will be, and thus the group overall as well. And even though the non-stadium areas of the same years will be equally affected, as the observations of all data years are taken together for each group (non-stadium, pre, post), the share of 'crisis-influenced' observations is much larger in the post-development group than in the pre-development group. For some indicator variables in particular, such as economic indicators like businesses and property values, it could be expected that this might be an element potentially distorting or skewing the outcomes. In the

recent stadia model variation then, this might relatively even be more overrepresented (that means, comparing the pre- and post-development group), as the post-development group only consists of more recent, and thus relatively more post-2008 observations. As said the short-term model variation also includes relatively more recent post-development observations, due to the five year restriction this group has also declined in size relative to pre-development. Nevertheless, this notion should thus be taken into account, for some indicator variables probably more evidently than others, when comparing and analysing differences between the pre and post stadium 'buurten', as well as to the non-stadium areas.

### *3.3.2 Qualitative analysis: case study*

Following the quantitative analysis, a qualitative element is added to the empirical part of this research, by carrying out a case study. As stated before, this will comprise of a single case; the goal is not so much to compare different situations, but to gain insight into the processes of development of such a project, its impact on urban development, the underlying reasons and factors explaining the extent to which it has produced those impacts, and what the influence of the local context is in those aspects. For this case study, the case of the Euroborg stadium in Groningen is selected. Completed in 2006, this home accommodation of FC Groningen has a capacity of 22.550 seats, and clearly has the character of a modern multifunctional stadium. There are a couple of reasons for selecting this case:

- The stadium has a medium-sized capacity (20.000+ seats); that means, based on existing literature and common sense, at least a certain impact might be expected.
- The stadium has been recently developed (2006), in fact it is one of the most recent stadium developments in the Netherlands, together with Alkmaar, The Hague and Zwolle which have been developed around the same time. In that capacity it falls within the period that can generally be identified with the notion of combining football stadia with additional developments or broader urban development objectives. Furthermore, while it is still just before the recent changes in the urban development and planning context (most notably marked by the economic downturn), as one of the most recent developments it is probably at least the most representative for the current situation.
- The stadium has been clearly developed as a multifunctional complex, placed within a clearly defined development area, the Europapark. It seems from the more recent examples, it is the case in which most strictly some harder conditions were stated (and kept) regarding additional developments and integration in a wider area, and thus related to urban development; although to a certain extent this was of a primarily financial (stadium funding) nature. And while this should not be a reason per se for picking a particular case, it might be an interesting element to be able to really analyse the role or function of a stadium within a more explicitly defined area development.
- Finally, an additional and more practical argument was that some background information and knowledge on the case was already gathered in a previous research (Kool, 2013).

As stated before, the data for this case study will mainly be collected through in-depth interviews with relevant stakeholders, as well as some document research. The interview partners consist of a combination of the various actors involved in or after the stadium development process; from someone from the municipality and the club to developer, stadium manager, representatives from the commercial functions in and around the stadium, housing association and local residents. The interviews will be semi-structured interviews, which will be following a certain structure based on the pre-determined impact dimensions and indicators, but which will also leave space for new input and improvisation from or based on

the respondents. The interview guides can be found in appendix 7. The recordings of the interviews are then transcribed in full, and the results will then be analysed by categorising the raw transcription data based on the various aspects and dimensions defined for this research. Per category or theme the data of the different interviews are then brought together to create a composed and diversified line of argument. The documents research will mainly consist of looking into policy documents, and additional reports or statements. Additional information might also be gained by observations, although that would only be supplementary in nature. All this information is then organised and analysed by transcribing (interviews), summarising, highlighting and/or categorising the information by the various subthemes of this research (for example, the impact dimensions).

### 3.4 Reflection

To conclude this section, a few short reflections on the overall methodology of this research will be given. The reliability of this research can be considered reasonable. This means in fact the reproducibility of the results of the research, and to what extent outcomes are not influenced by the observation or based on chance. The quantitative analysis can be considered rather reliable, as this is purely based on existing databases of neighbourhood statistics, which can be expected to be objectively and correctly gathered, and it does not entail personal measuring, observations or judgements. A disadvantage of a qualitative case study with in-depth interviews in this respect is that there are a few factors potentially affecting the reliability, such as the fact it concerns an observation of the researcher, and it is in large part based on a set of interviews with actors involved, who also have their own viewpoints and opinions. In part this can be taken care of by a good pre-established research design and carefully constructed interviews, with a good cross-section of the actors involved, and by possible combinations with other research methods (e.g. documents research, but also linking to the statistical element). Looking at the internal validity of both analyses, for the quantitative analysis this seems to be somewhat limited. As discussed in detail earlier on, the regression models here have their limitations, that are not all being dealt with. Particularly the assumptions that are not all met in all models (e.g. non-normality, serial autocorrelation), may potentially hinder the internal validity of this research design or method. Furthermore, the extent to which the models actually measure ‘stadium impact’, or show a causal effect (i.e. differences that can actually be ascribed to the stadium development), will not always be clear or unambiguous. There might often also be other explanatory factors not captured in the models (as not all variance is accounted for in the models, and for some the explanatory power turns out even rather low). The internal validity of the case study is rather high; in principle the study will generally measure what it should. However this stands or falls also with a good overall research setup, and for example the careful drafting and conducting of the interviews. The external validity, or generalisability, of the quantitative analysis is rather high, as in fact the entire ‘population’ of areas (‘buurten’), and all research objects (stadia, of certain characteristics), in the Netherlands are included. But also given a fictional larger population of which this would only be a – randomly taken – sample, the large numbers of observations should make for a reasonably representative and thus externally valid outcome; perhaps somewhat restrained by the limited explanatory power of some of the models, leaving room for potential other explanatory (perhaps context dependent) factors. For the case study on the other hand this is not particularly high, as it only consists of one particular case. The results obtained here will thus probably only to a limited extent be generalisable to other situations, c.q. stadiums. In addition to the quantitative analysis, this is partly also compensated by looking more in depth into the underlying reasons and processes, and particularly also the influence of the local context.

## **4. Quantitative analysis**

In this chapter, the results from the quantitative data analysis will be presented. As described in the previous chapter, this consists of three main parts; first some descriptive statistics, followed by the non-year specific regression models (Model I), and ultimately Model II, which is the most important part of the analysis and compares stadium areas before and after the development. In that order the outcomes are described below, paired with some overview tables summarising the results. While the two regression models used the same set of indicators, for the detailed description of the Model II outcomes only the most relevant and important findings are included. A description of the other indicators, as well as all full output tables can be found in the appendices and additional data file.

### **4.1 Descriptive statistics**

To start of with, some basic descriptive statistics will be presented and discussed here. This is more an exploration of the data and observations at hand, and will be discussed not in too much detail. To get a first grip on the data, some basic descriptives were inspected, looking at the ‘state’ of various variables in the dataset at certain moments in time; e.g. 2014 as the most recent data year (with a considerable number of variables), 2010 as the most recent with all key indicators, and 1995 as the first available data year. Before doing so, the cases were split by ‘stadionbuurt’ and other ‘buurt’, to be able to see how stadium areas in the Netherlands in general look like, also compared to other, non-stadium areas. For this the standard buffer of 1500 metres was used, taking the non-year-specific dummy – meaning the neighbourhood is considered a ‘stadionbuurt’ whether or not the stadium was already built at that moment in time. To compare the means on various variables for both groups, also a t-test for equality of means was conducted, which then indicates whether observed differences are in fact significant. Furthermore, as a very basic ‘controlling’ element in this, the statistics have also been carried out only taking observations of ‘buurten’ in municipalities with a ‘degree of urbanity’ of 1-4; as all stadiums in the Netherlands are situated in cities that meet this criterion, this makes the control group, the non-stadium areas that the stadium areas are compared with, somewhat more similar to those stadium areas in terms of urbanity – i.e. at least the less (or non-)urban municipalities are taken out of the equation.

When comparing the ‘stadionbuurten’ to the other areas, on multiple moments in time, it becomes clear that these two differ remarkably from each other. For all the specific years mentioned above, the vast majority of variables show a significant difference in means between the stadium and non-stadium group; that indicates that the ‘buurten’ located within a buffer of 1500 metres around stadiums vary significantly from other ‘buurten’ in the Netherlands. Of course, this only looks at the raw data, so no other factors are controlled for apart from being in the proximity of a football stadium or not. However, even when ‘controlling’ – in the most basic sense – for differences by taking only ‘buurten’ in municipalities within the same range of ‘urbanity’ (as described above), still almost all the variables show a significant mean difference. What should be noted, is that the areas also significantly differ in size, the stadium ‘buurten’ are generally smaller than the non-stadium ‘buurten’; that means for variables measured in absolute terms, a difference might either be somewhat toned down or even stronger when corrected for size. Although still this does not say very much about the stadiums as such, it does pose an interesting outcome, that indicates that it seems the areas where stadiums are generally located in differ substantially from other areas.

In general, the main conclusion that can be drawn from the descriptive statistics derived from the data, is that the stadium areas are generally more deprived, or underperforming, compared to the other ‘buurten’. The ‘stadionbuurten’ have lower average

property values, relatively high number of ethnic minorities, a lower average income level, higher percentages of low incomes, and relatively high numbers of inactive persons and social support payments. Also quality of life or liveability scores, as measured by Leefbaarometer, turn out lower than for the non-stadium areas. On the other hand, the ‘stadionbuurten’ generally accommodate more business activity, as exemplified by higher number of business establishments and business vehicles. A viable explanation for this might be that stadia rather often are located in business parks or on industrial sites. Furthermore, the stadium areas are generally also relatively urban, scoring higher on population and address density and percentage of urban land use. So despite the general understanding that stadia are often located on and also more and more moving towards the outskirts of cities, the ‘buurten’ surrounding the stadiums in the Netherlands are still relatively high density, urban areas. What should be noted, is that even though municipalities with the lowest degree of urbanity are filtered out, this is still compared to all other ‘buurten’ in all municipalities with a degree of urbanity between 1-4, while most stadia are located in more urban municipalities. Some other interesting differences include a lower average household size, and more rental versus owner-occupied housing.

Of course, this does not yet determine the impact of the stadiums, or in fact indicate possible impacts; it is not looking into development over time but only specific moments in time, does not control for other variables, and concerns all stadia together, regardless of how long ago they were developed. Nevertheless, it might well indicate that stadia are generally located in areas that differ from the ‘average’ buurt in many respects; whether or not deliberately placed there, and/or influenced by the stadium since. This first analysis included the indicators that will be used to measure the ‘impact’ later on, but also factors that are not expected to have a direct relation to the stadiums (i.e. general locational characteristics). In any case however it does emphasise that there are substantial differences between the two groups of ‘buurten’, and thus that it is important in the later analyses (regression models) to integrate these various characteristics as ‘covariates’ (i.e. additional predictor variables) in the model. That way such other factors will be ‘controlled for’, as much as possible, which is necessary to be able to find the ‘purest’ possible effect of the stadia on the different indicators, when comparing these stadium areas with the non-stadium areas.

Finally, the stadium areas here are defined by the ‘standard’ 1500 metre buffer, which was derived from the literature. In the later analyses the element of distance will be included in a more integral way. Nevertheless, a quick scan of the data looking at descriptives when taking a larger impact area, this revealed that even when taking the largest buffer of 2500 metre most differences between the stadium and non-stadium ‘buurten’ persist – i.e. still most variables show a significant mean difference, comparing ‘buurten’ within 2500 metre of a stadium with other ‘buurten’. While on the one hand this perhaps supports the supposition that differences observed are probably not solely related to the stadia but have also to do with locational characteristics of those areas, it does underline the understanding that the stadium areas are clearly different from other ‘buurten’, and thus the importance of including other variables in the further statistical models.

Variable	Stadium area (1500m buffer)	N	Mean	Std. deviation	t-test for Equality of Means*		
					Mean Difference	t	Sig. (2-tailed)
Degree of urbanity	Other ‘buurt’	9336	3,54	1,417	1,283	18,593	,000
	‘Stadionbuurt’	363	2,26	1,285			
Degree of urbanity - Municipality	Other ‘buurt’	9379	2,89	1,000	,855	19,620	,000
	‘Stadionbuurt’	363	2,03	,807			
Address density	Other ‘buurt’	9336	1136,14	1219,411	-1063,994	-14,791	,000

	'Stadionbuurt'	363	2200,14	1349,284			
Total surface area (hectares)	Other 'buurt'	9379	248,7179	537,44951	124,99612	9,109	,000
	'Stadionbuurt'	363	123,7218	239,12199			
Population	Other 'buurt'	9379	1508,85	2043,419	-1123,735	-6,218	,000
	'Stadionbuurt'	363	2632,59	3419,668			
Population density	Other 'buurt'	8981	3016,18	3438,044	-1806,620	-8,249	,000
	'Stadionbuurt'	358	4822,80	4086,778			
Population 0-14 (%)	Other 'buurt'	8348	16,46	5,309	2,228	6,953	,000
	'Stadionbuurt'	343	14,23	5,837			
Population 15-24 (%)	Other 'buurt'	8348	12,16	4,748	-3,554	-6,685	,000
	'Stadionbuurt'	343	15,71	9,799			
Population 25-44 (%)	Other 'buurt'	8348	22,98	7,608	-5,870	-	,000
	'Stadionbuurt'	343	28,85	9,662		11,112	
Population 45-64 (%)	Other 'buurt'	8348	30,10	6,621	4,430	10,299	,000
	'Stadionbuurt'	343	25,67	7,851			
Population 65+ (%)	Other 'buurt'	8348	18,32	9,573	2,759	5,255	,000
	'Stadionbuurt'	343	15,56	8,404			
Ethnic minorities – Non-western (%)	Other 'buurt'	8457	7,16	9,926	-8,058	-9,279	,000
	'Stadionbuurt'	345	15,21	16,005			
Ethnic minorities – Western (%)	Other 'buurt'	8457	8,31	5,201	-2,978	-	,000
	'Stadionbuurt'	345	11,29	5,034		10,437	
Households - Total	Other 'buurt'	9027	687,07	994,559	-678,956	-7,173	,000
	'Stadionbuurt'	361	1366,02	1787,353			
Households – One person (%)	Other 'buurt'	8647	31,83	17,087	-13,828	-	,000
	'Stadionbuurt'	357	45,66	19,934		12,912	
Average household size	Other 'buurt'	8751	2,350	,4094	,3672	16,516	,000
	'Stadionbuurt'	353	1,982	,4112			
Housing stock	Other 'buurt'	9379	676,77	959,218	-591,259	-6,838	,000
	'Stadionbuurt'	363	1268,02	1636,668			
Average property value	Other 'buurt'	7281	247928,86	113365,081	50670,181	7,807	,000
	'Stadionbuurt'	317	197258,68	107513,066			
Dwellings – Rental (%)	Other 'buurt'	8380	32,88	21,401	-16,868	-	,000
	'Stadionbuurt'	338	49,75	24,844		12,300	
Dwellings – owner-occupied (%)	Other 'buurt'	8380	66,49	21,686	17,112	12,322	,000
	'Stadionbuurt'	338	49,38	25,158			
Business establishments – Total	Other 'buurt'	9379	123,61	185,241	-84,678	-6,636	,000
	'Stadionbuurt'	363	208,29	240,358			
Business establishments – Agriculture, forestry & fishery)	Other 'buurt'	7888	5,61	13,782	4,470	16,208	,000
	'Stadionbuurt'	337	1,14	4,185			
Business establishments – Industry & energy	Other 'buurt'	7888	21,58	25,628	-4,890	-2,883	,004
	'Stadionbuurt'	337	26,47	30,686			
Business establishments – Business & hospitality	Other 'buurt'	7888	32,57	51,089	-20,681	-5,048	,000
	'Stadionbuurt'	337	53,25	74,466			
Business establishments – Transport, information & communication	Other 'buurt'	7888	12,12	21,531	-10,265	-6,920	,000
	'Stadionbuurt'	337	22,39	26,862			
Business establishments – Financial services & real estate	Other 'buurt'	7888	15,89	24,002	-4,930	-3,228	,001
	'Stadionbuurt'	337	20,82	27,592			
Business establishments – Business services	Other 'buurt'	7888	38,22	64,308	-26,719	-6,346	,000
	'Stadionbuurt'	337	64,94	76,141			
Business establishments – Culture, recreation & other services	Other 'buurt'	7888	18,84	34,751	-14,973	-6,322	,000
	'Stadionbuurt'	337	33,81	42,877			
Business vehicles (per km2)	Other 'buurt'	9027	107,7424	184,12212	-39,51115	-4,022	,000
	'Stadionbuurt'	361	147,2536	153,46591			
Personal vehicles (per household)	Other 'buurt'	7212	1,141	,3446	,3169	15,931	,000

	'Stadionbuurt'	314	,824	,3538			
Personal vehicles (per km2)	Other 'buurt'	7212	1468,93	1223,148	-447,454	-6,827	,000
	'Stadionbuurt'	314	1916,39	1133,058			
Leefbaarometer 2.0 scores (in classes)	Other 'buurt'	7801	6,95	1,377	,554	5,587	,000
	'Stadionbuurt'	323	6,40	1,760			
a. t cannot be computed because at least one of the groups is empty.							
*: Derived from separate output table; results presented here based on Levene's Test for Equality of Variances, and whether according to this equal variances can be assumed or not.							

Table 4.1: Descriptives + t-test statistics – Data split by 'stadionbuurt', buffer 1500 metre, year 2014, degree of urbanity  $\leq 4$  [Composed table – original output see appendices and data output files].

## 4.2 Model I – Non-year specific regression models

Taking the analysis a step further, following the descriptive statistics, regression models are carried out. As described in the methodology section, here the observations of multiple years are taken together in one model, with the different indicators regressed separately against/with a variety of 'stadium variables', combined with various other explanatory or independent variables. In Model I, the different stadium variables that are used are not year specific. That means, every current 'stadionbuurt' is considered a 'stadionbuurt' for all its observations, regardless of when the stadium was built; so, observations of areas that eventually 'get' a stadium, but at a moment before the stadium was actually developed, are also considered as 'stadionbuurt' here. Therefore, this is still not so much really representing the impact of the stadium developments yet, but more so whether there is a significant difference between stadium areas, over the past twenty years (whether the stadium was already in place every year or not), and other, non-stadium areas. By adding all (data-wise) possible other predictor variables to the models, other explanatory factors are as much as possible controlled for. In this capacity, it could be considered an intermediary step between the descriptive statistics, and the eventual year-specific impact model; and will therefore also be discussed more concise than Model II. In the following sections the outcomes of these models are presented, categorised by the three dimensions of impact.

### 4.2.1 Area development indicators

Firstly, the area development indicators mainly look at the physical development of an area; for Model I this basically means whether stadium areas are relatively well or underdeveloped compared to other areas. Starting with the percentage of urban land use, overall a conclusion in line with the descriptives outcomes can be drawn, namely that stadia are located in relatively urban areas. All buffer coefficients are positive and highly significant, ranging from 1,85% to 4,8% higher values in the stadium areas compared to other areas. Here as well the values are generally declining when taking a larger buffer, meaning the difference is the strongest in a small area surrounding the stadium location. This is also highlighted by the distance rings; only the inner three rings have significant parameter estimates, outwardly declining in both magnitude and significance. This is supported by significant and negative parameters for the distance interaction variables, indicating a declining (and non-linear) effect of distance. Looking at the small magnitudes however this should not be given too much weight. In short, it thus can be concluded that stadium areas are relatively highly urban areas, especially in those 'buurten' close to the stadium location. So, although not unambiguously expressed in terms of population or address density, as will be discussed hereafter, and despite their often somewhat peripheral locations, stadiums are still generally located in relatively urban areas. It should be noted that 'urban' is here seen as opposed to rural or natural areas though, which for example consists also of industrial areas or infrastructural land use.

Adding to this, with to a certain extent similar outcomes, is address density. This variable gets a significant parameter estimate only for the two largest buffers, with only the 2500 metre buffer also at the 5% level. This indicates that when taking a small area around the stadium location no differences in address density can be seen, but only when taking an area of 2000 metres or bigger the impact area shows a higher average density. Looking at the distance rings, another image occurs. Where the smallest ring has a large and positive coefficient, this drops down to a negative parameter estimate for the consecutive ring, after which the rings of 1000-1500 and 1500-2000 metres turn positive again. Thus distance from the stadium location does seem to matter in terms of address density, something which is supported by the significant coefficients for the distance interaction variables. A small but significantly negative coefficient indicates the average address density of ‘stadionbuurten’ is lower moving farther away from the stadium location, while the significant coefficient for the squared distance variable possibly indicates a non-linear relationship, although its magnitude is very limited. An explanation for this could lie in the general location of stadia within a city; while they are mostly not located in city cores, it could also indicate a location more towards the edge of a city, as moving outwardly away from the city, densities tend to decrease. Nevertheless, address density in areas in the immediate vicinity of the stadia is thus below average; but that might well be the reason the stadium is placed there, and/or a consequence of that. The other values indicate that, when looking at the larger surrounding area, stadia in general are located in relatively urban (i.e. densely built) areas. This is also reflected in the large average housing stock in the ‘stadionbuurten’; however on the other hand the lower population density (as well as business establishments, as discussed later), somewhat contrast this outcome.

In itself not very surprisingly, but not completely in line with earlier findings, we clearly see that stadium areas are relatively less densely populated. The parameter estimates for all distance buffers and rings range from -300 to -850 and are highly significant, indicating that the stadium areas have considerably lower population densities than other areas. Contrary to the earlier findings, this does correspond with the general idea that stadia nowadays are more often located in somewhat peripheral locations, mostly not or less so in the direct proximity of residential neighbourhoods. The distance interaction variable shows that the population density diminishes with increasing distance from the stadium. This is somewhat surprising, as it would mean that within the impact area the average population density is relatively lower, but that this negative difference is smaller for areas closer to the stadia compared to ‘stadionbuurten’ farther away. An explanation could be similar to that for the address density pattern, in that when distance from a stadium location on the edge of a city increases away from the city, population density decreases. However, a really well-founded argument it is not. The squared distance variable is small but significant, indicating possibly a non-linear relationship.

On the contrary though, the housing stock in ‘stadionbuurten’ appears to be relatively large. All buffers until 2000 metres show significant coefficients, with  $(\text{Exp}(0,087) - 1) = 0,0909 = 9,09\%$  difference for the 500 metre buffer down to  $(\text{Exp}(0,029) - 1) = 0,0294 = 2,94\%$  for the 2000 metre buffer. The distance rings do not directly support this pattern; here the 0-500 metre ring coefficient indicates a value 12,37% lower, whereas the 2000-2500 metre buffer a value 2,84% higher. The middle rings are hardly or not significant. The distance variables finally have non-significant coefficients, indicating there is no linear or clear, or in fact significant distance effect with respect to housing stock. In general an explanation for larger numbers of dwellings despite a lower population density could be a larger size of those areas; however, a quick scan of the descriptive statistics and t-tests learns that the ‘stadionbuurten’ are in fact even smaller than the non-stadium areas. Another possible explanation could then be that the number of people per dwelling is simply lower; again

looking at the t-tests this seems a more viable explanation, where household size and one person households are significantly lower and higher respectively in the 'stadionbuurten'. The underlying reason behind this however, cannot easily be determined or distilled from the statistics alone.

Finally, there are the 'Leefbaarometer' scores looking into area development aspects. As discussed earlier those are scores composed out of various indicators, and while its absolute values are not very meaningful as such, they are useful for comparing different areas. Following the previous housing stock variable, firstly the Leefbaarometer housing stock scores. As opposed to the earlier 'number of houses' variable, this score also looks into aspects such as type and quality of housing. However, as we perhaps might expect, both indicators show some similarities in outcome; the distance rings and buffers that are significant have positive parameter estimates, which means that also in these models the stadium areas generally score higher with regard to the housing stock, compared to non-stadium areas. Where the outcome for number of dwellings was somewhat surprising, this perhaps even more so, with regard to the general idea of stadiums quite often being located in somewhat underperforming areas – something which has also been confirmed already by some other indicators. The distance interaction variables finally are both non-significant, meaning that distance from the stadium is not an important factor here. As with the first housing stock variable, an explanation for the outcomes here cannot easily be given, and would not be based on sound argumentation.

For the public space scores, a first important note here is that the  $R^2$  is only 0,201; in other words, the model only explains 20% of the variation in the scores. This should be taken into consideration when looking at the outcomes for this model. Moving on, we see that all distance buffers show negative and highly significant parameter estimates, something which is also the case for all distance rings, outside the inner ring. For the buffers a difference of over 3 can be observed, where the distance rings between 500 and 2000 metres show a difference of 4 or even 5, which on a scale of 100 is quite substantial. Whether this is because or despite the stadium remains to be seen (perhaps in Model II), but we can conclude that 'buurten' in stadium areas generally score lower on the quality of public space. That is not to say this is very surprising, with regard to the general understanding of stadia being located in peripheral, industrial, and/or underperforming neighbourhoods. The distance interaction variable is positive and marginally significant, but with only a rather small coefficient it is fair to say that distance might only have a slight influence on the scores. The squared distance variable furthermore gives no reason to suspect a non-linear distance effect. While it is thus clear stadium areas generally score lower, the distance aspect does not show a strong concentration in the immediate vicinity of stadia. What the role of the stadia in those outcomes is exactly will be further investigated in Model II, although the lack of explanatory power of the model might be a hindering/limiting aspect that should be taken into account.

The last 'Leefbaarometer' indicator reviews the level of amenities. First of all we should note that the  $R^2$  is also not very high here, with 44,7% of variance explained by the model, so that should be taken into account. Looking at the coefficients, not all are assumed to be significantly different from zero. From both the distance buffers and rings the main outcome seems to be that in areas in the direct vicinity of the stadium the level of facilities is above average, with stadium areas scoring 3 points higher on the 500 metre buffer and even 7 points higher on the 0-500 metre ring. Both the largest buffer and the outer ring on the other hand get negative significant coefficients. The reason for this could well be the stadium itself; a stadium in itself is of course a large sports and entertainment facility, which often also comes with at least some additional facilities around it. Possibly Model II can provide some further proof of or insight into this presumption. The distance interaction variables are negative and highly significant, underlining the pattern outlined by the outcomes of the

distance buffers and rings, with the squared distance variable indicating possibly a non-linear relationship. However, also here the magnitudes are again rather limited. Strangely enough, in these models the 2500 distance buffer has a clearly positive and significant coefficient, contrasting the outcome found separately.

#### *4.2.2 Economic indicators*

From the economic indicators, in general it can be seen that in economic terms stadium areas are relatively underperforming compared to other areas. First of all, the business activity variables, business establishments and vehicles, together show a somewhat ambivalent picture. The number of business establishments seems to be lower in the stadium areas; all buffers show negative coefficients, the smaller the buffer the larger the magnitude, except for the 2500 metre buffer which is non-significant. Since the dependent variable is measured in classes however these are difficult to interpret exactly. Within the impact area, distance to the stadium matters but does not seem to be very influential. From the distance rings only the 1000-1500 and 2000-2500 metre rings are narrowly significant; with the former being negative and the latter positive, this shows that only in the outermost areas of the impact area the number of businesses is higher. The coefficients for the distance interaction variables are highly significant, while also the 2500 metre buffer gets a (negative) significant coefficient here. However, a coefficient of 0,0 indicates that there is no significant difference within the impact area between 'buurten' closer to or farther away from the stadia. A significant coefficient for the squared variable could indicate a non-linear pattern, however looking at the magnitudes of the base and squared interaction variables this seems rather irrelevant.

Business vehicles, on the other hand, paint a different picture. These seem to be overrepresented in stadium areas, restricted to about 1500 metres around the stadium. Significant and positive coefficients for the corresponding buffers and distance rings highlight this. Looking at the distance variables, we can see that this is actually declining with distance; the outer distance ring has a significant negative coefficient, while for three of the four inner rings this is positive – and declining with distance. Nevertheless, the distance interaction variable, although highly significant, has a coefficient of (again) 0,0, and the squared variant (again) is very small in magnitude. Furthermore, here the impact area as a whole (2500 metre buffer) does show a positive significant coefficient, even higher than all other distance buffers. These outcomes seem somewhat contradictory, while the distance rings indicate there is a relation between distance to stadium location and business vehicles, this finding is not reflected in the distance interaction models.

A possible explanation for this difference might be that although stadia are often placed in industrial or business areas, a location is chosen that in the direct proximity is not very densely built. Also, it could be that businesses in those areas are rather space extensive, but on the other hand are often businesses that do rely heavily on car transport; especially compared to other 'business-heavy' areas such as city centres or office parks.

An important economic variable are property values. Looking at the regression results, it is overwhelmingly clear that stadium areas overall are underperforming in terms of property values. All buffers show significant negative coefficients with values roughly between -7500 and -9500, simply meaning the difference in average property prices in euros. Also the distance rings show a similar picture. Only the smallest ring is non-significant, but comparing it with the smallest buffer, this might be due to the data deficiencies in terms of variable definition. Although only significant at the 10% level, the positive parameter estimate for the interaction variable shows that when distance of a 'buurt' to a stadium increases, the average property value seemingly increases (by approximately 2,3 euros per metre); in other words, the farther away from the stadium within the impact zone, the smaller the discount or

difference compared to non-stadium areas. Note however that this is distance from stadium to 'buurt' centroid, not to actual property location. Therefore this value should be taken with a grain of salt. The small but positive coefficient for the squared distance interaction variable indicates that this distance effect is slightly non-linear, with the decrease in discount increasing when moving further away from the stadium location. This outcome seems in line with the general notion that stadia often are located in underperforming areas. Model II should then establish whether this is actually an effect of the stadium developments, or something that was pre-existing, and perhaps on which – deliberately or not – the stadium has had an effect (positively or negatively).

Lastly, the income variables. This is perhaps not so much directly linked with the stadia, but more an indicator of the overall economic status of a neighbourhood and its residents. When looking at the percentage of high incomes, we see that this share generally lies lower in stadium areas compared to other areas. This seems to be the case mostly in areas closer to the stadium, with the buffers decreasing in magnitude and only the first two distance rings being significant (and negative). This is confirmed by the significant and positive parameters for the distance interaction variables, although they are small in magnitude. Especially the outcome for the squared distance variable, which would suggest a non-linear relationship between distance and high incomes, should therefore not be overestimated. This outcome is in line with the notion found earlier of stadiums being located in generally deprived or underperforming neighbourhoods, which for example was also confirmed by the average property values. The percentage of low incomes does not show such a clear-cut picture; small coefficients and most being non-significant show that the stadium areas do not differ that much from other areas in terms of low income inhabitants. The few significant outcomes underline the understanding of the underperforming neighbourhoods, with a relatively higher percentage; although the coefficients are rather small. Distance to stadium location does not seem to matter here, with all parameters turning out non-significant. Income variables thus draw a picture that is generally in line with the earlier findings of stadium areas as generally underperforming compared to non-stadium areas; the percentage of high incomes is below average, and while for low incomes both types of areas (groups) look more similar, the few significant differences indicate the stadium areas have a higher share of low incomes.

#### *4.2.3 Socio-cultural indicators*

For the socio-cultural impact, the first indicator is the overall 'Leefbaarometer' score. Being a general 'liveability' score, we can conclude from this model that the liveability of 'stadionbuurten' in general is lower than in non-stadium areas. The model parameters for all distance buffers and rings are negative, and although the scores are defined in classes and therefore not easy to interpret literally all are significant at the 5% and most even 1% level. Although not particularly high – apart from the inner distance ring the coefficients are not above 0,075 on a 1-7 scale – this indicates that there is a significant difference between the 'stadionbuurten' and other 'buurten', for all definitions of the stadium area. The distance interaction variables are both non-significant, so together with the coefficients for the different distance rings, no particular distance effect within the impact area can be observed for the 'Leefbaarometer' scores. In other words, the (difference in) liveability score seems to be rather evenly spread throughout the whole stadium (impact) area.

The first socio-cultural sub-dimension of the 'Leefbaarometer' is the population structure. Looking at the regression outcomes, we see that being a stadium 'buurt' or not does not affect this score very strongly. In fact, only the distance buffer of 2500 metre gets a significant, negative coefficient, as well as the outer distance ring, and the 1000-1500 ring only at the 10% level. This would indicate that within the impact area especially in 'buurten'

somewhat remote from the stadium the population structure scores lower on average than other 'buurten'. Therefore only when taking a buffer of 2500 metres this difference can be observed for the whole impact area. The distance interaction variables however are non-significant, which indicates that there is not a very clear influence of distance to the stadium location. An explanation might perhaps be that stadia are situated in underperforming areas when looking at the larger surroundings, but that in the more proximate areas, whether the stadia are – deliberately or not – placed there or the stadia have had a certain impact there, this is not so much the case (or at least not visible in these data). However this is not underpinned by evidence outside these data.

The next indicator is the 'Leefbaarometer' score on social cohesion. Note here that the power of this model is also rather confined, with an  $R^2$  of only 0,434. Continuing with the stadium dummy variables in the model, we find little evidence that the stadium areas differ significantly from other 'buurten' with respect to social cohesion. Only the positive 2000-2500 metre ring coefficient is significant, but only at the 10% level. Also given the rather small  $R^2$  this is not very convincing. The distance interaction variable however is highly significant and positive, but with a coefficient of 0,001 only shows a rather concise distance effect. The also highly significant squared distance variable indicates a possible non-linear relationship, although its magnitude is only very small. In terms of social cohesion there seems to be no large difference between 'stadionbuurten' and other 'buurten', with only a weak increase moving away from the stadium, which is only significantly visible for the 2000-2500 metre distance ring. However, strangely enough for the models incorporating distance the 2500 metre buffers show significant negative coefficients; what causes these contradictory outcomes is unclear. Whether the stadia have actually had an impact on the cohesion scores, i.e. whether there is a difference between the pre- and post-development situation, will be examined by Model II.

Lastly, the 'Leefbaarometer' score regarding safety and security. For this indicator a rather clear picture emerges; for all distance buffers the stadium area scores significantly lower than the other areas, with parameter estimates between 1,1 and 3,7, which is quite evident. The distance rings of 1000-1500 and 2000-2500 metres turn out non-significant, but the other rings show results in compliance with the buffers. In short, we can conclude that 'stadionbuurten' generally perform relatively badly with regard to safety compared to other 'buurten'. This outcome is not that surprising, and is something encountered also in other studies and practical examples. Apart from being located sometimes in underperforming areas, stadia are large buildings which attract large groups of people (more specifically, football supporters), that may cause nuisance and (feelings of) unsafety in the surrounding areas. Whether the low scores on this indicator are actually caused by the stadium or mainly are due to the neighbourhood characteristics, will be elaborated upon in Model II. While the distance rings show that distance to the stadium location is an important factor, but not showing a clear or linear pattern, the distance interaction variables only partly confirm this. Both are indeed highly significant (and positive), representing an increasing pattern moving away from the stadium in a non-linear line, but their magnitudes indicate this distance effect is also limited. However, when looking at the distance buffers, we can see that when taking larger buffers the overall difference between stadium and non-stadium areas decreases. In other words, the largest differences seem to be somewhat concentrated around the stadium, meaning in 'buurten' closer to the stadium the difference compared to non-stadium areas is generally higher, and so the safety scores lower. This might be an indication the stadium has in fact something to do with the difference in safety scores. Model II should be able to shed some more light on this.

### 4.3 Model II – Year-specific regression models

Having looked at the non-year-specific stadium variables in Model I, Model II incorporates the element of time, by ‘splitting’ the ‘stadionbuurt’ observations into before and after development. Therefore in this analysis it is particularly interesting to look at and compare the parameter estimates for the pre and post stadium variables (with other ‘buurten’ as base category). Similarly, two variations on this base model Model II are presented, in which only recent stadia (from 2000 onwards) are taken into account, or a short term (five years) impact period. Where Model I was a first or base line analysis merely comparing both types of areas over the past twenty years (regardless of the moment of development of the stadia), this second model will give a better insight into the actual impact of the stadium development on the different indicators, by focusing specifically on the post-development period. Similar to Model I the outcomes of these models are structured by the three impact categories, while the three model variants are brought together per indicator. In the following section, the most important findings of these analyses are presented. The description and analysis of some less relevant indicators can be found in the appendices, as well as the full results and output of all the models.

#### *4.3.1 Area development impact*

Model I suggested that stadium areas are generally urban areas, in terms of land use, density and amenity level; although underperforming regarding public space. Whether the stadia have actually played a part in these outcomes, i.e. an impact in terms of area development, positively or negatively, will be examined here. In the following sections the most important Model II results on area development are presented, on urban land use, address density, housing stock and the Leefbaarometer scores on public space and amenity level. The indicators population density and Leefbaarometer housing stock score were considered less relevant, and did not produce clear or interesting results; a description of both can be found in the appendix.

#### *Urban land use*

An indicator perhaps more or less summarising the area development dimension in general, and thus also the following indicators, is that of (the percentage of) urban land use. The base model here is rather unanimous; for all buffers, and the distance rings until 1500 metres, the pre-development parameters are not significantly different from the control group, while the post-development stadium areas have a significantly higher percentage of urban land use. This underlines the previous conclusions that the Dutch stadia are in general located in relatively urban areas. This is further emphasised by the interaction variables in Model IIc, for which significantly negative coefficients – albeit rather small in magnitude – imply a (non-linear) decrease in the share of urban land use when moving further away from the stadium. This also corresponds to the findings later on regarding population and address density. Since this is only the case for the post-development variable, it also suggests the presence of the stadium might correlate with the degree of urban land use found in the impact areas.

To check the assumptions derived from the base Model II, the model variations come into play. Both surprisingly and interestingly, both models hardly yield any significant outcomes. The ‘2000 stadia’ model has only a weakly significant parameter for the squared interaction variable; the five year impact model as well, together with some significant values for the 2000 and 2500 metre buffers. Overall however this is rather weak, showing only marginal differences between the stadium and non-stadium areas, and thus cannot really be considered as impacts of the stadiums. A possible explanation for these differences could lie in the deviating composition of the ‘stadium area’ groups between these models. The base

model includes all stadia, and therefore also older stadiums situated in urban areas, for which then only post-development observations are included; the two other variants incorporate only more recently developed stadia, which are also more often located in (perhaps less urban) areas on the edge of cities, and/or only look at a short impact period. What can be concluded from this though, is that when looking into the more recent stadium developments in the Netherlands, potential area or urban developments have not really come off the ground in the surrounding areas, at least not in a significant way visible in data on urban land use in the surrounding ‘buurten’. The reasons for this may of course vary per individual case; it may have something to do with the economic downturn that affected particularly projects still in development since 2008; while on the other hand it could also be that not in all stadium developments this was attached and pursued as an additional goal. Furthermore, it should be noted that urban land use in this indicator is rather broadly defined; that means, additional development (that would be considered as urban area development) on formerly industrial or infrastructural land, would not be reflected in an increase in these urban land use statistics. Nevertheless, it can be concluded that at least in this respect recent stadia, also when looking into short-term effects, do not seem to have had a considerable impact on area development.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model Ila – Distance buffers</i>									
Buffer 500m – Pre	,939	,118	,906	,863	,109	,913	1,695	,212	,832
Buffer 500m – Post	4,946	2,913***	,004	,963	,247	,805	3,810	,701	,483
Buffer 1000m – Pre	,862	,177	,859	,613	,126	,900	1,803	,368	,713
Buffer 1000m – Post	5,015	4,329***	,000	1,765	,634	,526	3,835	1,186	,236
Buffer 1500m – Pre	,550	,171	,864	,360	,112	,911	1,529	,472	,637
Buffer 1500m – Post	2,040	2,279**	,023	,902	,464	,643	2,489	1,149	,250
Buffer 2000m – Pre	1,134	,451	,652	,779	,310	,757	1,968	,776	,438
Buffer 2000m – Post	2,551	3,350***	,001	1,667	1,060	,289	3,044	1,769*	,077
Buffer 2500m – Pre	,498	,226	,821	,129	,059	,953	1,330	,598	,550
Buffer 2500m – Post	1,948	2,896***	,004	,809	,597	,550	2,224	1,505	,132
<i>Model Iib – Distance rings</i>									
Ring 0-500m – Pre	3,590	,185	,853	3,329	,171	,864	4,022	,206	,837
Ring 0-500m – Post	9,301	2,291**	,022	6,450	,470	,639	7,155	,517	,605
Ring 500-1000m – Pre	2,559	,264	,792	2,254	,232	,817	3,801	,388	,698
Ring 500-1000m – Post	4,331	1,960*	,050	6,878	1,226	,220	5,135	,786	,432
Ring 1000-1500m – Pre	-1,249	-,222	,824	-1,673	-,298	,766	-,538	-,095	,924
Ring 1000-1500m – Post	3,301	1,987**	,047	-1,378	-,412	,680	2,405	,647	,518
Ring 1500-2000m – Pre	-,364	-,086	,932	-,754	-,177	,859	,047	,011	,991
Ring 1500-2000m – Post	2,026	1,499	,134	-1,138	-,416	,677	-,545	-,179	,858
Ring 2000-2500m – Pre	1,180	,391	,696	,790	,262	,793	2,193	,720	,472
Ring 2000-2500m – Post	,963	1,112	,266	1,563	,859	,390	2,933	1,509	,131
<i>Model Iic – Distance interaction variables</i>									
Buffer 2500m – Pre	6,423	1,010	,312	5,944	,934	,350	6,997	1,091	,275
Buffer 2500m – Post	8,914	5,299***	,000	5,867	1,609	,108	8,217	2,052**	,040
Buffer*Distance – Pre	-,003	-,982	,326	-,003	-,972	,331	-,003	-,938	,348
Buffer*Distance – Post	-,003	-4,517***	,000	-,002	-1,494	,135	-,003	-1,610	,107
Buffer 2500m – Pre	5,023	1,374	,170	4,526	1,237	,216	5,685	1,539	,124
Buffer 2500m – Post	6,060	5,793***	,000	3,852	1,858*	,063	5,761	2,558**	,011
Buffer*Distance2 – Pre	-9,392E-7	-1,520	,129	-9,261E-7	-1,497	,135	-9,145E-7	-1,466	,143
Buffer*Distance2 – Post	-8,191E-7	-5,126***	,000	-6,036E-7	-1,937*	,053	-6,800E-7	-2,079**	,038
<b>Dependent variable: Stedelijk_Bg_Totaal_p</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.2: Model II – Percentage of urban land use.

### Address density

Another important indicator for area development, is the address density. As in Model I, this model shows that stadia overall are located in relatively urban areas, with an address density higher than in similar other ‘buurten’. The model parameters for the impact buffers and

distance rings show a limited number of significant outcomes, but in general the outcome seems to be that the pre-development stadium areas have a density lower or similar to non-stadium areas, while post-development these areas have densities similar or higher than non-stadium areas. The distance rings underline this outcome, with the exception of the 500-1000 metre ring. This could be an indication that stadium areas have become more dense with the development of the stadia; but to be able to determine this more precisely the model variations should be observed first. The interaction variables are both significant and negative only for post-development; this means address density decreases when moving further away from the stadium, in a slightly non-linear way. This corresponds to the outcomes observed for population density, and can probably explained in a similar fashion – moving away from stadiums in out-of-town locations directed outwardly probably also means a decrease in address densities. However, here the pre-development variables have non-significant coefficients, which would indicate that this is not only something bound to the locations, but might have a relationship with the stadium development. To find out, the two model variations could add to this.

The ‘2000s stadiums’ parameters for the impact buffers and distance rings show a somewhat different picture. The outcomes that are significant, here consist mostly of negative coefficients for the post-development stadium areas; but overall the areas within the impact areas and distance rings do not seem to differ substantially from non-stadium areas, and neither between pre and post development. Only for the smallest buffer, a minor positive development seems to be the case since the stadia were developed. More or less the same goes for the short-term impact model, with post-development coefficients being negative in some cases but mostly not significantly differing from the control group (non-stadium areas). For both models also the distance interaction variables turn out non-significant. Therefore, the earlier hypothesis of an increase in address density caused by the stadium developments does not really hold here. When looking at recently developed stadia, as well as a short-term impact period, with a more even distribution of ‘pre’ and ‘post’ observations, we cannot say stadium developments have increased address densities in the surrounding areas, perhaps in the direct vicinity of recent stadia as the only exception. It could thus be the outcomes in the base Model II were caused by the fact all stadia were included here, due to which the pre and post development groups were less balanced.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-224,146	-2,350**	,019	-224,570	-2,355**	,019	-213,615	-2,261**	,024
Buffer 500m – Post	-22,066	-,813	,416	-206,298	-3,113***	,002	-214,283	-2,708***	,007
Buffer 1000m – Pre	-37,892	-,617	,537	-37,653	-,614	,539	-26,324	-,433	,665
Buffer 1000m – Post	-23,079	-1,251	,211	-106,592	-2,222**	,026	-136,425	-2,619***	,009
Buffer 1500m – Pre	20,496	,487	,626	19,076	,453	,650	29,594	,709	,478
Buffer 1500m – Post	15,429	1,095	,273	-19,742	-,599	,550	-66,201	-1,844*	,065
Buffer 2000m – Pre	10,321	,300	,764	7,423	,216	,829	17,453	,512	,608
Buffer 2000m – Post	21,007	1,758*	,079	-20,880	-,777	,437	-55,974	-1,915*	,056
Buffer 2500m – Pre	40,328	1,365	,172	37,163	1,259	,208	47,034	1,604	,109
Buffer 2500m – Post	24,191	2,307**	,021	15,495	,676	,499	-18,776	-,749	,454
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	178,104	,591	,554	176,758	,587	,557	203,646	,682	,495
Ring 0-500m – Post	400,134	6,346***	,000	28,550	,116	,908	140,895	,528	,598
Ring 500-1000m – Pre	-158,529	-1,391	,164	-161,374	-1,416	,157	-152,726	-1,353	,176
Ring 500-1000m – Post	-72,015	-2,226**	,026	-240,072	-2,924***	,003	-283,541	-3,111***	,002
Ring 1000-1500m – Pre	125,347	1,785*	,074	121,905	1,735*	,083	134,337	1,930*	,054
Ring 1000-1500m – Post	74,273	2,904***	,004	30,964	,525	,600	22,218	,346	,729
Ring 1500-2000m – Pre	-1,437	-,024	,981	-5,063	-,085	,932	5,504	,094	,925
Ring 1500-2000m – Post	55,362	2,612***	,009	16,035	,356	,722	-36,379	-,710	,478
Ring 2000-2500m – Pre	55,166	1,344	,179	51,702	1,260	,208	60,424	1,484	,138
Ring 2000-2500m – Post	-1,497	-,109	,913	47,994	1,525	,127	11,544	,340	,734
<i>Model IIc – Distance interaction variables</i>									

Buffer 2500m – Pre	35,709	,445	,656	31,131	,388	,698	44,756	,563	,573
Buffer 2500m – Post	114,978	4,468***	,000	-64,287	-1,014	,311	-84,883	-1,226	,220
Buffer*Distance – Pre	,003	,069	,945	,003	,080	,936	,001	,030	,976
Buffer*Distance – Post	-,044	-3,863***	,000	,039	1,350	,177	,032	1,024	,306
Buffer 2500m – Pre	53,715	1,155	,248	49,227	1,059	,290	60,874	1,320	,187
Buffer 2500m – Post	71,525	4,502***	,000	3,721	,100	,920	-24,836	-,619	,536
Buffer*Distance2 – Pre	-2,639E-6	-,355	,723	-2,502E-6	-,337	,736	-2,866E-6	-,389	,697
Buffer*Distance2 – Post	-9,622E-6	-3,965***	,000	2,433E-6	,404	,686	1,231E-6	,194	,846

**Dependent variable: Omgevingsadressendichtheid**  
 \*\*\*: significant at the 1% level; \*\*: significant at the 5% level; \*: significant at the 10% level.  
 Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.  
 In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.

Table 4.3: Model II – Address density.

### Housing stock

Next indicator is the housing stock. The buffers for the base model show that the housing stock in the impact areas after development is generally above average, compared to non-stadium areas, but also compared to the pre-development observations. This image is however not so much reflected in the distance buffers, which show no or even a negative difference compared to the pre-development areas. Nevertheless, the distance buffers indicate that in an impact zone around stadiums the housing stock is relatively high. To determine whether this could actually be an impact of the stadiums, or whether it would be a result of the uneven distribution of pre and post observations, the model variations will be interesting to look at. The distance interaction variables here do not show a significant influence of distance from stadium location.

The Model II variations' results are somewhat more ambiguous. For the '2000' stadiums only the 2000 metre buffer scores significantly higher for post than for pre development, while for a 1500 and 2500 metre impact area this is the other way around. For the rings even only the 2500 metre ring has significant coefficients, with pre slightly higher than post. This is similar for the short-term model, only here both the 1500 and 2000 metre buffer have relatively higher coefficients. The distance interaction variables are non-significant for these models as well, again indicating no significant distance effect.

An explanation for the different outcomes especially looking at the distance buffers, might be that in the base Model II the (pre) post development period is somewhat (under-) overrepresented; it therefore includes also stadium areas that are much older, which might on the one hand be situated in more residential areas, and/or have had a long time for other developments (e.g. housing) to take place. When this is somewhat corrected for in the two model variations, we see an 'impact' (difference between pre and post) that is less obvious or positive. (...). So in short, whether the stadium developments have actually increased the housing stock in the surrounding areas, is doubtful based on these data.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	,048	,646	,518	,047	,633	,526	,051	,688	,491
Buffer 500m – Post	,090	4,241***	,000	,027	,517	,605	,102	1,644	,100
Buffer 1000m – Pre	-,035	-,733	,464	-,037	-,779	,436	-,029	-,604	,546
Buffer 1000m – Post	,055	3,836***	,000	-,021	-,572	,568	,040	,986	,324
Buffer 1500m – Pre	,059	1,789*	,074	,056	1,708*	,088	,066	2,007**	,045
Buffer 1500m – Post	,044	3,999***	,000	,044	1,694*	,090	,070	2,467**	,014
Buffer 2000m – Pre	,021	,779	,436	,018	,687	,492	,028	1,039	,299
Buffer 2000m – Post	,030	3,189***	,001	,046	2,194**	,028	,060	2,612***	,009
Buffer 2500m – Pre	,042	1,823*	,068	,042	1,820*	,069	,051	2,234**	,026
Buffer 2500m – Post	,008	,925	,355	,036	2,001**	,045	,045	2,293**	,022
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-,347	-1,471	,141	-,348	-1,476	,140	-,344	-1,467	,142
Ring 0-500m – Post	-,122	-2,478**	,013	-,241	-1,251	,211	-,335	-1,597	,110
Ring 500-1000m – Pre	-,086	-,967	,334	-,087	-,974	,330	-,080	-,904	,366

Ring 500-1000m – Post	,029	1,127	,260	-,086	-1,338	,181	,058	,805	,421
Ring 1000-1500m – Pre	,051	,925	,355	,051	,930	,352	,063	1,152	,249
Ring 1000-1500m – Post	-,042	-2,097**	,036	-,006	-,127	,899	,035	,692	,489
Ring 1500-2000m – Pre	,040	,863	,388	,040	,867	,386	,046	1,005	,315
Ring 1500-2000m – Post	,005	,303	,762	,063	1,780*	,075	,020	,508	,612
Ring 2000-2500m – Pre	,063	1,975**	,048	,064	1,983**	,047	,074	2,322**	,020
Ring 2000-2500m – Post	,024	2,214**	,027	,057	2,318**	,020	,063	2,376**	,018
<b>Model IIc – Distance interaction variables</b>									
Buffer 2500m – Pre	-,012	-,192	,848	-,012	-,196	,845	-,004	-,065	,948
Buffer 2500m – Post	,005	,256	,798	-,015	-,297	,767	,072	1,322	,186
Buffer*Distance – Pre	2,646E-5	,928	,353	2,651E-5	,930	,352	2,709E-5	,956	,339
Buffer*Distance – Post	1,182E-6	,132	,895	2,462E-5	1,095	,274	-1,288E-5	-,527	,598
Buffer 2500m – Pre	,019	,510	,610	,018	,502	,616	,027	,752	,452
Buffer 2500m – Post	,014	1,087	,277	,023	,790	,429	,067	2,138**	,033
Buffer*Distance2 – Pre	4,899E-9	,842	,400	4,918E-9	,845	,398	5,012E-9	,867	,386
Buffer*Distance2 – Post	-1,211E-9	-,637	,524	2,672E-9	,567	,571	-4,499E-9	-,904	,366
<b>Dependent variable: Ln_ Woningvoorraad</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.4: Model II – Housing stock.

The last two area development indicators are the ‘Leefbaarometer’ scores for public space and the amenity level. As stated earlier, these are composite scores, ranging from -50 to 50. Therefore the outcomes cannot be interpreted literally, but can be useful in highlighting relative differences between the different areas.

#### *Leefbaarometer – Public space*

Firstly the public space indicator. First of all, it should be noted that similar to Model I, the ‘R squared’, i.e. explanatory power of the model is rather small, so conclusions drawn here should be taken with some reservation. The distance buffers in the base model reveal a clear picture; first of all the model coefficients are all highly significant and negative, indicating the stadium areas are generally underperforming compared to non-stadium areas, in terms of quality of public space. But secondly, what catches the eye is that in all cases the post-development stadium areas score substantially (a few units of measurement) higher than the pre-development areas. That thus might indicate that stadium areas, although still generally underperforming, have overall seen an improvement in quality of public space since the development of the stadium. The fact that at a minimum the directly surrounding space receives some attention in such developments in terms of – practical and/or aesthetical – design could be an explanation for this. The location of the stadia, quite often on the edge of cities and/or industrial-like sites, might explain why compared to non-stadium areas they are generally still underperforming. But, whether this presumption still holds when comparing only more recent pre and post stadium development areas, remains to be seen in the model variations.

It is also the question whether the public space farther away from the stadium, let’s say over a kilometre, will really effectively be affected by the stadium itself. The distance rings seem to – partially – confirm this. Firstly, there is not really a clear post-development impact, stronger closer to the stadium location, visible here. Only for the 500-1000 and 1500-2000 rings the post- score better than the pre-development stadium areas; while for the other rings there seems to be no or even a negative ‘development’. Looking further into the distance element, the interaction variables show significant and positive parameters only for the pre-development stadium areas, although with rather small magnitudes; that implies that the stadium locations were, before development, in fact ‘centres’ of areas with relatively low quality of public space (as also illustrated by the 2500 metre buffers included in Model IIc), which then gradually (and slightly non-linearly) increases moving farther away from these

locations. So, stadia have generally been located in areas with a lower quality of public space, which in itself is not surprising given the fact that often locations are selected on under- or not yet developed land or industrial-like sites. This might indicate that, although no clear distance pattern can be observed for the post-development stadium areas, the quality of public space has somewhat ‘increased’ in the vicinity of the stadium locations (deducted from the disappearance of a distance effect). So while the differences between pre and post development for the buffers and distance interaction variables could indicate a certain stadium impact, in that these areas – explicitly or implicitly – are somewhat further developed in terms of public space, the ambiguous or non-significant post-development parameters for the distance variables do not link this directly to (distance to) the stadia. On the other hand, it could also mean that the ‘post-development’ group is somewhat biased compared to the ‘pre-development’ group, having included all and thus older stadiums as well.

The model variations might be able to shed some more light onto this. The two models show some very interesting results. The outcomes for the ‘2000s stadia’ in Model IIa are similar to the base model in that the post-development stadium areas score significantly better than ‘pre-development’, however with one evident difference; here all the ‘post-development’ impact areas have non-significant coefficients; that means, they do not substantially differ from the non-stadium areas. Thus, while pre-development the stadium areas still underperform in terms of public space, after development they have a quality of public space similar to that of other ‘buurten’. This indicates the stadium developments could have a positive impact on the quality of public space in the surrounding areas. It also shows an impact stronger than that observed looking at all stadia in the Netherlands, that only emerges when when only taking into account the more recent stadia; here the post-development stadium areas eventually score similar to the non-stadium areas on the quality of public space. The extent to which this can be ascribed to the actual stadium developments, and the reasons for this, may of course depend on the individual case. The results for Model IIb and IIc generally correspond to this. For the rings the parameters are not as unanimous, but they do show a comparable outcome to those for the buffers. The smallest ring even shows a rather high, although marginally significant, positive parameter for post-development. As for the interaction variables, these are fairly similar to the base Model II; positive significant coefficients for the pre-development variables indicate that before the actual stadium developments quality of public space in those areas increased moving away from the eventual stadium location, while after the development such an outcome cannot be identified anymore. This further feeds the presumption that especially around the stadium (although the distance buffers only reflect this for the area as a whole) quality of public spaces has increased with the development of the stadia.

Finally, the short-term impact model bears more resemblance to the base model II. Here the stadium areas also do score better after than before the development, however they are still underperforming compared to the non-stadium areas. Furthermore, they seem to score also somewhat worse than in the model with all stadiums included. This is certainly the case looking at the impact buffers, but – in a somewhat less obvious manner – also emerges from the distance rings. This outcome indicates that also in the short term stadia might have somewhat of a positive impact on the public space, although this is not yet optimised after five years – and thus might be an effect that stretches out over a longer period of time. The distance interaction variables produce the same outcome as for the previous two models, which would indicate that also on the short term the stadium developments might have had a certain impact on the areas they are located in.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									

Buffer 500m – Pre	-9,784	-2,229**	,026	-9,746	-2,220**	,026	-9,795	-2,240**	,025
Buffer 500m – Post	-5,148	-3,521***	,000	-3,332	-,913	,361	-11,106	-2,476**	,013
Buffer 1000m – Pre	-9,578	-3,299***	,001	-9,490	-3,268***	,001	-9,853	-3,405***	,001
Buffer 1000m – Post	-2,761	-2,789***	,005	-,787	-,296	,767	-5,706	-2,016**	,044
Buffer 1500m – Pre	-7,079	-3,426***	,001	-6,908	-3,344***	,001	-7,359	-3,570***	,000
Buffer 1500m – Post	-2,624	-3,470***	,001	-1,735	-,963	,336	-4,764	-2,512**	,012
Buffer 2000m – Pre	-5,652	-3,320***	,001	-5,323	-3,128***	,002	-5,781	-3,400***	,001
Buffer 2000m – Post	-2,957	-4,607***	,000	-1,100	-,755	,450	-3,235	-2,132**	,033
Buffer 2500m – Pre	-5,200	-3,537***	,000	-4,766	-3,245***	,001	-5,230	-3,559***	,000
Buffer 2500m – Post	-2,891	-5,126***	,000	-1,195	-,960	,337	-2,911	-2,229**	,026
<b>Model IIb – Distance rings</b>									
Ring 0-500m – Pre	2,568	,185	,853	2,858	,206	,837	1,995	,144	,885
Ring 0-500m – Post	,418	,125	,900	26,062	1,880*	,060	27,816	1,425	,154
Ring 500-1000m – Pre	-10,078	-1,853*	,064	-9,720	-1,786*	,074	-10,130	-1,869*	,062
Ring 500-1000m – Post	-3,704	-2,133**	,033	1,645	,365	,715	-8,109	-1,659*	,097
Ring 1000-1500m – Pre	-8,883	-2,632	,008	-8,497	-2,517**	,012	-8,980	-2,668***	,008
Ring 1000-1500m – Post	-4,399	-3,196***	,001	-4,685	-1,429	,153	-6,738	-1,914*	,056
Ring 1500-2000m – Pre	-8,208	-2,766***	,006	-7,783	-2,622***	,009	-8,289	-2,801***	,005
Ring 1500-2000m – Post	-5,577	-4,943***	,000	-3,505	-1,444	,149	-5,240	-1,945*	,052
Ring 2000-2500m – Pre	-1,881	-,915	,360	-1,444	-,702	,482	-1,867	-,910	,363
Ring 2000-2500m – Post	-1,444	-1,967**	,049	,032	,019	,985	-,679	-,395	,693
<b>Model IIc – Distance interaction variables</b>									
Buffer 2500m – Pre	-12,481	-3,186***	,001	-12,024	-3,069***	,002	-12,735	-3,262***	,001
Buffer 2500m – Post	-4,352	-3,152***	,002	-2,838	-,810	,418	-6,643	-1,770*	,077
Buffer*Distance – Pre	,004	2,004**	,045	,004	1,998**	,046	,004	2,074**	,038
Buffer*Distance – Post	,001	1,158	,247	,001	,503	,615	,002	1,060	,289
Buffer 2500m – Pre	-8,895	-3,892***	,000	-8,426	-3,687***	,000	-9,037	-3,963***	,000
Buffer 2500m – Post	-3,261	-3,822***	,000	-2,525	-1,237	,216	-4,052	-1,900*	,057
Buffer*Distance2 – Pre	7,791E-7	2,110**	,035	7,720E-7	2,089**	,037	8,029E-7	2,182**	,029
Buffer*Distance2 – Post	7,384E-8	,570	,568	2,758E-7	,821	,411	2,273E-7	,674	,500
<b>Dependent variable: Leefbaarometer_Score_PubliekeRuimte</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.5: Model II – ‘Leefbaarometer’ score – Public space.

### Leefbaarometer – Amenity level

The final Leefbaarometer aspect concerns the level of amenities. Here as well, the explanatory power of the model similar to Model I turns out rather limited; so again, outcomes should be regarded with some reservation. What is evident here looking at the results in the first model, is that the post-development stadium areas are relatively well-performing on this indicator, compared to pre-development, but also to non-stadium areas. Until an impact zone of two kilometres around the stadia the scores are significantly higher than in the control group of other ‘buurten’. At the same time, the pre-development variables get significantly negative coefficients, indicating a relatively poor level of facilities; except for the smallest buffer. A generally similar picture is drawn by the distance rings, although those between 500 and 1500 metres for post-development are non-significant, and the outer ring is even significantly negative. Looking into the distance models, the 2500 metre buffers here do show the same outcome as the other distance buffers, while both the interaction variables are negatively significant. That indicates that the amenity level scores – slightly non-linearly – decrease when moving further away from the stadia within the impact area. So despite the lack of a clear pattern emerging from the distance rings, a certain distance effect seems to be present. And, the pre-development variables being non-significant could imply that the placement of the stadia actually played a role in this. These results correspond to the earlier findings that stadia are generally located in relatively urban areas, which can be expected to have a relatively high level of amenities; but does not underline the image of somewhat underperforming areas. Nevertheless, to determine whether the difference between pre- and post-development actually could be considered a stadium impact, the model variations should be examined first.

Looking into the results of the ‘2000 stadia’ model, the outcomes found above seem to be somewhat toned down. While still a difference can be observed between pre- and post-development stadium areas, looking at both the distance buffers and rings, this seems to be smaller than in the first model; the pre-development areas still score lower than the non-stadium areas, but contrary to the positive outcomes in the base Model II, the post-development parameters here do not suggest a significant difference from the control group. A possible explanation for this might be again the composition of the post-development group of ‘buurten’ in the base model; looking into all stadia includes also those located in urban areas, which often have a relatively good level of amenities. The ‘recent stadia’ model incorporates mainly stadiums that have been situated in – at least formerly – underdeveloped locations; something which the outcomes for the pre-development variables underline. What the results here do show however, is that also for the recent stadium areas the amenity level scores have significantly improved between pre- and post-development; while before these areas were generally underperforming on this aspect, after the completion of the stadia the areas perform comparable to similar non-stadium areas. The again significantly negative distance interaction variables further imply a possible positive impact of the stadium developments. We might conclude therefore that from these data it shows that recent stadium developments have caused, or in any case coincided with, an increase in the amenity level in the surrounding areas. A reason for this could be the development of additional functions in and around the stadia, but looking at the fact that also areas within the larger buffers and rings seem to have experienced this, it might also be partly due to a broader development of these areas.

The short-term impact model finally shows outcomes rather similar to those of the recent stadiums. That means that, although also not as clear as when including all stadium area observations, also on the short term stadium developments already seem to have had a certain effect on the amenity level in the surrounding areas. The fact that this model outcomes are more similar to those of the first model variation than to the ones in the base Model II, might confirm the assumption that the difference in outcomes observed between these two is as described above; it could mean the inclusion of all the older stadiums as well in the base model potentially influences the outcomes found for the ‘pre’ and ‘post’ groups in that model.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-5,082	-1,156	,248	-5,142	-1,170	,242	-5,572	-1,261	,207
Buffer 500m – Post	4,119	2,814***	,005	-5,108	-1,399	,162	,597	,132	,895
Buffer 1000m – Pre	-10,609	-3,651***	,000	-10,696	-3,680***	,000	-11,175	-3,824***	,000
Buffer 1000m – Post	2,661	2,685***	,007	1,965	,740	,459	,290	,102	,919
Buffer 1500m – Pre	-9,320	-4,508***	,000	-9,469	-4,581***	,000	-10,043	-4,826***	,000
Buffer 1500m – Post	2,021	2,670***	,008	,448	,248	,804	-1,700	-,887	,375
Buffer 2000m – Pre	-7,571	-4,443***	,000	-7,696	-4,520***	,000	-8,259	-4,812***	,000
Buffer 2000m – Post	1,249	1,943*	,052	1,272	,873	,383	-,690	-,450	,653
Buffer 2500m – Pre	-7,920	-5,383***	,000	-7,884	-5,368***	,000	-8,468	-5,712***	,000
Buffer 2500m – Post	-,205	-,364	,716	,064	,051	,959	-1,586	-1,203	,229
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-28,651	-2,067**	,039	-28,594	-2,061**	,039	-28,997	-2,080**	,038
Ring 0-500m – Post	9,169	2,753***	,006	-9,659	-,696	,486	-9,271	-,471	,638
Ring 500-1000m – Pre	-10,862	-1,996**	,046	-10,818	-1,986**	,047	-11,413	-2,086**	,037
Ring 500-1000m – Post	2,765	1,591	,112	3,576	,794	,427	6,269	1,270	,204
Ring 1000-1500m – Pre	-9,193	-2,723***	,006	-9,163	-2,712***	,007	-9,844	-2,897***	,004
Ring 1000-1500m – Post	2,144	1,556	,120	2,045	,623	,533	-1,750	-,492	,622
Ring 1500-2000m – Pre	-6,669	-2,246**	,025	-6,659	-2,242**	,025	-7,127	-2,385**	,017
Ring 1500-2000m – Post	3,666	3,247***	,001	3,117	1,283	,200	,869	,319	,750
Ring 2000-2500m – Pre	-7,163	-3,483***	,000	-7,136	-3,470***	,001	-7,753	-3,742***	,000
Ring 2000-2500m – Post	-3,182	-4,334***	,000	-2,260	-1,331	,183	-3,419	-1,970**	,049
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-12,296	-3,138***	,002	-12,314	-3,141***	,002	-12,947	-3,284***	,001

Buffer 2500m – Post	7,309	5,294***	,000	7,336	2,094**	,036	2,345	,619	,536
Buffer*Distance – Pre	,002	1,216	,224	,002	1,220	,223	,002	1,227	,220
Buffer*Distance – Post	-,004	-5,965***	,000	-,004	-2,221**	,026	-,002	-1,107	,268
Buffer 2500m – Pre	-9,737	-4,258***	,000	-9,750	-4,265***	,000	-10,370	-4,504***	,000
Buffer 2500m – Post	3,194	3,741***	,000	3,956	1,937*	,053	-,235	-,109	,913
Buffer*Distance2 – Pre	3,918E-7	1,060	,289	3,955E-7	1,070	,285	4,018E-7	1,081	,280
Buffer*Distance2 – Post	-6,876E-7	-5,312***	,000	-8,079E-7	-2,405**	,016	-2,706E-7	-,795	,427

**Dependent variable: Leefbaarometer\_Score\_Voorzieningenniveau**

\*\*\*: significant at the 1% level; \*\*: significant at the 5% level; \*: significant at the 10% level.

Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.

In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.

Table 4.6: Model II – ‘Leefbaarometer’ score – Amenity level.

### 4.3.2 Economic impact

As seen in Model I, the economic impact in general was not very large, in fact the stadium areas were often even underperforming in economic terms. Here we will determine whether the outcomes observed in the previous analysis were due to or despite the stadium development that has taken place; in other words, whether a difference can be observed between before and after the development. In the following sections, results on business activity (establishments and vehicles) and property values are discussed. The income indicators were deemed less relevant and important here; a description of the outcomes can be found in the appendix.

#### *Business establishments*

First again is the number of business establishments. When looking at the distance buffers, a rather clear picture emerges. The pre-development buffer dummies turn out non-significant or weakly significant and positive, which indicates that the stadium areas before the stadium development counted relatively many business establishments compared to non-stadium areas. So far no real surprises, as this seems to underpin the idea of stadia often being located in industrial or business areas. Though when putting against the post-development buffer coefficients, it becomes clear that the stadium areas after the development generally accommodate a lower number of businesses than the non-stadium areas, with significantly negative coefficients. Only for an impact area of 2500 metres the outcome is not significantly different from zero, but here the pre-development period gets a positive significant coefficient. Taking the distance rings this pattern is a little less evident, with only the rings until 1500 metre showing a similar outcome. For the two outer rings there is no significant difference between the pre- and post-development period. The distance interaction variables are positive and only significant for post-development; this means there is no pre-development impact of the stadia, and that post-development the number of businesses in ‘stadionbuurten’ would increase, non-linearly, with distance. This thus indicates it is not only be related to certain general characteristics of these areas, but suggests a certain impact of the stadium developments. However, with magnitudes being zero or very low respectively this does not seem to be substantial.

This outcome possibly indicates a negative impact of the stadia on the number of business establishments in the surrounding ‘buurten’. Within a radius of 2000 metres, and specifically within 1500 metres from the stadium, we clearly see a difference between the pre- and post-development period: where before the ‘stadionbuurten’ scored relatively high on number of businesses, the ‘stadionbuurten’ after the development are generally underperforming on this aspect.

However, it should be noted here that all stadium areas are included; so, as discussed in the methodology, where for the pre-development ‘stadionbuurten’ only stadia developed after 1995 are taken into account, for the post-development ‘stadionbuurten’ also the stadia

that were long developed before 1995. Therefore the ‘after’ observations differ largely in terms of time the stadium has been in place. To see whether this biases the results, i.e. whether recent developments or a shorter impact period paint a different picture, the Model II variations come in helpful. An interesting difference can be observed at the 2000s stadiums; for the 500 metre buffer the post-development period shows a higher and more strongly significant coefficient, indicating that in the immediate surroundings of the more recent stadiums, business establishments have increased after the development. This is not reflected in the distance buffer parameters, which are only significant for the 500-1000 metre buffer; but while both are positive, the magnitude actually declines between pre and post development. Nevertheless, interestingly overall the post-development stadium areas here perform better than in the other two models. When drawing a larger circle around the stadia, we see a picture similar to that of the base model II, with business establishments being overrepresented in pre-development stadium areas, but turning into values that differ not significantly from non-stadium areas post-development. Finally distance does not seem to have a significant effect here.

Using a five year impact period, the outcomes are rather similar to those of the first model, with stadium areas pre development performing generally better than other ‘buurten’, whereas post development not anymore. The distance interaction variables also show an increase in businesses with distance, after development. These results thus suggest that a shorter impact period does not really affect the earlier outcome for business establishments, and that also on the short term stadium developments do not favourably influence the number of businesses in the area.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	,225	1,712*	,087	,228	1,736*	,083	,226	1,732*	,083
Buffer 500m – Post	-,208	-5,560***	,000	,297	3,250***	,001	,137	1,259	,208
Buffer 1000m – Pre	,081	,958	,338	,085	1,011	,312	,088	1,051	,293
Buffer 1000m – Post	-,110	-4,330***	,000	,068	1,035	,300	-,016	-,222	,824
Buffer 1500m – Pre	,055	,946	,344	,061	1,054	,292	,061	1,066	,286
Buffer 1500m – Post	-,080	-4,149***	,000	,019	,426	,670	-,033	-,661	,509
Buffer 2000m – Pre	,113	2,392**	,017	,119	2,512**	,012	,121	2,567**	,010
Buffer 2000m – Post	-,050	-3,061***	,002	-,012	-,312	,755	-,031	-,767	,443
Buffer 2500m – Pre	,073	1,781*	,075	,073	1,791*	,073	,075	1,867**	,062
Buffer 2500m – Post	-,002	-,104	,917	,003	,107	,915	-,026	-,765	,444
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	,395	,952	,341	,395	,950	,342	,412	1,002	,316
Ring 0-500m – Post	-,155	-1,778*	,075	-,185	-,544	,586	,080	,219	,827
Ring 500-1000m – Pre	,335	2,131**	,033	,335	2,135**	,033	,340	2,184**	,029
Ring 500-1000m – Post	-,030	-,682	,495	,274	2,425**	,015	-,023	-,181	,856
Ring 1000-1500m – Pre	-,056	-,575	,565	-,055	-,569	,570	-,057	-,592	,554
Ring 1000-1500m – Post	-,066	-1,868*	,062	-,086	-1,054	,292	-,153	-1,734*	,083
Ring 1500-2000m – Pre	,041	,500	,617	,042	,510	,610	,048	,590	,555
Ring 1500-2000m – Post	-,003	-,097	,923	,018	,294	,769	,027	,389	,697
Ring 2000-2500m – Pre	,090	1,597	,110	,091	1,609	,108	,093	1,654*	,098
Ring 2000-2500m – Post	,027	1,421	,155	-,015	-,357	,721	-,017	-,371	,711
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	,181	1,638	,101	,184	1,663*	,096	,188	1,714*	,087
Buffer 2500m – Post	-,244	-6,886***	,000	-,058	-,660	,509	-,204	-2,136**	,033
Buffer*Distance – Pre	-5,372E-5	-1,071	,284	-5,422E-5	-1,080	,280	-5,492E-5	-1,104	,269
Buffer*Distance – Post	,000	7,495***	,000	2,969E-5	,750	,453	8,555E-5	1,995**	,046
Buffer 2500m – Pre	,145	2,266**	,023	,148	2,309**	,021	,152	2,386**	,017
Buffer 2500m – Post	-,123	-5,609***	,000	-,055	-1,076	,282	-,125	-2,257**	,024
Buffer*Distance2 – Pre	-1,539E-8	-1,503	,133	-1,557E-8	-1,520	,129	-1,582E-8	-1,558	,119
Buffer*Distance2 – Post	2,466E-8	7,381***	,000	1,208E-8	1,455	,146	1,994E-8	2,281**	,023
<i>Dependent variable: Bedrijfsvestigingen_Samengevoegd_Klassen</i>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.7: Model II – Business establishments.

*Business vehicles*

A second business indicator are the business vehicles. The base model II demonstrates a clear outcome, with the post development impact areas up until 1500 metres having highly significant positive coefficients, which indicates that the number of business vehicles has increased since the development of the stadia in those areas. This is also reflected in the distance rings until 2000 metres, with the exception of the 500-1000 ring. Further away from the stadium the difference dissolves, with the outer ring even showing a significantly negative coefficient for the post development period, resulting in the 2000 and 2500 impact areas to be not significantly different overall. However, looking into model IIc, also the 2500 metre buffer indicates a positive impact of the stadium development, with highly significant coefficients. The interaction variables indicate distance to stadium has a significant influence, and that this effect seems non-linear. While for the normal interaction variable only the post-development coefficient is significant and thus indicating an effect of the stadia, the squared variant gets significant coefficients for both pre and post, questioning this supposition. However, again the magnitudes are zero or very small.

The two variations on the model yield some interesting results. Taking only the stadiums from 2000 onwards, outcomes seem to be somewhat reversed. Here all the different impact areas have significantly negative coefficients after development, as opposed to no significant deviation from other ‘buurten’ pre development. This indicates that these stadium areas have actually seen a decline in business vehicles per km<sup>2</sup> since the development. That this difference is not that strong can be derived from the distance rings, for which only the middle ring is significant, and negative. Nevertheless, a possible explanation for this contrasting outcome, which is also not completely in line with the outcomes for business establishments remains an educated guess, but it might perhaps have something to do with the types of businesses. More in line with the general ideas about the newest generation of stadium developments, it could be that the businesses that are located and/or attracted by those stadiums, differ from those around older stadia, and thereby all stadia in general as well. It could for example be that businesses around more recently developed stadia are more service related, and in the form of offices, which rely less on car use and transport, while around older stadiums there are more vehicle oriented businesses, such as industry or transport related sectors. As for Model IIc, only the squared interaction variable for pre-development is significant, with the negative coefficient indicating that before the development the average number of vehicles decreased with increasing distance, in a non-linear fashion. That means that the areas close to the eventual stadium location were relatively ‘business vehicle-heavy’ compared to areas further away, before the development, but that this distance-decaying pattern has in the end been evened out with the development of the stadium – for which a possible explanation could be related to what is described above; on these locations, perhaps industry and other transport-heavy businesses have made way for the stadia and other types of businesses or economic functions. However, this is also more based on guessing, and cannot be specifically derived from these data.

Finally, the 5-year impact variation does not show any significant or interesting results, which means that there seems to be no significant short term impact related to business vehicles.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-,182	-1,361	,173	-,184	-1,374	,170	-,182	-1,353	,176
Buffer 500m – Post	,096	2,925***	,003	-,146	-1,847*	,065	-,060	-,584	,559
Buffer 1000m – Pre	,017	,198	,843	,010	,124	,901	,008	,094	,925

Buffer 1000m – Post	,129	5,765***	,000	-,117	-2,038**	,042	,013	,189	,850
Buffer 1500m – Pre	-,040	-,710	,478	-,045	-,791	,429	-,047	-,835	,404
Buffer 1500m – Post	,035	2,058**	,040	-,110	-2,800***	,005	-,011	-,244	,807
Buffer 2000m – Pre	,002	,053	,958	,000	-,005	,996	-,001	-,032	,974
Buffer 2000m – Post	,003	,230	,818	-,090	-2,797***	,005	,004	,102	,919
Buffer 2500m – Pre	,017	,432	,666	,017	,423	,672	,017	,423	,672
Buffer 2500m – Post	-,012	-,950	,342	-,074	-2,703***	,007	,013	,415	,678
<b>Model IIb – Distance rings</b>									
Ring 0-500m – Pre	,103	,247	,805	,104	,251	,802	,118	,282	,778
Ring 0-500m – Post	,241	3,177***	,001	,132	,451	,652	,206	,637	,524
Ring 500-1000m – Pre	-,131	-,831	,406	-,130	-,831	,406	-,131	-,831	,406
Ring 500-1000m – Post	,004	,111	,911	-,060	-,612	,541	,028	,235	,814
Ring 1000-1500m – Pre	-,043	-,448	,654	-,045	-,464	,642	-,046	-,470	,638
Ring 1000-1500m – Post	,083	2,664***	,008	-,205	-2,907***	,004	,013	,154	,878
Ring 1500-2000m – Pre	-,019	-,248	,804	-,020	-,263	,792	-,025	-,317	,751
Ring 1500-2000m – Post	,051	1,995**	,046	-,084	-1,569	,117	-,002	-,036	,972
Ring 2000-2500m – Pre	,070	1,297	,195	,069	1,278	,201	,072	1,316	,188
Ring 2000-2500m – Post	-,077	-4,562***	,000	-,038	-1,008	,313	,015	,347	,729
<b>Model IIc – Distance interaction variables</b>									
Buffer 2500m – Pre	,110	1,041	,298	,107	1,006	,314	,100	,935	,350
Buffer 2500m – Post	,249	7,971***	,000	-,098	-1,295	,195	,075	,839	,401
Buffer*Distance – Pre	-4,398E-5	-,929	,353	-4,334E-5	-,915	,360	-3,992E-5	-,838	,402
Buffer*Distance – Post	,000	-9,164***	,000	1,164E-5	,339	,734	-2,971E-5	-,738	,460
Buffer 2500m – Pre	,115	1,887*	,059	,111	1,821*	,069	,108	1,752*	,080
Buffer 2500m – Post	,140	7,260***	,000	-,061	-1,388	,165	,061	1,178	,239
Buffer*Distance2 – Pre	-1,914E-8	-2,047**	,041	-1,891E-8	-2,021**	,043	-1,816E-8	-1,931*	,054
Buffer*Distance2 – Post	-3,114E-8	-	,000	-2,575E-9	-,358	,720	-9,694E-9	-1,176	,240
		10,516***							
<b>Dependent variable: Ln_Bedrijfsmotorvoertuigen_km2</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.8: Model II – Business vehicles.

### Property values

The third indicator are property values. Similar to model I, the outcomes in general are rather clear; stadium areas on average have lower property values than other ‘buurten’, with almost unanimously significant and negative coefficients, most of which even with values exceeding -10.000 (which can be interpreted literally in euros). This coincides with some of the other findings portraying stadium areas as generally underperforming. What is interesting from model II though, is that we can now compare these areas before and after the stadium development. And also looking at these pre and post development variables, a clear picture emerges: here only the post development buffers and rings get the negative coefficients, while the pre development all turn out non-significant. This evidently shows that stadium areas before the actual development did not substantially differ from other, non-stadium areas in terms of property values, but that after the stadium developments property values in those areas are significantly lower than in the other ‘buurten’. Such an overwhelmingly one-sided outcome, can probably be interpreted as that stadia generally have a negative effect on property values. This means that the potential positive impact that is sometimes ascribed to stadia, with extra exposure, investments in infrastructure and new facilities, is outweighed by issues such as the – expected or actual – inconveniences and nuisance caused by a stadium, congestion and parking issues, supporter problems, (noise) pollution et cetera. As many of such ‘liveability’ factors of a neighbourhood are implicitly or explicitly reflected in property values, this is a very important indicator and thus outcome, in economic terms but also something to keep in mind looking into the other dimensions and indicators. What should be noted, is that there seems to be no real concentration around the stadium locations of this deficit; on the contrary, the smallest ring gets no significant coefficient, and the two smallest buffers are in fact smaller in magnitude than the larger buffers. In model c, the standard interaction variables are also non-significant, not indicating a distance effect related to the

stadium. This would imply that either the effect spans out over a large area, or the stadia are not the only factor responsible for this. On the other hand, the squared variant gets a positive significant coefficient for post-development, which might in turn indicate a slight increase in property values moving further away from the stadium, being a non-linear relationship increasing more rapidly with distance. This could perhaps then be seen as an indication the stadia might have something to do with these property value findings; squared distance from the stadium location after development is a significant predictor explaining property values. The fact that this distance variable is non-significant for pre-development, seems to confirm this suspicion of an influence of the stadia.

Nevertheless, the post-development observations of course include all stadia here, also those that are already long in place. To further explore whether the outcomes found above might in fact really be related to stadia, also for recent stadia and a short term impact period, and with that also a more equal distribution of pre and post observations, the model variations might provide more insights. Looking into both variations however, a rather similar picture emerges. Both the '2000 stadia' and a short term impact period show comparable outcomes, with most parameters for the buffers and rings being negative and significant. Interesting to see is that these coefficients seem to be even somewhat larger in general, with values even between -15.000 and -20.000. This would suggest that stadia in fact do have a certain negative impact on property values, also when corrected for the 'skewed' distribution of stadium observations over pre and post development; and in fact that in recent cases and on the short term this 'impact' seems to be even stronger. Tracking back to the base model, that would thus imply it is something that perhaps diminishes somewhat over time, for cases where the stadium is already longer in place. Finally, at least it indicates that also the ideas and development of the new generation of stadia have not been able to improve on this aspect, or in fact produce a positive outcome. On the other hand, the variation models do not show any significant coefficients for the two inner distance rings; this would mean that in the immediate surroundings of the stadia this negative effect has not been the case; however, looking at the coefficients for the other rings, and the distance buffers, this seems somewhat unlikely. A factor of influence in this might perhaps also be the definition of those areas, and the limited amount of observations in these models as a result. Finally the distance interaction variables all turn out non-significant, so a clear distance effect cannot be observed in those two models. The reason why this contrasts the base model with regard to the squared variant, is not really clear; but at least underlines there is no distance effect related to the stadia to be observed in the model variations.

What should be noted with particular regard to this indicator, as also described in the methodology section, is the potential influence of the economic downturn. Undoubtedly this has had a considerable impact on property values in the Netherlands, over the recent years. As discussed in the methodology, the observations affected by the economic downturn, are somewhat unevenly spread between the pre- and post-development groups in Model II, with the post-development group containing much more observations affected by the downturn than the pre-development group. This might be a factor in explaining the strongly negative outcomes on property values for post-development stadium areas observed in this Model II analysis, compared to the non-significant outcomes for the pre-development stadium areas. Furthermore, this is even more so for the two model variations, in which the inclusion of more recent stadia means the 'post economic downturn' observations are even more overrepresented in the post-development group. That might perhaps explain the differences observed between the model variations and the base Model II, and why the stadium areas in these models are in fact performing even worse. Nevertheless, the results found here are of such an evident nature, that this does probably not account for the entire difference in property values, compared to non-stadium areas, and pre-development stadium areas. In other

words, the models still probably indicate a certain negative impact of stadia on property values regardless. This thought is also backed by the earlier analyses of the descriptives and Model I, in which it also came forward that overall stadium areas are generally underperforming in this respect.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-15833,540	-1,430	,153	-15840,806	-1,431	,153	-16077,694	-1,439	,150
Buffer 500m – Post	-7452,517	-2,367**	,018	-25258,403	-3,283***	,001	-19363,400	-2,070**	,038
Buffer 1000m – Pre	715,678	,100	,920	926,177	,130	,897	717,257	,100	,921
Buffer 1000m – Post	-8123,248	-3,794***	,000	-15429,861	-2,771***	,006	-17426,603	-2,829***	,005
Buffer 1500m – Pre	3618,471	,741	,459	4135,406	,847	,397	3808,900	,772	,440
Buffer 1500m – Post	-10452,216	-6,395***	,000	-18174,066	-4,747***	,000	-19693,735	-4,641***	,000
Buffer 2000m – Pre	3430,230	,861	,389	4311,300	1,082	,279	3984,763	,990	,322
Buffer 2000m – Post	-10985,058	-7,928***	,000	-17951,989	-5,754***	,000	-17989,766	-5,207***	,000
Buffer 2500m – Pre	2418,746	,705	,481	3515,016	1,026	,305	3161,252	,912	,362
Buffer 2500m – Post	-10838,494	-8,913***	,000	-18378,871	-6,907***	,000	-18253,494	-6,161***	,000
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	15746,709	,450	,652	16467,889	,471	,638	16257,706	,461	,645
Ring 0-500m – Post	-6603,460	-,902	,367	-26575,490	-,931	,352	-27494,648	-,872	,383
Ring 500-1000m – Pre	-4712,307	-,356	,722	-3731,682	-,282	,778	-4017,654	-,301	,763
Ring 500-1000m – Post	-10893,851	-2,901***	,004	-12713,657	-1,334	,182	-11764,985	-1,092	,275
Ring 1000-1500m – Pre	-6302,179	-,773	,440	-5241,225	-,643	,520	-5563,559	-,676	,499
Ring 1000-1500m – Post	-10153,630	-3,420***	,001	-17972,435	-2,624***	,009	-17718,025	-2,337**	,019
Ring 1500-2000m – Pre	6515,644	,947	,344	7640,330	1,110	,267	7511,787	1,082	,279
Ring 1500-2000m – Post	-10701,730	-4,350***	,000	-15379,632	-2,940***	,003	-13270,126	-2,192**	,028
Ring 2000-2500m – Pre	4099,621	,860	,390	5204,640	1,093	,275	4719,232	,981	,327
Ring 2000-2500m – Post	-11238,970	-7,037***	,000	-20624,221	-5,647***	,000	-21302,684	-5,310***	,000
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-5116,406	-,550	,583	-3856,048	-,414	,679	-4044,770	-,431	,667
Buffer 2500m – Post	-15320,105	-5,131***	,000	-21495,439	-2,922***	,003	-20336,331	-2,486**	,013
Buffer*Distance – Pre	3,666	,868	,386	3,599	,851	,395	3,519	,825	,409
Buffer*Distance – Post	2,186	1,643	,100	1,515	,454	,650	1,003	,273	,785
Buffer 2500m – Pre	-2139,295	-,396	,692	-856,038	-,159	,874	-1158,163	-,212	,832
Buffer 2500m – Post	-14773,193	-8,017***	,000	-21088,918	-4,897***	,000	-20409,388	-4,306***	,000
Buffer*Distance2 – Pre	,001	1,080	,280	,001	1,047	,295	,001	1,026	,305
Buffer*Distance2 – Post	,001	2,838***	,005	,001	,799	,424	,000	,581	,561
<b>Dependent variable: WOZwaarde</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.9: Model II – Property values.

### 4.3.3 Socio-cultural impact

In socio-cultural terms, Model I outlined the image of stadium areas generally underperforming, on overall liveability and specifically regarding safety and security. The Model II analyses presented here shall provide some more insight into the actual role of the stadia in those outcomes, again comparing pre- and post-development observations now. In the following sections the most important findings on the Leefbaarometer indicators will be presented. The population structure was considered less relevant in this respect, and the outcomes for that can be found in the appendix.

#### Leefbaarometer – Overall score

For the socio-cultural impact, a first indication can be given by the overall ‘Leefbaarometer’ scores, a composed score for the overall quality of life, or liveability of the area. The model parameters for both the buffers and distance rings reveal that stadium areas in general score lower in terms of liveability than non-stadium areas, as illustrated by the negative coefficients. What can also be observed for the impact buffers is that, although both underperforming, in

most cases the stadium areas after development score slightly higher than the areas pre-development. Only for a buffer of one kilometre this is the other way around. However, this is not so unambiguously the case for the distance rings model; in fact until a distance of 1500 metres the outcome is reversed. Although there seems to be a certain increasing pattern in this linked to distance from the stadium location, this is not reflected in the distance interaction variables, which turn out non-significant. The results here may suggest that taking an impact zone around the stadia as a whole a ‘stadium area’ has a somewhat higher score on liveability after development compared to before, the distance rings imply that especially in zones close to the stadium this might in fact also be the other way around. To find out more specifically what the actual influence of stadium developments on liveability scores might be, also correcting for the uneven distribution of observations in the base model, the model variations have to be examined.

The recent stadia model does not produce radically different outcomes, with the post-development stadium areas also generally underperforming, but compared to pre-development stadium areas the scores are slightly better overall. The distance rings, as well as the interaction variables, again do not fully reproduce these results, with most coefficients being non-significant. For both models, this might be either due to the definitions of those rings, or perhaps that differences are not strong enough to be visible in separate distance rings, but only when taking impact buffers as a whole. So, although differences are rather small and the distance rings do not so much reflect this, a cautious conclusion from this might be that when looking at recent stadium developments, the general liveability scores in the surrounding areas have slightly increased comparing pre- and post-development observations of those areas.

Looking at the short term impact model, all buffer zones show a comparable difference between pre- and post-development favourable to the latter category, except for the 1000 metre impact zone for which coefficients are not significantly different from zero. Similar to the recent stadia model, the distance rings are largely non-significant here, with only the 1500-2000 metre pre-development variable being significantly negative. Again the distance interaction variables turn out non-significant as well. Therefore conclusions could be similar to those from the first model variation; while differences in these data are not that strong, it seems that also taking a short-term impact period stadium areas perform slightly better with the stadium in place compared to before the development took place. Although the extent to which this is accountable to the stadia remains debatable and of course can vary per case, based on these models we could say that both recent stadia developments and for stadium developments taking only a five year impact period seem to have come along with a positive development in general liveability scores, in the surrounding areas.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-,189	-2,712***	,007	-,189	-2,707***	,007	-,191	-2,773***	,006
Buffer 500m – Post	-,035	-1,495	,135	-,022	-,376	,707	,036	,509	,611
Buffer 1000m – Pre	-,038	-,828	,408	-,037	-,796	,426	-,032	-,699	,485
Buffer 1000m – Post	-,053	-3,390***	,001	-,085	-2,011**	,044	-,046	-1,042	,298
Buffer 1500m – Pre	-,092	-2,795***	,005	-,088	-2,676***	,007	-,082	-2,534**	,011
Buffer 1500m – Post	-,063	-5,264***	,000	-,067	-2,331**	,020	-,065	-2,182**	,029
Buffer 2000m – Pre	-,088	-3,241***	,001	-,081	-2,995***	,003	-,077	-2,868***	,004
Buffer 2000m – Post	-,065	-6,344***	,000	-,054	-2,332**	,020	-,049	-2,067**	,039
Buffer 2500m – Pre	-,075	-3,191***	,001	-,067	-2,848***	,004	-,062	-2,676***	,007
Buffer 2500m – Post	-,055	-6,090***	,000	-,031	-1,564	,118	-,029	-1,388	,165
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-,195	-,883	,377	-,190	-,863	,388	-,171	-,785	,432
Ring 0-500m – Post	-,241	-4,545***	,000	-,282	-1,277	,202	-,279	-,907	,364
Ring 500-1000m – Pre	-,131	-1,515	,130	-,124	-1,436	,151	-,126	-1,476	,140
Ring 500-1000m – Post	-,046	-1,673*	,094	,025	,349	,727	-,028	-,367	,714
Ring 1000-1500m – Pre	-,008	-,151	,880	-,001	-,014	,989	,008	,142	,887
Ring 1000-1500m – Post	-,045	-2,075**	,038	-,110	-2,109**	,035	-,064	-1,146	,252

Ring 1500-2000m – Pre	-,133	-2,814***	,005	-,124	-2,636***	,008	-,123	-2,639***	,008
Ring 1500-2000m – Post	-,063	-3,511***	,000	-,046	-1,189	,234	-,055	-1,287	,198
Ring 2000-2500m – Pre	-,061	-1,861*	,063	-,052	-1,603	,109	-,047	-1,452	,146
Ring 2000-2500m – Post	-,047	-4,051***	,000	-,007	-,263	,793	-,008	-,294	,769
<b>Model IIc – Distance interaction variables</b>									
Buffer 2500m – Pre	-,095	-1,530	,126	-,087	-1,391	,164	-,081	-1,319	,187
Buffer 2500m – Post	-,068	-3,094***	,002	-,081	-1,457	,145	-,057	-,967	,333
Buffer*Distance – Pre	1,021E-5	,358	,721	9,976E-6	,349	,727	9,482E-6	,337	,736
Buffer*Distance – Post	6,456E-6	,663	,508	2,439E-5	,964	,335	1,364E-5	,517	,605
Buffer 2500m – Pre	-,088	-2,415**	,016	-,079	-2,175**	,030	-,074	-2,054**	,040
Buffer 2500m – Post	-,055	-4,018***	,000	-,049	-1,517	,129	-,033	-,991	,322
Buffer*Distance2 – Pre	2,783E-9	,474	,636	2,641E-9	,449	,653	2,501E-9	,431	,666
Buffer*Distance2 – Post	-2,860E-11	-,014	,989	3,793E-9	,710	,478	9,425E-10	,177	,859
<b>Dependent variable: Leefbaarometer_Score_Klassen</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.10: Model II – ‘Leefbaarometer’ score – Overall score.

### Leefbaarometer – social cohesion

The next social ‘Leefbaarometer’ indicator concerns social cohesion. When looking into the impact zones, the model parameters suggest that stadium areas after development generally score better than the stadium areas pre-development. For the first three impact buffers (until 1500 metres) this is expressed by negative coefficients for the pre-development variables, while for the two largest impact buffers instead the post-development variables get positive coefficients. It should be noted however that some of those are only weakly significant. Nevertheless, this indicates that the areas surrounding stadium locations generally seem to perform better with a stadium in place, in terms of social cohesion, than such areas before the development has taken place. For smaller impact zones around the stadia this means a shift from generally underperforming areas to ones that are similar to non-stadium areas; taking a larger impact area, the surrounding ‘buurten’ overall shift from comparable to non-stadium areas pre-development to slightly better performing areas after. Looking at the effect of distance, an ambiguous picture emerges. Coefficients for the distance rings turn out largely non-significant, indicating the differences are not that evident that they show up in the separate rings as well, but also that there seems to be no significant influence of distance to stadium location. However, on the other hand, the interaction variables do turn out significant, with positive coefficients for both the standard and the squared variant, and pre- and post-development. Although magnitudes are rather small, so this should not be overestimated, this may indicate that when moving farther away from the stadia locations social cohesion scores generally increase. The fact that this is the case for both pre- and post-development, suggests that this would more be something related to those locations, rather than an effect of the stadium developments – although, the magnitude of the parameters somewhat decreases. Nevertheless, to come to a more decisive answer to the question what the actual impact of the stadia in this might be, the model variations should be examined.

The ‘2000 stadia’ model underpins these outcomes, and is even somewhat more evident looking into the impact buffers. For example, the 1500 metre buffer now has significant coefficients for both pre- and post-development, with the former being negative and the latter positive. Also the parameters for the two largest impact zones are much larger here and more strongly significant. Looking at the distance rings, only the post-development variable for the largest ring is – highly – significant and positive, which corresponds to the findings for the larger impact buffers. A sound explanation for this cannot be given based on these data; however it possibly suggests that it is not so much or at least not only the stadia that play a role in the observed outcomes, as the clearest difference seems to lie relatively rather far away from the stadia. On the other hand, it could also mean the impact manifests

itself most evidently somewhat further away from the stadia; although it seems rather unlikely that stadiums have their strongest impact on social cohesion at a distance of two or more kilometres away. When reviewing the distance interaction variables, an interesting difference comes to the fore. As opposed to the base Model II, here only the pre-development interaction variables turn out significant, and positive. That means, only in stadium areas before the actual development social cohesion scores were relatively low around the eventual stadium location, and increased when moving farther away from that. The fact this pattern cannot be observed anymore post stadium development, suggests these developments might actually have had a positive impact on this in the surrounding areas. So, this leaves a somewhat ambiguous picture; on the one hand the impact buffers and distance interaction variables suggest a certain impact on social cohesion that can be related to the stadia, while on the other hand the increasingly positive outcomes farther away from the stadium, as illustrated by the outer distance ring and two largest buffers, might indicate this is perhaps not so much (only) a direct result of the stadia (or, a stronger impact further away from the stadium, although that seems somewhat unlikely in this case).

Finally, the short-term impact model. The outcomes of this model seem to lie somewhat in between the two earlier models. The model parameters for the buffers and distance rings are rather comparable to the other two models, although somewhat stronger or higher than the base Model II, but a little less so compared to the recent stadia model. The distance interaction variables follow the results from the other model variation; only positive and significant coefficients for the pre-development interaction variables. From these outcomes, we can conclude that also when looking into a short-term impact period, stadium areas seem in general to perform better after the stadium development than before. While the more positive values further away from the stadium would suggest it is perhaps not only the stadium that plays a role here, comparing the outcomes of pre- and post-development for both the impact zones and the interaction variables outcomes indicate the stadia might in fact have had a certain positive impact on social cohesion scores in the surrounding areas, also already on a short term impact period. Possible explanations for these Model II outcomes overall, could be a broader development of the surrounding areas in general, the development of new housing projects, or perhaps even a certain ‘binding’ function of the stadia. However, the question whether this can actually be ascribed to the stadium developments, or whether it is something that developed alongside, cannot unequivocally determined from these data alone, and probably also differs from case to case.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-5,220	-1,731*	,084	-5,216	-1,729*	,084	-5,378	-1,772*	,076
Buffer 500m – Post	,560	,557	,577	3,138	1,252	,210	2,732	,877	,380
Buffer 1000m – Pre	-5,763	-2,889***	,004	-5,739	-2,877***	,004	-5,771	-2,873***	,004
Buffer 1000m – Post	-,302	-,444	,657	2,763	1,516	,130	2,114	1,076	,282
Buffer 1500m – Pre	-2,607	-1,836*	,066	-2,602	-1,833*	,067	-2,596	-1,813*	,070
Buffer 1500m – Post	,344	,661	,509	2,325	1,878*	,060	1,072	,814	,416
Buffer 2000m – Pre	-1,800	-1,538	,124	-1,813	-1,551	,121	-1,824	-1,545	,122
Buffer 2000m – Post	,738	1,671*	,095	3,584	3,587***	,000	2,023	1,921*	,055
Buffer 2500m – Pre	-,502	-,496	,620	-,504	-,500	,617	-,528	-,517	,605
Buffer 2500m – Post	,648	1,670*	,095	3,652	4,273***	,000	1,783	1,966**	,049
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-9,532	-1,001	,317	-9,603	-1,009	,313	-10,140	-1,058	,290
Ring 0-500m – Post	,573	,250	,802	,497	,052	,958	7,072	,522	,602
Ring 500-1000m – Pre	-4,961	-1,327	,185	-4,978	-1,332	,183	-5,070	-1,347	,178
Ring 500-1000m – Post	-1,364	-1,142	,254	2,564	,829	,407	2,024	,596	,551
Ring 1000-1500m – Pre	-3,690	-1,590	,112	-3,690	-1,591	,112	-3,713	-1,589	,112
Ring 1000-1500m – Post	1,040	1,099	,272	4,280	1,900*	,057	2,905	1,189	,235
Ring 1500-2000m – Pre	-,130	-,064	,949	-,134	-,066	,948	-,108	-,053	,958
Ring 1500-2000m – Post	,718	,925	,355	,843	,505	,613	-1,157	-,618	,536

Ring 2000-2500m – Pre	1,311	,928	,354	1,309	,927	,354	1,292	,906	,365
Ring 2000-2500m – Post	,845	1,674*	,094	5,049	4,335***	,000	2,637	2,210**	,027
<b>Model III – Distance interaction variables</b>									
Buffer 2500m – Pre	-9,314	-3,460***	,001	-9,316	-3,463***	,001	-9,355	-3,452***	,001
Buffer 2500m – Post	-1,231	-1,297	,195	,732	,305	,761	-1,131	-,434	,664
Buffer*Distance – Pre	,004	3,530***	,000	,004	3,533***	,000	,004	3,515***	,000
Buffer*Distance – Post	,001	2,167**	,030	,001	1,300	,194	,001	1,192	,233
Buffer 2500m – Pre	-4,786	-3,046***	,002	-4,778	-3,045***	,002	-4,799	-3,031***	,002
Buffer 2500m – Post	-,448	-,764	,445	2,145	1,530	,126	,106	,072	,943
Buffer*Distance2 – Pre	9,020E-7	3,555***	,000	9,015E-7	3,554***	,000	9,002E-7	3,525***	,000
Buffer*Distance2 – Post	2,203E-7	2,477**	,013	3,120E-7	1,353	,176	3,339E-7	1,427	,154
<b>Dependent variable: Leefbaarometer_Score_SocialeSamenhang</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

Table 4.11: Model II – ‘Leefbaarometer’ score – Social cohesion.

### Leefbaarometer – Safety and security

The last indicator, the ‘Leefbaarometer’ score on safety and security, does show some interesting results. Starting with the base Model II again, it can be observed that stadium areas in general score significantly worse in terms of safety compared to other areas, both non-stadium areas and stadium areas pre-development. For all distance buffers the post-development variables coefficients are highly significant and negative, whereas the pre-development areas do not significantly differ from the non-stadium areas. Although somewhat less obvious, the distance rings seem in general to confirm this outcome. Furthermore, the distance interaction variables also indicate that safety scores increase when moving farther away from the stadia, with positive (although small) significant coefficients for the post-development variables. This also shows it might well be something related to the stadia, as for the pre-development stadium areas no such distance pattern can be observed.

Despite the unbalanced distribution of areas over pre- and post-development, as also highlighted earlier, the outcomes of this model suggest that stadium areas in the Netherlands are generally performing relatively poorly in terms of safety and security. What the definition of these groups here does impose, is that also all the older stadia are included in the post-development group. These are, more often than newer stadia, located in more dense urban areas, and causing problems and nuisance for the surrounding neighbourhoods. In fact, in recent stadium developments that was in many cases also one of the main arguments for (the importance of) moving to a new stadium and location (i.a. Van Dam, 2000; Kool, 2013). To determine what impact recently developed stadia have on safety scores in the surrounding areas, as well as what the short-term impact of a stadium development on this might be, and thus whether this differs from the overall base Model II, the model variations will be discussed below.

When analysing the ‘recent stadia’ model, some interesting differences to the base model can be observed. The impact buffers in this model all turn out non-significant, with the important exception of the smallest (500 metre) buffer, which is highly and significantly negative only for post-development. This outcome contrasts with the first model, and indicates that when taking into account only recent stadium developments, at least the larger surrounding areas generally do not substantially differ from similar non-stadium areas. The fact that this is the case for both pre- and post-development, suggests these recent stadium developments have not had a significantly (negative) effect on safety scores in the larger surrounding area. However, the negative outcome for the 500 metre buffer indicates that in areas in the direct proximity of the stadia, safety scores have in fact significantly decreased with the development of the stadium. Looking at the distance rings, this is also reflected by the inner ring, while the others do not reflect a clear picture with regard to distance. Only the 1000-1500 metre ring shows a decrease as well comparing pre- and post-development, while

the outer ring actually sees an increase. The interaction variables do show a certain distance effect, although with small magnitudes; the post-development coefficients here are significant and positive, indicating that only after the stadia were put in place the safety scores in the surrounding areas see an increase when moving farther away from the stadium location. So, this further underlines the suspicion that in the direct surroundings the stadia might have had a negative effect on safety scores.

Finally, the short-term model produces only limited significant outcomes. The impact buffers are in fact all non-significant, while only for the inner and outer distance rings a – weakly significant – difference can be observed. Interestingly though, for two this difference is in favour of the post-development variable, which would mean a positive development since the arrival of the stadium. However looking into the weak significance of this and the outcomes for the buffers, this should not be weighted too heavily. The distance interaction variables however do paint a picture similar to the first model variation; for the post-development variables coefficients are positively significant, thus indicating an increase in safety scores with increasing distance from the stadium, but only after the stadium has been developed.

From the models on this indicator we can conclude that in general stadium areas seem to score relatively low on safety and security. This is especially evident looking into all stadiums included in this research. When taking into account only recent stadia, we only see such a negative outcome for the smallest impact zone, so the areas in closest proximity to the stadium. The outcomes in the base model could partly be the result of the unbalanced distribution of the pre- and post-development groups, and thus not properly comparing areas before and after a stadium development. The overrepresentation of older stadia in the ‘post’ group may affect these results; however, whether that provides a fully sound explanation for negative scores up until even 2500 metres cannot be distilled from that. The more balanced ‘recent stadia’ model suggests that stadium developments might in fact have a negative impact on safety and security in the surrounding areas, but that this remains limited to the ‘buurten’ close to the stadium location (especially within 500 metres). The distance interaction variables confirmed this by indicating scores go up when distance from the stadium increases. The overall negative outcomes correspond to the general idea of football stadiums creating nuisance and other problems for their surrounding areas, especially related to the large groups of football supporters they attract. While this thus becomes apparent in the Leefbaarometer safety scores in both models, for the recent stadia this is limited to only a small area surrounding the stadia. A reason for this might be that in many recent stadium development cases safety and security were important factors in both leaving the old location, and selecting and designing the new location. It might thus be that when taking into account also the older stadia, these cause that negative safety scores are spread over a larger area (...), while in the newer stadia the choice of location (edge of city, underused areas, et cetera) and the practical design and planning of the stadium sites ensured these effects are restricted to only a smaller area.

While this safety aspect is expected to be mainly related to the football activity, at least as far as the influence of the stadia is concerned, looking into a short-term impact period it seems the stadia did not produce such clear results. Observing stadium areas only five years after development, distance buffers and rings do not show significant differences between pre- and post-development. Distance interaction variables do indicate that there is a certain pattern in which safety scores increase moving away from the stadium. (...) Nevertheless, this would generally indicate that such an impact only becomes apparent over a longer period of time; although a logical explanation for this cannot be deduced from these data, nor from earlier research.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model Ila – Distance buffers</i>									
Buffer 500m – Pre	-1,576	-,514	,608	-1,557	-,507	,612	-1,966	-,642	,521
Buffer 500m – Post	-3,933	-3,849***	,000	-6,623	-2,598***	,009	,190	,060	,952
Buffer 1000m – Pre	,761	,375	,708	,837	,412	,680	,468	,231	,817
Buffer 1000m – Post	-2,388	-3,451***	,001	-1,601	-,863	,388	1,480	,746	,456
Buffer 1500m – Pre	,827	,573	,567	,980	,678	,498	,658	,455	,649
Buffer 1500m – Post	-2,144	-4,057***	,000	-,706	-,560	,575	,448	,337	,736
Buffer 2000m – Pre	,119	,100	,921	,349	,293	,769	,001	,001	,999
Buffer 2000m – Post	-1,888	-4,206***	,000	,107	,105	,916	,783	,736	,462
Buffer 2500m – Pre	,344	,335	,738	,587	,572	,567	,291	,282	,778
Buffer 2500m – Post	-1,369	-3,471***	,001	,658	,756	,450	1,473	1,609	,108
<i>Model Iib – Distance rings</i>									
Ring 0-500m – Pre	-16,095	-1,662*	,097	-16,035	-1,655*	,098	-16,836	-1,741*	,082
Ring 0-500m – Post	-5,871	-2,522**	,012	-23,062	-2,380**	,017	-22,448	-1,642	,101
Ring 500-1000m – Pre	-4,127	-1,085	,278	-3,945	-1,037	,300	-4,342	-1,143	,253
Ring 500-1000m – Post	-2,426	-1,997**	,046	,533	,169	,866	1,345	,393	,695
Ring 1000-1500m – Pre	4,479	1,898*	,058	4,696	1,990**	,047	4,376	1,856*	,064
Ring 1000-1500m – Post	-,351	-,364	,716	-,294	-,128	,898	,901	,365	,715
Ring 1500-2000m – Pre	-2,204	-1,062	,288	-1,958	-,943	,345	-2,214	-1,068	,286
Ring 1500-2000m – Post	-3,427	-4,343***	,000	-1,223	-,721	,471	-1,128	-,597	,550
Ring 2000-2500m – Pre	1,045	,727	,467	1,290	,898	,369	1,017	,707	,479
Ring 2000-2500m – Post	-,460	-,896	,370	2,195	1,851*	,064	2,854	2,371**	,018
<i>Model Iic – Distance interaction variables</i>									
Buffer 2500m – Pre	-,593	-,217	,829	-,333	-,122	,903	-,787	-,288	,774
Buffer 2500m – Post	-4,123	-4,272***	,000	-4,771	-1,949*	,051	-4,928	-1,874*	,061
Buffer*Distance – Pre	,000	,365	,715	,000	,361	,718	,001	,423	,672
Buffer*Distance – Post	,001	3,126***	,002	,003	2,374**	,018	,003	2,596***	,009
Buffer 2500m – Pre	,045	,028	,978	,321	,201	,841	-,055	-,035	,972
Buffer 2500m – Post	-2,861	-4,797***	,000	-2,015	-1,412	,158	-1,793	-1,200	,230
Buffer*Distance2 – Pre	6,057E-8	,235	,815	5,525E-8	,214	,831	7,158E-8	,278	,781
Buffer*Distance2 – Post	3,016E-7	3,333***	,001	5,549E-7	2,364**	,018	6,528E-7	2,764***	,006
<p><b>Dependent variable: Leefbaarometer_Score_Veiligheid</b>  ***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.  Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.  In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.</p>									

Table 4.12: Model II – ‘Leefbaarometer’ score – Safety & security.

#### 4.4 Summary results quantitative analysis

This quantitative analysis has provided some interesting insights into the performance of stadium areas in the Netherlands, and the possible impacts of football stadia on these surrounding areas. As an overall model incorporating multiple stadiums, it provided an general picture of Dutch football stadia (areas); it of course overlooks in large part details of and differences between individual cases – which will be provided by the case study later on. Descriptive statistics and a non-year-specific regression model provided a general overview of what the stadium areas in the Netherlands look like, compared to non-stadium areas, on specific moments in time (descriptives), or over time but regardless of when the stadium was developed (Model I), while the year-specific regression model II then incorporated a pre-post element, and thus has shed some light on the possible impact of the stadium developments. As the extensive tables and descriptions above may be rather tough to read through, the results will be briefly summarised here.

Taking a first shallow dive into the data looking at descriptive statistics for different years, it became clear that stadium areas (‘buurten’ within a buffer of 1500 metres) seem to be generally underperforming on many aspects, compared to non-stadium areas. For example, the stadium areas seem to have significantly lower average property values, a lower average income level, as well as relatively high numbers of low incomes and unemployment, and score lower in terms of liveability. On the other hand, in comparison the stadium ‘buurten’

seem to be relatively dense, urban areas, that also generally accommodate more business activity.

Looking at the Model I results then, over the past years the stadium areas overall still come off as relatively urban areas, compared to non-stadium areas, however with a few caveats. The share of urban land use and amenity level seems to be relatively high particularly in areas close to the stadium locations, and while address density is also higher in a larger zone as a whole, it is lower in the direct vicinity of the stadia. For population density, this is even the case for all stadium area definitions. Housing stock on the other hand is relatively large, which might be explained by the lower average household size found earlier. While lower densities directly around stadia does not seem illogical, either as cause or effect of a stadium placement, the overall picture seems to be that 'urbanity' indicators in stadium impact areas in fact somewhat decline moving further away from the stadia. This might indicate stadia are generally located more on the edge of cities, where densities tend to decline moving outwardly farther away. The underperforming character found in the descriptives, is reflected in the quality of public space, but not so for the housing stock scores. Contrary to the descriptives, business establishments turned out relatively low in stadium areas here, although business vehicles do seem to be overrepresented. While it contrasts the idea of stadia in 'business-heavy' areas, and a conclusive reason cannot be given based on the data alone, a possible explanation might be related to the types of businesses. Furthermore, the outcomes on property values and income variables here clearly suggest stadium areas are generally underperforming, similar to results found with the descriptives. Finally, the socio-cultural Leefbaarometer indicators also mainly seem to underline the underperforming character of stadium areas. While not substantially reflected in all indicators, the overall scores do show a significant difference in favour of the non-stadium areas. In particular the scores related to safety and security turn out lower for stadium areas, especially somewhat concentrated around the stadium locations; although not decisive in terms of impact, this might well indicate a certain relation with the stadia.

So concludingly, both analyses provided an overall image for stadium areas in the Netherlands, but did not yet say a lot about the actual stadium impact. The descriptives are not looking into development over time but only specific moments in time, do not control for other variables, and concern all stadia together, regardless of how long ago they were developed. And while Model I then accounted for the first two elements, and used the same indicators and 'stadium area' definitions as Model II, and with that provided a somewhat more sophisticated and nuanced picture for the stadium areas, it did also not incorporate a pre-post impact element. Nevertheless, both do pose an interesting outcome, indicating that seemingly the areas where stadiums are generally located in are substantially different from non-stadium areas in many respects; regardless of whether or not the stadia were deliberately placed there, and/or influenced by the stadium since. Overall, the stadium areas seem relatively urban areas, although not unanimously reflected in all indicators, but seem to be generally underperforming in both economic and social terms. Model I then also highlighted a potential influential factor of distance to the stadia.

Following these area characterisations, Model II has provided more insight into the actual possible impacts of the football stadia, and in particular the two model variations. Starting off with the area development indicators, mixed results were found. Firstly, data on urban land use and address density paint a rather similar picture. In the base model, both clearly underline the earlier finding of stadium areas as generally urban areas, post-development compared to both pre-development and non-stadium areas. While this might suggest a certain impact, these results were not reproduced in the model variations however; mostly non-significant results refute the suggestion of a stadium impact on area development at least in terms of those indicators, when looking into recent stadium developments and a

short term impact. The reason for this difference may probably lie in the definition of the post-development group; the base model includes all stadia, so the post-development stadium areas consist also of 'buurten' around older stadia that are developed longer ago and generally understood to be located in somewhat more urban areas, and for which only post-development observations occur. The model variations include only more recent stadia, which a.o. means the post-development 'buurten' consist of relatively many observations affected by the recent economic downturn, compared to the base model; that might also contribute to the difference between the models in the difference observed between pre and post. Nevertheless, by looking at a more even distribution of pre and post development 'stadionbuurt' observations with the model variations, and thus a more proper pre-post analysis, overall these developments do not seem to have caused a significant impact; specific reasons for that may of course differ per individual case. In addition, the housing stock indicators, both quantitative and qualitative, show rather comparable outcomes; whereas the base model indicates a relatively high score for post-development stadium areas, these results are not maintained looking into the model variations. Some other, interesting results were found for the Leefbaarometer indicators. In terms of public space, stadium areas in general seem to be underperforming, but it becomes clear these areas after the development score better than before. Therefore, results indicate a potentially positive stadium impact on the quality of public space. This seems particularly the case for recent stadium developments, where post-development scores are even similar to non-stadium areas, and also somewhat concentrated in areas closer around the stadia; on the short term also an overall increase appears from pre to post development, although a smaller increase suggests this effect is not yet optimised after five years. Finally, stadium areas score relatively high in terms of the amenity level; this is particularly the case when including all stadia, and somewhat toned down for the model variations. Again, this might also be influenced by the inclusion or exclusion of older stadia – generally understood to be in somewhat more urban areas, closer to the city core – in the base model and model variations respectively. Nevertheless, it can therefore be concluded that from these data it shows that the stadium developments may have caused, or in any case coincided with, an increase in the amenity level in the surrounding areas. A reason for this could be the development of additional functions in and around the stadia, but looking at the scale of the positive outcomes it might also be partly due to a broader development of these areas in general. It should be noted however, that for both the public space and amenity level scores the explanatory power of the model was rather limited; so these conclusions should be watched with some reservation.

As a first important indicator for economic effects, outcomes on business activity also did not turn out conclusively. For business establishments, the base model even shows that in pre-development stadium areas the number was relatively high, while post-development 'stadionbuurten' are generally underperforming. A possible explanation, but not more than an educated guess, might again be the definition of both groups; post-development includes older stadia, that are generally located in urban areas, but that might also include areas of a more residential character, while pre-development includes only observations for more recent stadia, often placed on business or industrial-like locations. These results are somewhat flattened out in the model variations, particularly in the recent stadia model. Main interesting outcome there is that in areas in the immediate surroundings, within 500 metres, there seems to be a slightly positive impact on business establishments. However, this is not backed up with further positive outcomes, and in fact both model variations do not suggest a positive impact outside of that – if anything, a slightly negative impact comparing pre and post development. As described for area development, the economic downturn might have had an influence in these outcomes; even though that would not explain the (stronger) negative outcomes in the base model. Interestingly, the business vehicles indicator showed not

completely parallel outcomes; numbers for the post-development stadium areas are relatively high in the base model, while this is somewhat reversed for the recent stadia model variation (on the short term, no significant differences could be observed). Here stadium areas pre-development are similar to other buurten, while post-development they seem to score lower, possibly suggesting a decline in the density of business vehicles in areas surrounding these stadia. An explanation for these contrasts to the base model, as well as outcomes for business establishments, cannot be derived from the data alone. It might have something to do with the types of businesses; perhaps businesses around recently developed stadia would be more service-oriented, e.g. in the form of offices, that rely less on transport, while around older stadiums vehicle-oriented businesses in the industry and transport sector are still more dominant. But again, this is only a guess at most, and would on the other hand not really align with the earlier notions of older stadia located in more urban, and perhaps residential areas. Perhaps a more viable explanation might therefore also be the influence of the economic downturn, especially affecting the model variations. Nevertheless, both these indicators do not suggest a very clear stadium impact on business activity in surrounding neighbourhoods, and overall there seems to be a slightly negative development rather than positive. Finally then, results for property values are rather clear, indicating underperforming areas, and potentially a negative stadium impact. This is the case when including all stadia, and even somewhat stronger in the model variations. The effect is visible until the largest impact zone (2500 metre), but there does not seem to be a clear distance pattern. Comparing model variations to the base model, the difference when taking into account also older stadia might imply that such a negative effect somewhat evens out over time. Furthermore, the already mentioned economic downturn is a factor probably also affecting property values, and might therefore also be a factor contributing to the negative outcomes overall, as well as the stronger negative outcomes for the recent stadia in the model variations. Nevertheless, the results are of such an evident nature, that it does probably not account for the entire negative magnitude of outcomes; in other words, the outcomes still probably indicate a certain negative impact of stadia on property values. The model variations also indicate at least that also the ideas and development of the new generation of stadia have not been able to improve on this aspect, or in fact produce a positive outcome. So, as the earlier statistics already showed stadium areas are generally underperforming in terms of property values, and Model II adds to this that there might in fact be a negative influence of the stadia involved here.

For the socio-cultural impact, a couple of Leefbaarometer indicator scores were examined. First of all, the overall liveability score again emphasises the generally underperforming character of stadium areas. However, in all three variants overall the post-development stadium areas seem to score somewhat higher than the pre-development observations. So, although differences are not that strong and not reflected in all stadium area definitions, and the extent to which this is accountable to the stadia remains debatable and may of course vary per case, based on these models the stadia overall, as well as recent stadium developments and taking only a five year impact period, seem to have come along with a positive development in liveability scores, in the surrounding 'buurten'. Looking into the specific scores on social cohesion, there seems to be a certain stadium impact as well, comparing pre and post development scores, in both the base model and the variations. Overall higher scores for the post-development stadium areas – for the recent stadia even somewhat more evident than when incorporating all stadia, while outcomes for short term impact lie in between – might suggest stadia have in fact had a certain impact on social cohesion. Somewhat ambiguous outcomes related to the distance element on the other hand may hint it is not solely the stadium, but also related to other characteristics. So while there might be a certain social or 'binding' function of the stadia, it might also have something to do with a broader development of the surrounding areas in general, or other characteristics not

accounted for in these models. The question whether these outcomes can actually be ascribed to the stadium developments, or whether it is something that developed alongside, cannot unequivocally be determined from these data alone, and probably also differs from case to case. Finally, similar to Model I scores on safety and security are relatively low in 'stadionbuurten', and as Model II indicates only post-stadium development. This might suggest a negative impact, and corresponds to the general idea of stadia causing nuisance and problems for surrounding areas, especially related to football matches and supporters. An interesting difference emerged however between incorporating all stadia and only the recent ones; whereas for the base model this is spread over the entire impact zone, for the recent stadia model this is only concentrated directly around the stadia (within 500 metre), while farther away no differences can be observed. This might be due to the different composition of stadia in the models; older stadia, included only in the base model, are generally understood to be located in somewhat denser urban areas, and causing more problems and nuisance for the surrounding neighbourhoods. In fact, in recent stadium developments that was in many cases also one of the main factors in both leaving the old location, and selecting and designing the new location. So while perhaps for older stadia these issues cause negative safety scores spread over a larger area, for recently developed stadia there is still an effect, but the choice of location and practical design and planning of the site ensured these effects are restricted to only a smaller area. Finally, while the influence of the stadia is expected to be mainly related to the football activity, this impact cannot be observed in the short term model; this would implicate this impact only becomes apparent over a longer period of time, but a logical explanation for this cannot be deduced from these data, nor from earlier research.

## **5. Qualitative analysis – Case study Euroborg, Groningen**

### 5.1 Introduction & case description

As stated before, the second part of the analysis will consist of a case study of the Euroborg (as of mid-2016 officially Noordlease Stadion) in Groningen. The Euroborg, opened in January 2006, is the home venue/accommodates the football club FC Groningen, and currently has a capacity of 22.550 seats (Voetbal International, 2016). With this the club left their old stadium the Oosterparkstadion, situated in the ‘working class’ neighbourhood Oosterparkbuurt on the east side of the city, which had been their home venue since the 1930s. The Euroborg is situated in the Europapark area, a former industrial area, southeast of the city centre of Groningen. Groningen itself, the capital city of the province by the same name, has a population of just over 200.000 (CBS, 2016), with which it is the largest city of the northern provinces of the Netherlands (Noord-Holland obviously not included).

#### *5.1.1 Short history*

The first notions of a new stadium for FC Groningen trace back to early 1997. Since the mid-nineties the club increasingly became the centre of a number of problems. Incidents involving football supporters caused nuisance and disturbances for the Oosterpark neighbourhood, a situation increasingly becoming a burden for both local government, police and the club, while the negative image this reflected upon FC Groningen led to people as well as sponsors distancing themselves from the club. This was accompanied by poor performances on the football pitch, eventually even leading to relegation to the second tier (Eerste Divisie) in 1998. Furthermore, the club was also struggling in financial terms; there was a structural budget deficit, and on multiple occasions the club faced a looming bankruptcy. Taking all this together, both club and municipality realised something had to change. What these problems also highlighted, was that the Oosterparkstadion was strongly outdated; its location in a densely populated residential area causing problems in terms of traffic and nuisance, but certainly also in terms of capacity and facilities, for spectators and sponsors, and thereby limiting the potential revenues and financial possibilities for the club. For the club it quickly became clear: a new stadium was necessary, to create more revenue, by exploiting more the commercial function of a stadium, a higher budget, and thereby a better performing football club. While the municipality took some initial convincing that this was really the only possibility, fairly quickly also they endorsed the need for FC Groningen to move to a new stadium, on a new location.

Around the same time, a large power station (Hunzencentrale) southeast to the city centre closed its doors, and in 1998 was eventually demolished. The large abandoned area, first called EDON- (and later Essent-) terrain, was then acquired by the municipality of Groningen. However, it was still ‘a bit of a puzzle’ what to do with the location, further complicated by issues of soil and noise pollution due to (former) industrial functions (Willem Smink, in Venema & Schoenmaker, 2015). Going back to the stadium issue, a couple of early location suggestions were dismissed, in particular because they were considered to be too far away from the city. Quite soon these two ‘streams’ were then connected: already in 1997 the former EDON location was considered as a potential stadium location for the first time, and in a location report later that year even rated as the best possible location (Draaijer & Partners, 1997). When convinced that a move to a new location was the best option for the club, the municipality soon also embraced the idea of incorporating a new stadium in the now-called Europapark development; a large vacant area that needed a new function, earmarked for redevelopment, situated relatively close to the city centre, making it also accessible for ‘slow

traffic', while also close to both a highway and railway line. A new stadium, including additional functions and facilities, was seen as an interesting solution, with the potential to bring the area to a broader attention, and be a driver for the development. So in short, they concluded "this was actually a very nice place for the new stadium" (Willem Smink, in Venema & Schoenmaker, 2015). And so it happened that "some lines were tied together", as Jelle Dijkstra (personal communication, 11 June 2013) later put it, and following the club the municipality in principle also committed to the realisation of a new stadium, on this location.

In principle, because an important precondition was a stable financial situation of the club. This statement came together with a loan that was provided by the municipality, that saved the club from bankruptcy early 1998. Despite divided opinions in the city council, the idea (and justification) was that after this the club would not have to come knocking on the door every once in a while, and with the perspective of a new stadium a 'structurally healthy situation' would be created (Willem Smink, in Venema & Schoenmaker, 2015).

Nevertheless, it was by no means plain sailing from then on. The situation around the club and supporters remained turbulent, and later that year FC Groningen even relegated to the Eerste Divisie, the second tier of Dutch football. They stayed there for two years, before gaining promotion back to the Eredivisie in 2000. However, this situation did not stop the process of realising a move to a new stadium; if anything it was considered a sign that a new stadium was necessary, and in fact should have been developed earlier (Hans Nijland, in Venema & Schoenmaker, 2015). In 1999 a prominent architect, Wiel Arets, was appointed to design the stadium, and surrounding area. Ambitious plans were drawn up for the Europapark, in which the new stadium would get an important place. Private parties were sought for additional functions in and around the stadium complex, to contribute to the funding of the stadium, but also that would fit into the broader development plans for Europapark. That is not to say that there were no more hurdles to take along the way. In the years until 2002 for various reasons the process got delayed on multiple occasions, while also costs turned out higher, leading to retrenchments in the original designs. Bringing and holding together the various commercial actors, necessary for financing the stadium part of the development, also posed a time-consuming challenge: "at a given moment all together have to come to a certain concept, on which at more or less the same time they put their signature. (...) Well that posed an incredible operation, to get everybody in that same 'wheelbarrow', that everyone constantly tried to jump out of again" (Willem Smink, in Venema & Schoenmaker, 2015). Therefore, for a long time no agreement could be reached, and a definitive 'go' was constantly postponed. But, as FC Groningen financial director Erik Mulder stated, "together you went into a kind of 'fish trap', every time a new step was taken, and with every step the municipality had to raise their stakes; but the 'no go' decision would bring about so many costs for the municipality, that basically moving forward was the only option" (Venema & Schoenmaker, 2015).

When and at the end of 2002 the process was reaching towards a conclusion, a last but major obstacle emerged; it became clear that banks were no longer willing to provide financing to professional football organisations. This meant a major turnaround in the process: the club no longer had a financial position, meaning that they would not be able to become owners of the stadium, but – at most – tenants. So, a completely different financial construction had to be sought c.q. found, and subsequently the club turned again to the municipality, with the question whether they would be able and willing to provide this. A consequence of this shift from owner to tenant of the stadium was that it created an entirely different playing field for the development process, in which the club would have a less influential position, which created tensions between the actors and a.o. lead to a conflict regarding the capacity of the stadium. Stepping in financially also drastically changed the risk

perception of the municipality, and lead to intense discussions in the executive board and city council; some city councillors opposed financially supporting the football club, while also the municipal concern controller advised against such a construction. Nevertheless, the importance attached to the Europapark development, and continuity of the football club proved decisive factors: in January 2003 the city council agreed to provide a 15 million euro loan to the Euroborg NV, the development group and operator of the stadium, in which the municipality and the developers are seated – and thus to become co-owner of the stadium. The club would then rent the stadium from Euroborg NV, whereby the repayment of the municipal loan would be arranged through the rental fee. The justification for this, according to Willem Smink (personal communication, 23 June 2016; Venema & Schoenmaker, 2015), was twofold: professional football for the city would be ensured, and the Europapark development would be able to continue.

So, the definitive ‘go’ was now given, and in November that year the mayor finally gave the starting shot for the construction of the Euroborg, after which actual construction started in 2004. In the following two years again some delays occurred, postponing the relocation of FC Groningen from mid-2005 to the beginning of 2006, during the winter break. Eventually on the 13<sup>th</sup> of January the Euroborg was opened, with a match against SC Heerenveen (Venema & Schoenmaker, 2015).

### *5.1.2 Key actors & goals*

In the following section a short description will be given of the main actors involved in the process, directly and indirectly, and their aims or goals they formulated with the development. This will not be a fully comprehensive and detailed actor analysis, because that is not the main scope of this research, but for a better understanding of both the realisation process and the eventual impact the stadium has generated, as also illustrated by the subquestions and conceptual model defined in chapter one and two, it is an important element nevertheless.

The two key actors in the development process of the stadium development are of course the football club, FC Groningen, and the municipality of Groningen. The first plans for a new stadium came up in close consultation between club and municipality. FC Groningen was struggling both financially and performance-wise, and increasing problems with supporters created a negative sentiment around the club. At the same time, the club concluded the old Oosterparkstadion was strongly outdated. Its location in a residential neighbourhood caused increasing problems in terms of parking and nuisance, while the stadium itself did not meet the requirements for a modern football stadium, in terms of capacity, business and catering facilities, comfort, and parking (Gemeente Groningen, 1997; 1999; Venema & Schoenmaker, 2015). This strongly limited the possibilities to generate revenues, and thereby the growth potential for the club, something which is then also reflected in the performances on the football pitch (Draaijer & Partners, 1997; Gemeente Groningen, 1997). Therefore, the club realised moving to a new stadium was the only possibility, somewhere they would be able to attract more supporters and sponsors, to better exploit the commercial function of a stadium (i.e. to generate more revenue), to structurally increase their budget, and correspondingly improve the performance level of football; while also the parking and nuisance problems would be solved. So in short, the main goal of the club was to improve both financially and sportively, and to structurally ensure continuity of FC Groningen as top flight club that is financially healthy (J. Kruizenga, 2016; B. Veenbrink, 2016<sup>2</sup>; Venema & Schoenmaker, 2015).

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<sup>2</sup> For the sake of readability, the in-text citations of the interviews will be shortened in the remainder of this thesis, omitting the ‘personal communication’ and exact date; the full references and dates can be found in the reference list.

The municipality of Groningen have traditionally had strong ties with the football club, so already at an early stage the issue was jointly discussed. The municipality also acknowledged the alarming situation around the club, especially the increasing problems with supporter incidents and riots were worrying for local officials and police. Also recognising the importance of the club for the city, the municipality realised something had to be done. They were not immediately convinced of a new stadium however, especially looking at the important neighbourhood function of the old stadium within the Oosterparkwijk; but a location report and ongoing incidents with supporters convinced the municipality to support the development of a new stadium. The former was also the reason that some locations put forward were rejected by the municipality, due to the fact that they were too far away from the city itself, and that the club should really have – literally and figuratively – its roots in the city. That the fate of FC Groningen was dear to the municipality, was also illustrated by the loan provided in 1998 to save the club from bankruptcy, that along with the future stadium development would ensure a structurally healthy football club for the city. The continuity of the football club was thus also an important aspect (Gemeente Groningen, 1997; J. Dijkstra, 2013).

As described before, around the same time the former EDON location (later rebranded the Europapark) became vacant, and in the hands of the municipality, and for some time the municipality was figuring out what to do with it. Already early on, the idea emerged of the area as a potential stadium location, and soon thereafter, and backed by a location report it even was considered to be the best alternative. It was a location close to the city centre, so it would remain part of the city and accessible for slow traffic, but also close to both major roads and a railway line. There were some problems such as soil pollution and required adjustments to the infrastructure, but not considered insurmountable (Venema & Schoenmaker, 2015; W. Smink, 2016). So while in practical terms it turned out to be a good location, the municipality also saw opportunities with regard to their plans for the Europapark development; the area was earmarked for (a still to be defined) redevelopment, and a new stadium was considered as a potentially interesting addition to this. A new football stadium and the attention this attracts would put the Europapark directly on the map, and could have an important position within this broader area development, functioning as a ‘catalyst’ for the area development. So the primary objective of the municipality was an Europapark development, that was then soon combined with the emerging objectives of and for the club regarding the realisation of a new stadium (B. Veenbrink, 2016).

So, in terms of policy “some lines were tied together”, and from then on the focus was laid on a coupled development of the Europapark and the new stadium for FC Groningen (J. Dijkstra, 2013; Gemeente Groningen, 1999). Ambitious plans were drafted for the Europapark, in particular expressed in the urban plan for Europapark in 1999, and a renowned architect, Wiel Arets, was hired to design the stadium complex and draw a master plan for the stadium area. The Europapark was seen as the economic driver for the city for the coming years, that would function as a ‘high class, multifunctional entrance area’ for Groningen. It would become a completely new urban quarter accommodating a new stadium, offices, houses, retail and leisure and entertainment, as well as a train station and parking garage (Gemeente Groningen, 1999; 2000). In total, it would add up to an investment of half a billion ‘gulden’ (Venema & Schoenmaker, 2015). For the offices, the Europapark was designated as the (economic) development location for Groningen, in which a total of 200.000-250.000m<sup>2</sup> of office space would be realised, a.o. with a specific 80.000-100.000m<sup>2</sup> office park (J. Dijkstra, 2013; E. van der Kley, 2016; Van Tiel, n.d.). Housing was envisaged in the residential neighbourhood ‘De Linie’, part of the Europapark, as well as two apartment towers directly adjacent to the stadium, with the idea of creating a safe and ‘neighbourhood’

character for Europapark. Other functions that were mentioned in the Europapark plans were mainly ‘crowd pulling’ amenities, such as retail, hospitality facilities (catering, hotel rooms, convention centre), a fitness centre, and in the field of leisure and entertainment a casino and cinema. Finally, an urban park would arise, Helperpark, to create a green public space for recreation (Gemeente Groningen, 1999; 1999b; 2000; Van Tiel, n.d.). All together, these would then ensure a larger influx of people, and create a more vibrant and liveable urban area. As Wiel Arets envisioned, an vibrant area integrating working, living and recreation (Van Tiel, n.d.).

The Europapark development was however entirely dependent of the stadium development, as also illustrated by the study of a non-stadium alternative in the environmental impact report (‘MER’) (Gemeente Groningen, 2000). That means, development of the Europapark would be in the pipeline anyway, and that the stadium was given a place in this, rather than that it was set up around a to be built new stadium. Nevertheless, the municipality did state that “the omission of a driver like the stadium (...) makes the development of this location dubious” (Gemeente Groningen, 1997b). So the idea was to create a stadium as an integral part of the broader Europapark development, developed in strong coherence with the other functions to be located there (Gemeente Groningen, 1999). The reason for this was that a stadium was considered an important trigger, or boost to stimulate this area development (J. Dijkstra, 2013; B. Veenbrink, 2016; W. Smink, 2016). The extent to and way in which this would manifest itself in practice, was not exactly specified; at least not more concrete than being a trigger, without which the area development might be questionable. So the exact ‘impact’ the stadium would have for the area, remained on a rather abstract level.

Looking at the stadium complex itself, also ambitious plans were drawn up. As stated before, the architect Wiel Arets was appointed to design the stadium and create a master plan for the surrounding area, a specific demand made by the municipality to ensure a certain quality of appearance. In that capacity he is also an actor that should be shortly discussed here. In line with the visions and plans for Europapark, as issued above, the stadium would not only be located within a multifunctional area, it would also become a multifunctional complex itself. By the time Wiel Arets said the stadium would be ‘the first example of a new generation of football stadia’, that as the eyecatcher within a vibrant new city quarter “I think is unique in the Netherlands, and even in Europe” (Wiel Arets, in Venema & Schoenmaker, 2015). His vision was that the stadium should not be a ‘stand alone’, but developed alongside, or in combination with, a new city district; which might take even thirty years to be fully developed. Furthermore, it would then not be a stadium ‘sec’, but a multifunctional building in which various programmes or activities/functions take place; “people should be able to live, work, study there; the stadium should be a ‘24-hour business’” (Idem). As Jan Voorrips put it, “to provide such an area development with some body, a place was designated to a stadium, but specifically a modern stadium, with possibilities for other real estate developments around it” (2016). Important aspect in the design was the idea to create a ‘public space’; the football pitch was compared to a town square, a place where in this case the football (and potentially other) activity can take place, but around which there is also place for other functions. This was inspired by the idea of a stadium as a theatre, and specifically “a Shakespearian theatre, which is the theatre that arose from the street; from the street the people look onto the stage” (Idem). This notion is reflected in the design for the Euroborg, which is placed on a certain mound, with a an elevated public level circled around the building, from which people can look and walk into the stadium. However, not all of the architect his plans made it to the final draft; the design was somewhat sobered down over time, some of the more bold ideas were eventually tossed, for both practical or financial reasons. Among others, the idea of putting everything into one building, with a central

entrance hall from which all functions could be reached, was considered unpractical (J. Voorrips, 2016). Also, a plan for the football field movable in height, which would serve as roof when moved up, was abandoned due to high costs (Venema & Schoenmaker, 2015). The reason behind this idea was that it would enable the Euroborg to create a broader programme, and also host other large events besides the football matches. However, with the investments necessary for this it was not considered profitable, and the idea of the stadium as a large-scale event location was abandoned. Besides that, in the end also the interests of the club seemed to be prioritised, and hosting events would also mean concessions in terms of design, practical arrangements and burdens placed on the football field (Venema & Schoenmaker, 2015; J. Voorrips, 2016).

Nevertheless, the idea of a 'stadium plus', that besides a football stadium would also accommodate other amenities and functions remained intact; so some of the aforementioned functions targeted for the Europapark development would find their place directly inside or adjacent to the stadium building. Apart from the ambitions of both municipality and architect, for a large part this had also a financial reason; functions that contrary to a stadium function are economically viable, would then serve as 'cost carriers' for the 'uneconomic top' of the football stadium. Another actor that comes into play here looking at the realisation of the stadium, is of course the development group. When FC Groningen and the municipality agreed on looking for the realisation of a new accommodation, the municipality turned to 'the market' with this question of realising such a stadium, and specifically how to make this financially feasible. Seven construction companies then discussed the issue with the municipality, in the end concluding that the project would not have enough body, or a sufficient support base to carry out. Eventually four of those agreed to take on the project, despite its size and complexity, but only if the municipality would come on board as well. These four then formed the development group for the Euroborg, named the 'G4', and subsequently together with the municipality started the Euroborg NV (limited company). During the realisation process parts of the project were separated, and tasks (and risks) were divided. The Euroborg NV, in which the municipality was represented, took care of the land exploitation, and mainly the developments of a 'public nature', that were less interesting in commercial terms – the stadium, parking garage, and things like infrastructure and the public space. All the other – commercial – functions would then be taken up by the development group, the G4. The uneconomic parts of the project would then be covered or financed by the land values under all these functions (J. Voorrips, 2016). This of course reflects the stances of both parties towards the development process; whereas the municipality naturally serves a public purpose, the developers simply seek to make a profit. As will be discussed in the following paragraphs, this division of labour also posed a distribution of risk; eventually the executive board of the municipality stuck out its neck for politically 'scraping together' additional resources for the stadium part, while the developers took the risk of sales of the other commercial functions (Idem).

The combination with other functions, was thus both desirable and necessary in Groningen (J. Voorrips, 2016). That also meant that commercial parties, both developers and future users or operators of these functions, were important actors in the process as well. The project sparked interest from a variety of different parties, but the central corresponding factor between those was the prospect of an area in development, the Europapark as a new urban quarter, in which various functions would be located, close to the city centre and with good accessibility (H. Bouma, 2016). Additionally for some the stadium was seen (directly or indirectly) as an interesting factor, with the influx of people and brand awareness it would provide; while others were merely presented with a rare opportunity to establish on a new location in the city,

for example the supermarket, cinema and casino (B. Veenbrink, 2016; J. Voorrips, 2016). However, in the large-scale and complex process that it was, for a long time all the actors were unable to reach an agreement, and repeatedly a definitive ‘go’ was postponed. As Willem Smink described it, “at a given moment all together have to come to a certain concept, on which at more or less the same time they put their signature. (...) Well that was an incredible operation, to get everybody in that same ‘wheelbarrow’, that everyone constantly tried to jump out of again” (Venema & Schoenmaker, 2015). Looking at this, the process went through a couple of stages, until enough actors were on board and developers and municipality considered the development feasible (J. Voorrips, 2016). At the same time, this was also the reason that the developers separated a couple of functions, and placed outside the core building (i.a. the supermarket and apartment towers); they wanted to phase the development project, so that construction could start as soon as a buyer was found, and upon completion a function could immediately be used – and thus create revenue. This can also be found in the municipal documents on the project, in which a distinction is made between amenities planned in the core building and those in the ‘periphery’ of the stadium (Gemeente Groningen, 2001). Nevertheless, the idea of one integral design, under the supervision of the same architect remained, all functions remain part of one overall design, one complex (J. Voorrips, 2016).

A major shift in the relation between the local government and the club occurred when, at a time the process seemed to come to its concluding stages, it became clear the club (or any professional football club) would not be able to get financing from banks. This changed the roles and approach of both municipality and club; the club no longer had a financial position, and therefore asked the municipality whether they would be willing to step up and provide this. That meant the involvement of the municipality, in financial terms – and thus also risk – would rise drastically. But as described before, the executive board and city council eventually decided in favour of this proposition, i.e. they would provide a loan for the costs that initially the club would bear. With this construction the municipality, represented in the Euroborg NV, would become owner of the stadium; FC Groningen would pay back the loan through the rental fee over a period of thirty years. This illustrates the importance the municipality attached to the goals it had with the project; those were valued that highly that it was even prepared to deploy financial resources, to ensure the project was able to continue. As stated around the definitive ‘go’ decision, this was twofold; ensuring the continuity of the club and thereby professional football for the city, and continuation of the whole Europapark project (Venema & Schoenmaker, 2015; W. Smink, 2016). Regarding the latter aspect, alderman of economic affairs Koen Schuiling at the time stated: “that means you are talking about an area from which 37.500 people are directly dependent for their living; if you cross this off against each other, the risk of not proceeding is much larger” (Venema & Schoenmaker, 2015).

For the club this obviously posed a completely different situation as well; it would no longer become owner, but only tenant of ‘their’ stadium. As a consequence, it had a less influential position in the development process, which also led to some conflicts of interest along the way (J. Kruijenga, 2016; Venema & Schoenmaker, 2015). But overall, throughout the whole process, the stance of the club was rather pragmatic. Such a financial construction, the combination with other functions, or influential role of the architect all had their pros and cons; but as FC Groningen was in urgent need of a new stadium, “everything that ensures the project can move on, (was) a positive” (J. Kruijenga, 2016). In general, this also captures an important notion crucial in the eventual realisation of the project: “because all parties had a serious interest in the project, the stadium has eventually been realised”; if that had not been the case for either club or municipality, the process would have stranted (Idem).

These (changed) roles of and relations between the different actors also had consequences in terms of the financing. As this development process shows, a stadium development in itself is not a profitable undertaking, that requires additional funding coming from a combination with other functions, as well as some additional resources. As described, FC Groningen was not able to provide this additional funding, due to the changed attitude of banks towards professional football clubs. Generally speaking, in a sense this makes credit providers, i.e. banks, then also an actor to be reckoned with. But eventually the municipality of Groningen thus stepped in, for the reasons described above. This comprised in the first place the ‘fifteen million’ loan construction, but also some additional costs were accounted for by the municipality. As Willem Smink recites, the public resources deployed in this respect consisted of revenues from sales on the old Oosterpark location, some provincial funds, and an amount of municipal reserves was held back; furthermore, emphasising the public character of the stadium area, there is an annual contribution for maintenance issues (Venema & Schoenmaker, 2015). In this respect, there are certain rules in place regarding state aid to professional football clubs, from the EU and the KNVB (Dutch football association), that may not be violated – i.e. clubs may not be oversubsidised (B. Veenbrink, 2016; J. Voorrips, 2016). However within those rules, a municipality is allowed to create a venue for football activity, as long as the football club pays the ‘housing costs’ (rent). “And that the actual costs are much higher, well that is a given, as it is impossible to make a stadium commercially profitable; just as it is impossible for a theatre or a museum (...);” so for a stadium that is only used around twenty times a year, there is a limit to potential revenues, making it impossible to exploit looking at the costs attached to it (J. Voorrips, 2016).

Nevertheless, this involvement from the municipality was not undisputed, and caused some political struggles within the local administration (Venema & Schoenmaker, 2015). Also the opinions among the different stakeholders – and in fact the general public as a whole (B. Veenbrink, 2016) – are also divided about this; some state the municipality should not contribute in any way to a commercial business that is a football club, others think the important societal function of the football club for the city is a legitimate justification, while others argue there really had and has to be some broader impact to the city, for example in terms of area development or specific social projects. As discussed, both aspects played a role in the justification from the municipality. Providing support to the football club was first of all of interest to the municipality given the fact it has an important public function, simply in that a lot of people want to visit the football matches (B. Veenbrink, 2016; J. Voorrips, 2016). In terms of municipal funding, Ben Veenbrink therefore also compares it to amenities such as a concert hall, opera house or museum, other amusement functions that are somewhat more common to receive public subsidies. On the other hand, as a return on investment, the broader impact in terms of area development was also seen as a potentially beneficial, or even profitable, aspect. As Willem Smink in hindsight describes, “it also brings incredibly much for the municipality; on the place where FC Groningen used to be in the Oosterpark, housing has been built, which generates money in terms of taxes and property tax, and new inhabitants; the whole (Europapark) area has been put on the map, offices have and residential developments have been realised, the whole area has become interesting (...); subsequently an Europapark train station has been made possible by all those visitor flows. So essentially a ‘lost’ part of the city has been drawn towards the city, brought into development, and that also brings along various revenues” (Venema & Schoenmaker, 2015). This statement seems to be backed up by the other actors closely involved in the development. A rather objective way to evaluate the financing part of the project, is to look at balance of the land exploitation. The whole Europapark has been put into one municipal land exploitation (as the land was owned by the municipality), for which then a long-term budget was drafted. All the costs made by

the municipality, also in terms of demolition, soil remediation, site preparation, infrastructure et cetera, of course come first, but would then eventually be recouped by the issue of lands for new developments (J. Voorrips, 2016). Obviously the economic downturn posed a challenging item in this respect, that influenced the pace of development and thus the issue of land. Therefore expectations regarding the Europapark development in terms of land values had to be readjusted (J. Dijkstra, 2013; J. Voorrips, 2016). However, when looking at the hard figures, the balance of the municipal land exploitation, there appears to be no deficit and an overall positive balance (B. Veenbrink; J. Voorrips; W. Smink, all 2016).

In the following three sections, the three impact categories defined earlier on will be discussed for the case of the Euroborg in Groningen. The base for this will be formed by the pre-defined indicators for these dimensions; however alternative or additional information that came to the fore in the case study will of course also be incorporated here. Contrary to the quantitative analysis, these indicators will not so much be ‘measured’, but described and discussed, mainly based on the interviews with the various stakeholders, as well as some secondary sources. To a certain degree that means the impact measurement is a question of ‘what if (the stadium had not been developed there)?’ – but a well-considered and nuanced picture has been tried to distill out of the opinions and experiences of the various actors involved.

## 5.2 Area development

For the area development dimension, the main focus will be the development in and of the Europapark area. As described above, this was an old industrial area, for which after the demolition and relocation of the old function its redevelopment was ‘tied together’ with the new football stadium. The Euroborg and Europapark are strongly linked to each other (only look at the names), that have been a combination already from the early stages of the process. The Europapark also forms quite a delineated area, while the surrounding neighbourhoods are, literally and figuratively, more distant from the stadium. Therefore also most interviewees limit the impact of the stadium to the Europapark. To recall, the main indicators for area development defined in this research included the development of other functions, (urban) use of land, quality of public space, district formation, and development of the old location.

### *5.2.1 Land use & other urban functions*

Firstly, the two most evident, and strongly interrelated, indicators for area development are the extent to which the stadium has attracted other (urban) functions, and the (intensity of) land use. To begin with, what can be observed is that the Europapark area has clearly seen a development since the realisation of the stadium, with new functions and an intensification of land use. However, as we have seen, it was an area already earmarked for (re)development, in which the stadium then got a place. So the real question here is, to what extent can the developments that have taken place, actually be ascribed or attributed to the development of the stadium? Analysing the results from the case study, these give a somewhat ambivalent picture in this respect.

To start with, what should be understood is that the stadium got a place in the Europapark development; and it is not an area development wrapped around the new stadium. As described in the previous section, the municipality had grand ambitions for the Europapark, envisioning a multifunctional area that would be a main location for development in Groningen for the foreseeable future. And while the new FC Groningen stadium was considered as an interesting addition, the area would have been developed also without a stadium (J. Dijkstra, 2013). That being said, the stadium was considered a key element in the

eventual development plans for Europapark, and both before and after the development it was stated that the absence of the stadium would make the area development doubtful (Gemeente Groningen, 1997b; J. Dijkstra, 2013). Of course, the extent to which such statements also carry a political value remains the question. Nevertheless, the stadium was seen as an integral part within the broader Europapark development, that could have strong relations with other functions coming to the area, and in that respect function as an important trigger (Gemeente Groningen, 1999; J. Dijkstra, 2013; W. Smink, 2016). However, the exact way in and extent to which this would work out in practice, was kept on a certain level of abstractness – i.e. beforehand it was not specified what exactly this ‘flywheel’ effect would comprehend, which functions would be attracted. That means that to a certain degree the impact of the stadium remains a ‘what if’ question, in which it is difficult to examine or evaluate what the actual impact of the stadium has been on the development of functions in the area.

A way of looking around this, is to take it a step more concrete, and simply look at the actual establishment of other functions separately, and the role the stadium has played in this. As discussed earlier, during the process it became clear FC Groningen could not get funding for their new stadium itself; and although eventually stepping in with a considerable loan construction, the municipality was not willing to fully finance the development either. Therefore, aside from the ambitions of multifunctionality from both architect and municipality, also in practical terms a combination was sought with other, more lucrative functions, that could then cover the uneconomic top of the stadium. So as Jan Voorrips stated, a combination with other functions was both desirable and necessary in Groningen (2016). From the developers’ point of view, the additional developments were first and foremost a means of funding for the ‘stadium part’ of the development. For the municipality it served a double purpose; as stakeholder in the Euroborg NV it took part in the development process as well, looking for a positive outcome for the club, while on the other hand it also actively engaged in activities to spark the Europapark area development. However, looking at the decision making process and the urgency that was attached and articulated to realising a new accommodation that would satisfy the needs of the club, the impression cannot be avoided that the primary reason for the inclusion of at least these particular functions should be seen in that light. The importance of the continuation of the project for the municipality was also underlined by the decision to provide an additional loan to the club, and becoming owner of the stadium.

Nevertheless, in the end this has ensured that in or in the direct vicinity of the stadium building, a couple of other functions have been realised. This includes a supermarket (Jumbo), cinema, wok restaurant, small casino, fitness and health centre (Plaza Sportiva), the school Noorderpoort (‘ROC’, secondary vocational education), which also accommodates hotel rooms and catering facilities, Euroborg Horeca (catering and rentable spaces for conferences and events), and office spaces (Euroborg Offices) in the stadium complex itself; and directly adjacent to the stadium two apartment towers (Stoker and Brander), which were completed a few years later. Regardless of what was ultimately the reason for planning these functions there, unequivocally it can be concluded that these were realised directly coupled with the stadium development; and can thus be considered functions directly attracted by the stadium. And in the end, this basically comes down to the same thing, “just depending on how you present it – how do you want to label it?” (E. van der Kley, 2016).

The process of finding and holding together all the actors to take up or exploit these additional functions, has been rather extensive and tricky (Willem Smink, in Venema & Schoenmaker, 2015). As described earlier, actors hitched on, and dropped out again, and for a long time no agreement could be reached. Eventually the process came to a stage in which enough actors were on board for the development group and municipality to proceed with the development. For these ‘future operators’ of the functions, the reasons for settling on this

location may vary, and can of course also comprise a combination of factors. A couple of aspects are applicable to most of the functions; the expectation was the Euroborg would provide some ‘brand awareness’ to the location, while the Europapark plans created high expectations regarding the development of a new and vibrant city district. The stadium would then be a facility able to draw large groups of people to the area, which was particularly interesting for amenities such as the cinema, casino and catering; although on the other hand this would only be on specific moments, and perhaps also be a source of inconvenience. In practical terms, the location relative to the city centre, accessibility and the prospect of parking facilities and a train station were interesting and often-heard location factors (i.a. H. Bouma; J. Kruizenga; E. van der Kley; B. Veenbrink, all 2016). As Harry Bouma summarises, “it was the overall plan; a plan that the Europapark would be a new ‘A1-location’, with the same attention as downtown Groningen; and that would comprise the stadium, with all its accessibility, with offices to be realised and residential developments on the edge, that would directly become a part of the city. So at the time everyone thought ‘we end up in a kind of new city centre of Groningen’” (2016).

For the cinema and casino, the project posed an interesting – and for such amenities rather rare – opportunity for a new establishment. Furthermore, the combination with a stadium (coupled with other functions), that would attract large numbers of people, was seen as an positive element for these functions. “When people find their way to the stadium, they will also find their way to the cinema”, was the idea (H. Bouma, 2016). Also for the supermarket it posed an interesting location, to realise one of the first ‘mega store’ supermarkets in the region – in an area that would see residential developments as well as other crowd-pulling functions, with good infrastructural and parking facilities. Such elements of course also applied for example to the fitness centre and restaurant. The school Noorderpoort already had different locations across the southern part of the city, and with the Euroborg project the development group and municipality offered to move along to the Europapark. Noorderpoort considered this an interesting opportunity, especially with the prospect of a new train station, but also the synergies of its hospitality education with the influx of people and businesses as a result of the stadium and area development were regarded as a potentially beneficial element; although the stadium as such was probably not a critical factor (Idem). As for the apartment towers, from a policy perspective these were interesting on this location in terms of creating more liveliness in the area, but in the development process were also a major element in the financing. And although some residents show interest in football and FC Groningen, the stadium should not be seen as an important locational factor for individual residents. Here also the characteristics of the location, aside from the apartments itself, seem to be the most important (H. Bouma, 2016; R. Doppenberg, 2016).

Looking at the Europapark as a whole, also outside of the stadium complex a couple of other functions have been developed. A new train station ‘Groningen Europapark’ has been realised, a few years after; a couple of office buildings, Menzis, two premises on the north side (‘Two Towers’, and De Haan Advocaten & Notarissen), as well as the municipal department of Social Affairs and Employment (SoZaWe – Sociale Zaken en Werk); the Mediacentrale, a former power station now occupied by various predominantly IT or media oriented companies; the Alfa-college, a second school (‘ROC’ – secondary vocational education) after Noorderpoort, which is developed directly adjacent to the stadium; and also some residential developments, the neighbourhood De Linie on the west side of the Europapark, and recently also the apartment complex Hete Kolen, with youth accommodations and some additional office spaces. Furthermore, some new residential developments are in the pipeline, among others a residential care complex, and a private commissioning housing project (Gemeente Groningen, 2016). Finally, plans are being made

and discussed for a multifunctional sports centre in Europapark, which should be completed in 2018. Despite these various developments, the area development of the Europapark as a whole has until now been much smaller than originally intended. The initial idea was the area would be ‘completed’ by 2015, with an office park multiple times the size of the current office stock, as well as other developments such as housing and a park; nevertheless, still large parts of the area are vacant. Of course the emergence of the economic downturn has played a role in this, and along the way ambitions have been readjusted. This aspect will also be discussed in some more detail later on.

Nevertheless, in the light of this research, the question again is what the role of the stadium has been, or is, in the realisation of those functions. Looking into the outcomes from the stakeholder interviews, overall the rather clear picture emerges that seemingly the stadium has had little direct influence on the establishment of other functions, outside the stadium complex. For some functions there seems to be no effect at all; while others could perhaps to a certain extent indirectly be linked to the stadium development. For most functions, their location choice seems to be merely based on general locational characteristics, instead of the actual presence of the stadium in the area. Similar to the functions in the Euroborg complex, these include the relative location within the city, accessibility and the (prospect of) good infrastructure, a train station and parking facilities. This is also rather strikingly summarised by the promotional publications for the office park ‘Kantorenpark Euroborg’, which carry the slogan ‘Location Location Location’ (Van Tiel, n.d.). And, as described earlier, in general the designation and branding of the Europapark as the new multifunctional city quarter and main development location of Groningen was an important element.

Looking at the individual functions, for the office buildings these aspects seem to be the main location factors. For Menzis, the first office building that was realised, the stadium did play an additional positive role in this (W. Smink, 2016); and as facility manager Bert Kleijweg of the company stated, “because the area was the expansion plan of the municipality of Groningen, for us this was a logical choice. We have suspended our definitive GO on the development of the Euroborg and the train station” (Van Tiel, n.d.). He summarises this effect in that “the success of the stadium has ensured that the publicity value of the area has grown considerably” (Idem). Looking at the considerations of general director Winfryd de Haan (also chairman of the Business Club of FC Groningen) regarding the establishment of law firm De Haan, there seems to have been also an additional social aspect to the Euroborg; the stadium as something of a symbolic location factor (Idem). For the municipal office for Social Affairs (SoZaWe) then, an important consideration was to stimulate the economic and area development of the Europapark. The stadium has not had a specific effect on this, main location factors were proximity to the city centre and the targeted site being next to the train station. On the Mediacentrale and its businesses the views are somewhat divided; according to Willem Smink, the Mediacentrale would not have been established there if the stadium had not, and the businesses that settled there in the early stages specifically did so because they believed in the Europapark and its further development, also because of the stadium. However, this is not directly acknowledged by other stakeholders (Van Tiel, n.d.; E. van der Kley, 2016; W. Smink, 2016). The train station then, has in part been made possible by the stadium; it was not developed specifically for the football supporters, but the stadium contributed, together with the residential and other functions, to the creation a sufficient ‘mass’ that made the realisation of a new train stop on this location viable. However, the expectation is that sooner or later it would have been realised also if the Europapark had developed without a stadium (J. Dijkstra, 2013; W. Smink, 2016). Vice versa, the prospect and later presence of the station also posed an interesting location factor for other functions. As for the Alfa-college, the reasons were similar to those of Noorderpoort, especially as being an interesting new location in development, with a train station; while a competition element

with the Noorderpoort can also not be ruled out (H. Bouma, 2016; E. van der Kley, 2016) Looking at the residential developments, both realised and planned, there seems to be no direct link with the stadium; the stadium was not regarded as a positive location factor for such developments, or as something that produces added value for (potential) residents in that respect (H. Bouma, 2016; M. Zomer, 2016). The Europapark was and is simply one of the few locations where residential developments are possible in Groningen, and interesting in terms of location, accessibility and facilities. Marieke Zomer does think the stadium overall has a positive effect on the area and living environment, but more in terms of the general development of the area and additional facilities it attracted, than specifically the stadium (2016). Similar to the apartment towers, the Euroborg is not something that attracts new residents, and if anything the effect is probably slightly negative rather than positive, especially the expectation of nuisance of the football activity (H. Bouma; R. Doppenberg; A. Grootjans; all 2016).

So, while there are probably no functions that have settled in the area specifically and solely due to the stadium, there might be some indirect, but not to be overestimated, effects; most notably for the economic functions. This could for example be seen in the 'brand awareness' element the stadium brings, that might be an interesting aspect for some businesses, as exemplified by the Menzis case, and among others stated by Ben Veenbrink and Jan Voorrips (2016). Similar to the Euroborg Offices, a large section of the total office programme for Europapark was branded the 'Kantorenpark Euroborg' (Van Tiel, n.d.). So, here also a connection was made with the stadium in terms of marketing and branding, indicating the stadium as an important 'symbolic' selling point with regard to office spaces in the area. As observed before, the stadium also directly attracted a couple of additional functions, that have improved the overall attractiveness of the area, in terms of facilities (e.g. supermarket, catering) and liveliness of the area. Furthermore, the inclusion of the stadium in the development plans, and perseverance to carry the project through, not only as a stadium 'sec' but more than that, was an indication for other actors of the commitment of the municipality to the Europapark project (E. van der Kley, 2016). Whether it is in the end then really the stadium that attracts the functions is questionable, but the placement of a stadium in such an area could indicate, or be marketed as such, that it is a location where things are about to happen and developments will take place. Furthermore, the stadium helps in the sense that because of such a large-scale development project, special attention has to be given to issues such as infrastructure, area design and landscaping; without a stadium this might perhaps have been given less priority in terms of time and resources, and therefore have happened at a slower rate (i.a. W. Smink, 2016). And although in terms of landscaping this has still been lacking in Groningen, as will be discussed later on, infrastructure improvements in fact turn out to be an important element of stadium impact. Ben Veenbrink (2016) therefore describes the stadium as a sort of 'flywheel' in terms of impact; in the least case the stadium ensures improvements in the base infrastructure, and in the first place perhaps some business and other functions' establishments can also be directly linked to the stadium or FC Groningen, but subsequently businesses come because of the other already established functions, and the infrastructural features, which forms a certain (ac)cumulative positive effect for the area, in which the role of the stadium becomes more indirect over time.

So in fact, what is perhaps the most evident or concrete 'impact' of the stadium in this respect, looking at the stakeholder interviews from the Groningen case, are enhancements in infrastructure. Most of the interviewees note that the development of the stadium has probably ensured a quicker realisation of infrastructures and/or improvements in existing infrastructure in the area. This is in the first place in terms of conventional 'transport' infrastructures, but might also be related to other infrastructures. The inclusion of the stadium meant 'the area' would have to be able to handle over 20.000 visitors at the same time, at specific moments,

placing certain requirements on the infrastructures within the area, and connections to other infrastructure networks and parts of the city. Also parking facilities were realised in relation with the stadium, specifically the parking garage under the stadium complex – which serves all the functions in the direct surroundings. Without the stadium, the general understanding is that all this would not have been developed at the same pace it did now. Even though the area was already earmarked for (re)development, it is expected that due to the stadium development issues of base infrastructures, accessibility, parking, public transport, but also infrastructures regarding utilities received more attention (H. Bouma, 2016; W. Smink, 2016). As described earlier, another important infrastructural feature of the Europapark is the train station; and while it is not solely developed for the stadium, the stadium certainly contributed to making this development viable (i.a. B. Veenbrink; W. Smink, 2016). In turn these infrastructure improvements then became important location factors for other functions, making it a more appealing place, enabling or attracting other functions to establish in the area as well (B. Veenbrink, 2016). So, in fact these infrastructural improvements might then be one of the most evident direct impacts of the stadium, due to which it has indirectly affected further development of the area.

### *5.2.2 Quality of public space*

A next element of area development is the quality of public space. Somewhat related to the infrastructure aspect, the general idea is that with such a large-scale development more attention will be given to things like spatial design, landscaping and decoration. Looking at the plans beforehand, this was also an important aspect; the idea was of a ‘high class’ and vibrant urban area, that would be a pleasant place to be. For the stadium itself the appointment of a renowned architect to design the whole stadium complex (stadium plus direct surroundings) underlines this. The architect himself, Wiel Arets, also specifically spoke about ‘creating a public space’, which is reflected a.o. in the creation of an elevated public level circulated around the stadium. Furthermore, an urban park would be created with the Helperpark, a public green space for recreation and to relax. Nevertheless, a clear difference compared to the infrastructure aspect can be observed here; many of the interviewees state that until now (too) little attention has been given to the public space, and that the quality of the public space has generally been lacking so far. The specific attention for architecture and design is limited to the stadium complex and direct surroundings, while on the other hand the intended spatial quality here is also not experienced as such by the various stakeholders or users of this space. Seemingly without exceptions the actors interviewed in this case study describe the stadium area as rather chilly, bleak, grey, windy, cold and stormy, et cetera; in other words, not a pleasant area to reside (i.a. H. Bouma; E. van der Kley; J. Kruijzena; B. Veenbrink, all 2016). The same goes for the area as a whole; for a long time the Europapark area has generally been experienced in the same fashion – not much like the ‘high quality’ public area it was envisioned to be. Some actors also feel the municipality has been lacking or lagging in this respect. For a long time, undoubtedly little resources have been deployed for the purpose of the public space in the area; for example, it took years before decent street lighting was provided, while also the realisation of public green has been kept to a minimum – the Helperpark has not yet been realised. Also infrastructures for slow traffic, such as bicycle parking and paths linking with other areas have long been lacking. This has also led to disappointment for certain actors in the area, who had higher hopes for the overall development tempo and quality of the area when moving in (H. Bouma, 2016).

However, after all, this is in large parts also simply a financial matter. Shortly after the completion of the stadium of course the economic downturn arose, due to which also the issue of land in the area development almost came to a standstill, leaving the municipality with a

strong cutback in resources. That has also been at the expense of aspects like the quality of the public space (H. Bouma, 2016; Ben Veenbrink, 2016). It is only fairly recently that it seems issues of public design are being picked up again. An important reason for this is the recent ‘influx’ of new residential development projects. While it could be argued that this perhaps places greater importance on the public space, it should in the first place simply be seen in practical terms; these new development projects meant new land sales, and thus revenues for the municipality, providing the resources to take up aspects such as the public space again (H. Bouma, 2016). No concrete actions have yet been taken to take up the Helperpark; a ‘green vision’ is being drafted and discussed, however currently (end of 2016) the new (residential) development projects seem to have priority (Gemeente Groningen, 2016; 2016b). So, although undeniably the economic downturn has had an effect on this, this outcome does prove that the stadium on its own has not automatically had a decisive effect on the quality of public space; particularly recent developments of other functions (mainly residential) seem to spur this again – for financial, and it remains to be seen perhaps functional reasons. It seems the impact of a stadium in this respect remains mostly limited to the practical (and thus, necessary) aspects – i.e. infrastructural improvements.

### *5.2.3 District formation*

With regard to the district formation aspect, first of all it should be noted the Europapark was not really planned and developed with a specific underlying theme in mind, i.e. to become a thematised district. The idea for Europapark was a ‘high quality’ urban district, an ‘entrance area’ for the city, specifically characterised by multifunctionality; it would accommodate a mix of sports (the football stadium) and entertainment, become a major office location, but also with residential developments, as well as a couple of other functions, such as education (i.e. schools). However, a rather strong focus was placed on the economic aspect, especially reflected in the vision of the Europapark as something of a business or office park (J. Dijkstra, 2013). As Harry Bouma (2016) put it, in retrospective the general understanding was that with a combination of different functions it would become an area with the quality and allure of a new city centre. Looking at it this way, these visions for the area did not yet entirely work out. Obviously, the economic downturn, and the collapse of the office market, have had a major impact on this. That means, a certain character of the Europapark as an office park, or a downtown-like urban quarter, has not been realised. Furthermore, the recently emerging developments are predominantly housing projects, which even hints towards a more residential character of the area in the future (e.g. Marieke Zomer, 2016). The development of a sports complex which is in the pipeline could mean a further concentration of sports-related functions, however that would not really affect the mixed-function character of the Europapark, and not create an actual thematic district.

A point that does come to the fore in conversations with the various stakeholders, is that clearly the Europapark is being experienced more as a part of the city, or more of a city quarter, so to say (i.a. R. de Boer; R. Doppenberg; A. Grootjans; J. Kruizenga; W. Smink; M. Zomer, all 2016). So while a thematised district is out of the question, it has become a more coherent, or at least recognisable (and acknowledged) area within the city. Looking at the impact of the Euroborg, it can be argued the stadium also played a part in this, for example with the exposure or brand awareness it produces. In the absence of other really area-defining developments such as perhaps envisioned beforehand, the stadium has put the area on the map; to a certain extent the Europapark has long been and perhaps still is seen by many people as the place where the Euroborg, the stadium of FC Groningen is located. Furthermore, in its capacity as football stadium it is simply also an asset that draws large numbers of people to the area, a place that before most citizens would never go. On the other hand though, this

has also to do with the overall development of the area, of course, compared to the industrial zone it was before. Although at a slower rate than originally intended, the development of other functions and all the infrastructural enhancements that have taken place, also physically connected it to the existing (inner) city. Crucial factor in this is also the location within the city, relatively close to the city centre; “when you can go there by foot, you will more clearly/early see the psychological effect of ‘this is part of the city’, than if it would be located somewhere in a field or on an industrial park” (W. Smink, 2016).

However, the impact of the stadium in this respect should not be overestimated; as it undeniably attracts a large number of citizens to the Europapark, this only happens once every two weeks. So it is also the schools and the growing number of houses, that ensure a more steady ‘influx’ of people to the area, and the emergence of an urban quarter that is an integral part of the city (E. van der Kley, 2016). Nevertheless, still it remains an area that people predominantly visit with a specific purpose, and not so much ‘pass by’ (H. Bouma; B. Veenbrink; J. Voorrips, all 2016). In that respect, the ring road, which at the time of writing is being improved, has long been a clear barrier, as well as limitations in infrastructures for slow traffic (Jelle Dijkstra, 2013; B. Veenbrink, 2016). As Willem Smink (2016) put it, “there is a certain degree of integration [in that respect], but the Europapark has mainly become an urban area, and not an area that belongs to the surrounding neighbourhoods; it is an area with urban functions, so you could say the integration takes place on the level of the city”.

#### *5.2.4 Old location*

The final aspect of area development, and the only one not directly related to the Europapark, is the redevelopment of the vacated location of the old stadium. The old Oosterparkstadion was situated in the Oosterpark quarter, north-east of the city centre of Groningen and north of the new stadium in the Europapark. Although this is obviously not related to the area development around the new stadium, looking at the urban development of the city as a whole it is an element that should be considered here as well. FC Groningen and the stadium leaving the Oosterparkwijk has two major components; redevelopment of the vacated site, but also a social element. Regarding the latter, on the one hand the stadium had a strong social function within the Oosterparkwijk, while on the other hand it also placed a burden on the neighbourhood in terms of nuisance (e.g. Venema & Schoenmaker, 2015; W. Smink, 2016). This aspect will be discussed in more detail in the socio-cultural impact section. Here the aspect of redevelopment will be briefly examined.

Beforehand, the redevelopment of the location was not so much an important element (Jelle Dijkstra, 2013). Nevertheless, as a predominantly residential neighbourhood, on a location close to the city centre, the old stadium site was soon designated as location for residential developments. In 2009, the first houses were realised here, marking the start of the neighbourhood De Velden. After that, however, as a result of the economic downturn development came to a halt, and for several years large parts of the area remained undeveloped (Poelman, 2016). As of 2013, Jelle Dijkstra (2013) therefore also assessed the development as not yet successful. However, it is fairly recently that development has been picked up again, and seems to have gained serious momentum since the beginning of 2016. Housing corporation Nijestee, who had bought the land after the stadium was demolished (and also have dwellings in De Linie in the Europapark), as well as developers Van Wijnen and Rottinghuis are at the time of writing developing a mix of owner-occupied, rental and social housing, as well as a shelter home for women, with the first completions scheduled for the end of 2016 (M. Zomer, 2016). So, after a considerable period of stagnation fairly recently the redevelopment of the location has taken a flight, which in the foreseeable future is expected to be completed c.q. successful (Idem). So to summarise, fairly recently the

developments on the old stadium location seem to move towards a successful redevelopment, and while this cannot be directly credited to the Euroborg development, in terms of stadium development impact and in time, it can inextricably be considered an impact as a result of the move to a new stadium.

### 5.3 Economic effects

For the economic impact, the indicators defined in this research are business activity, employment and property values. First of all, it should be noted here that particularly the first two indicators are rather strongly related to issues discussed in the section on area development; both the business activity and employment effects are of course clearly interlinked with the establishment of other – economic – functions, as discussed in the previous section. However, the focus here will be specifically on the economic aspects; for business activity specifically looking at the economic functions, so the establishment of the offices and other businesses, but also their experiences and economic performance in the Europapark. Also non-fixed or non-permanent business activity will be considered here; for example the use of flexible office spaces and rentable spaces such as meeting or conference rooms in the stadium. Employment is an indicator difficult to ‘measure’, and virtually impossible to determine for the exact extent to which the stadium has had an influence on this. Unfortunately also no uniform (varying definitions) data, with sufficient moments of measurement, are available on employment from the CBS database. Therefore, here the outcomes regarding the additional (economic) functions will be combined with the thoughts of the various stakeholders on this aspect, to be able to deduct as good as possible what the employment effects are and to what extent this can then be ascribed to the stadium development; with the note that this of course does not provide factual numbers, and may reflect personal opinions. Finally, property values is of course a rather quantitative indicator, but this aspect will be analysed by looking at data at ‘buurt’ level from CBS, the same as used in the quantitative analysis in this research, comparing the Europapark and surrounding neighbourhoods with the city as a whole, combined with experiences and visions from the various stakeholders.

#### *5.3.1 Business activity*

As described in the area development section, the stadium has directly attracted a couple of economic functions in the immediate surroundings of the stadium complex. Even though the initial reason for this might be of a financial nature, this means that directly related to the stadium development business activity has increased – e.g. with a supermarket, cinema, casino, wok restaurant, catering and hospitality facilities (Euroborg Horeca) and a fitness and health centre, which also houses a physiotherapy practice. As concluded earlier, the reasons for these businesses to locate here were in part practical, and predominantly related to the general locational characteristics, but for some the relation with the stadium also posed an interesting aspect. As identified, this should mainly be seen in terms of brand awareness, crowd-pulling function of the stadium and a general belief in the Europapark development. Another, and special form of economic activity is formed by the Euroborg Offices; on one side of the stadium rentable office spaces have been realised, with a total of around 5.000-6.000m<sup>2</sup> (E. van der Kley, 2016; W. Smink, 2016). In the beginning, due to an effective marketing strategy these spaces have been filled. It branded the location as ‘the place to be’, a lively urban quarter, the new office park of Groningen, ‘with all the other functions you need’. The role of the stadium in this was mainly in terms of branding and identity; to have an office ‘in the FC Groningen stadium’, and ‘with a view on the pitch’, so to say (Euroborg,

n.d.; E. van der Kley, 2016). These elements initially thus proved effective in attracting businesses to the Euroborg Offices; an effect that however seems to have flattened out over time (E. van der Kley, 2016). Businesses that established in the Euroborg complex later on, outside of the financial construction for the stadium, among others include security company Preventief; this business more or less emerged from FC Groningen, so the stadium obviously played an important role here (J. Kruizenga, 2016). Finally also further mutations in the occupancy of the Euroborg Offices fall under this; those will be further discussed in a moment.

Apart from these business establishments, there are also non-fixed business activities taking place in the stadium complex. The hospitality facilities (Euroborg Horeca) in the stadium offer catering services and rentable spaces, e.g. also a business lounge and skyboxes, hosting ‘conferences, meetings, parties, et cetera’ (B. Veenbrink, 2016). This role of the stadium in terms of business activity is perhaps best summarised by Winfryd de Haan, chairman of the FC Groningen business club, and with his law firm also ‘inhabitant’ of the Europapark: “An Eredivisie [top division] club is a binding factor (...), also for the business community. In our business club we immediately felt the impact of the new stadium: many new members have joined us, also national players. But more importantly, a positive level of expectations developed, that goes beyond involvement with the club. You can see that commerce, governments and other parties come together in a place that to everyone feels like a natural/logical place to meet” (Van Tiel, n.d.). So, the location in a (new) stadium seems to be an attractive element in this respect. Nevertheless, similar to the aforementioned businesses, it looks like this effect might have been particularly evident in the first years; although these facilities are still used, the general understanding among stakeholders is that activities taking place in the stadium are rather limited, and that it is more occasional than that there is really a constant ‘stream’ of business activity going on inside the stadium (H. Bouma, 2016; E. van der Kley, 2016). As Ellen van der Kley describes it, “in the beginning (many business activities took place), then it was of course all ‘hip and fun’: ‘you can go see the stadium, get a tour to the dressing rooms’, et cetera; but at a certain moment in time of course most have seen already it”.

Opinions on the scale of the economic impact of the stadium are somewhat divided; while some see the Europapark as the area of impact, others limit the impact to the Euroborg complex itself (i.a. E. van der Kley; B. Veenbrink; W. Smink, all 2016). Nevertheless, as observed earlier a couple of other functions not directly coupled with the stadium development, have established in the Europapark as well. In terms of economic activity, this mainly concerns the Mediacentrale and the few office buildings that were realised, north-east of the stadium. As found in the area development analysis, these economic functions and businesses can to a limited extent, and at least not solely be related to the presence of the stadium. Regarding the Mediacentrale, views are somewhat ambiguous. As Willem Smink stated, the Mediacentrale would not have been established without the stadium, and also businesses settling there in the beginning specifically mentioned the importance of the stadium in their belief in the Europapark development. Nevertheless, this is not a notion that seems widely shared among other stakeholders (e.g. Van Tiel, n.d.; E. van der Kley, 2016). Furthermore, over the years the Mediacentrale has grown into an entity in its own right, within the Europapark and Groningen as a whole, with its own identity and attractive force for businesses. In fact, perhaps even more so than the stadium at present day, in the eyes of Ellen van der Kley (2016). So, an impact of the stadium in this respect should probably be seen mainly in the early stages of the Europapark development. Looking into the office buildings, the Euroborg particularly played a role in terms of branding, in the attraction of businesses. First of all, the office park was branded ‘Kantorenpark Europapark’, thus clearly linking the offices to the stadium; however, in practice this has largely not been realised. For Menzis, the

presence of the stadium played a positive role in terms of highlighting the Europapark as the development location in Groningen, even suspending their definitive ‘go’ on the development of the Euroborg and train station; and as their facility manager summarised the role of the stadium, “the success of the stadium has ensured the publicity value of the area has grown considerably” (W. Smink, 2016; Van Tiel, n.d.). Furthermore, also the establishment of law firm De Haan seems to have been positively influenced by the stadium, with its general director emphasising the social and symbolic value of the Euroborg, as well as the business and hospitality facilities present in the stadium. Nevertheless, as the marketing publications for the Kantorenpark Euroborg already underlined, and which is generally endorsed by the various interviewees, the main factor here remains ‘location location location’ (Van Tiel, n.d.).

Notwithstanding these mixed outcomes, what should be noted is that the economic development in the Europapark has clearly turned out differently – that is, smaller – than originally intended. Especially the realisation of offices, a.o. the ‘Kantorenpark Euroborg’, took place at a much smaller volume than how it was envisioned. Also, the economic functions inside the stadium complex have not been without their struggles, and the Euroborg Offices have come to deal with vacancies. Unarguably this cannot all be ascribed to (a lack of impact from) the stadium; but undoubtedly it also means the economic impact of the stadium can be described as rather concise, until now. Overall, it seems the impact that can be observed has been predominantly concentrated in the first years; aside from the businesses included in the financial construction of the stadium development, according to stakeholders its attractive force on other businesses was most evident at the early stages, when the novelty, branding, appearance and symbolic value of the football stadium posed interesting elements. Over time it seems these aspects have somewhat flattened out, leaving the location, accessibility, infrastructure and other facilities as the main locational factors. On the other hand, as also noted regarding area development, Ben Veenbrink (2016) and Jelle Dijkstra (2013) more or less acknowledge a short-term direct impact as a ‘logical’ element; the stadium being a ‘flywheel’ for development, which in the first instance might directly attract some businesses, but after a while each addition or improvement becomes a location factor in itself – i.e. other businesses and functions, infrastructural facilities, et cetera – reduce the stadium impact to a more indirect factor.

However, there are a couple of other, internal and external, factors that can be observed, that might have affected the economic impact of the stadium. First of all, the economic downturn undoubtedly has had a major effect; on economic development in general, and thus also the impact of the stadium on attracting business activity. All the stakeholders in this case study also acknowledge this as a key factor of influence. And while some consider the crisis as the determining factor hindering further impacts, according to others this should be combined with a notion that the envisioned stadium impact was also somewhat overestimated. Although an exact ‘impact’ of the stadium was not specified beforehand, looking at the empirical data from the case study there seems some truth in both. Even though that is of course looking back in hindsight, the original plans did not take into account the crisis that as it turned out was looming. Specifically, the economic downturn is reflected in the collapse of the office market, which subsequently meant a huge cutback in the ambitious office plans for Europapark, while also affecting the office spaces in the stadium complex. Other, but related trends in the office (and labour) market that have had an influence on this include the increasing demand for more flexible work spaces, and a revaluation of inner city locations at the expense of greenfield locations (E. van der Kley, 2016). Furthermore, as concluded in the area development section, the economic downturn also led to a more moderate development of the area as a whole; in terms of other functions, but also resources available for issues like landscaping and public space.

An effect that might have been somewhat overestimated, is the ‘magnet’ effect of the stadium in terms of ‘traffic’; the people it would draw to the area. It appears the movement streams the stadium attracts are predominantly destination traffic – people coming specifically and only for the football match; and outside of the football matches, activities are limited (H. Bouma, 2016; J. Voorrips, 2016). This is clearly different to how the situation was envisioned, in which there would be more synergies between the functions, and people combining various functions in their visits to the area. Another reason for this is that besides the football matches, not many other events take place; this limits the large streams of people to once every two weeks, while on the other days not much traffic is generated outside of the people living and working in the area (Idem). These latter aspects have been hindering elements for the already established businesses, and probably also for potential new functions. For some parties in the area, such as the cinema, this led to serious disappointment, as well as some financially dire straits. As Harry Bouma (2016) assesses it, looking back a couple of those would not establish their business there again, if they had known how the Europapark development would turn out in practice.

So, overall the economic downturn has had a large influence on the economic impact of the stadium. Looking at the office park, this should probably be considered the main reason for the lacking development. One ‘internal’ aspect that comes to the fore here, is that the municipality has perhaps stuck too long to certain conditions for development plans for office buildings, i.e. regarding volume, phasing, location, et cetera. A somewhat less strictly regulated policy might have allowed some more developments to take place (E. van der Kley, 2016). However, this is of course again also a matter of hindsight, in which the municipality was perhaps more picky than it could eventually afford with the knowledge of the oncoming crisis (Idem; B. Veenbrink, 2016).

Looking at the business activity in the Euroborg complex itself, a couple of observations can be made. First of all, as concluded earlier the possible attractive force of the stadium does not seem to be an ever-lasting effect. This was perhaps the case in the beginning, when businesses were attracted by the prospects of the Europapark development, or the ‘novelty’ element attached to a new football stadium. Nevertheless, and of course also in combination with the economic climate, this effect somewhat leveled off, interest seemed to decrease, and the offices have seen a decline in occupancy rates. At a certain moment a part of the office space was brought into the formula of ‘FlexOffiz’, a concept of pay-per-month offices with low costs, which according to Ellen van der Kley is fairly successful. Nevertheless, still the offices are dealing with vacancies, and also anno 2016 terminations of rental contracts take place (2016). Outside of the external factors, a couple of reasons for this can be identified that are specifically related towards the Euroborg complex itself.

First of all, the office spaces appear to be not optimal in terms of design; both practical and facility-wise and aesthetical. Issues such as parking, signings and findability in and outside of the complex turned out not ideal in facility terms, as well as unpractical measurements of the office units themselves. Furthermore, due to design issues a lack of visibility from and appearance to the outside, and opportunities to carry an own identity are limited; while on the other hand the ‘identification’ element of residing in the stadium is limited by a lack of integration in terms of design, but also functional coherence. These aspects also make that the binding with the football club and stadium itself, other businesses, and ‘the outside’ is not really being established, or optimally utilised. All together this does not make for an optimal situation for office use, and a lively, liveable, or thriving climate for economic activity (E. van der Kley, 2016; H. Bouma, 2016). To a somewhat lesser extent, these issues also apply to the other businesses located in the Euroborg. Related to this, some of the businesses also identify a lack of coordination and alignment of interests between the different functions; despite the functioning of a business platform Euroborg, there is not much

coherence between the different users of the space. Besides the aforementioned design deficiencies, this is also limited due to the fact that rather few events or activities take place in and around the stadium, or are allowed to take place. Another element in this, is that some actors experience a somewhat unequal coordination between the different functions; they feel the football club in the end has the main priority; businesses – as well as residents – around the Euroborg seem to come on second place (H. Bouma, 2016; R. Doppenberg, 2016). That means for example that businesses have to adapt to the club – while in terms of binding, coordination and cooperation returns are rather little (Idem). As a final element, specifically related to the Euroborg Offices, some interviewees hint there are some difficulties in terms of exploitation; i.e. costs c.q. rents are rather high, compared to similar offices elsewhere (E. van der Kley; J. Kruizenga; J. Voorrips, all 2016). Taking into account all these factors, the short-term impacts of the stadium on businesses, the novelty, brand awareness, prestige or ‘specialness’ to be located around the new Euroborg, in the end do not seem to outweigh the adverse aspects described above (H. Bouma, 2016; E. van der Kley, 2016).

All in all, however, the most important reason for the limited business activity impact of the stadium, should be seen the economic downturn; and in correlation with that the slower and smaller development of the area as a whole, in terms of other functions and the public space. However, also looking around this, the impact that can realistically be expected should not be overestimated. Results from this case study show, that particularly in the early stages a stadium can have a certain direct impact in this respect, but that after some time this effect largely flattens out, mainly becoming an indirect effect at most. In the long term, the main locational factors for businesses include location, accessibility and infrastructure, and other functions or facilities established in the area (i.a. J. Dijkstra, 2013; E. van der Kley, 2016; B. Veenbrink, 2016) – the latter aspects then perhaps indirectly influenced by the stadium development, as discussed earlier. And although the original aims were perhaps set a bit high, when looking at it now and taking into account the economic downturn, most stakeholders acknowledge that this is perhaps what can realistically be expected from a stadium development; and that by no means the stadium would in any case be able to ‘fill up’ the entire area (i.a. W. Smink; B. Veenbrink; J. Voorrips, all 2016). Nevertheless, that does not alter the fact that a couple of aspects have come to the fore, that also taking into account the changed context could perhaps have ensured a somewhat better climate for business activity. Specifically, in terms of internal design and coordination between functions in the stadium complex itself; as well as a somewhat less strict municipal policy towards developments outside of the stadium, something which, as noted in the area development section, would also be more in line with the recent context of area development in the Netherlands. Although, as also concluded earlier, this is of course also a matter of new insights, which in a way is an intrinsic element of spatial planning.

### *5.3.2 Employment*

An important argument in the Europapark and Euroborg development was the economic impact, and specifically also in terms of employment for the city. The area development as whole has also received considerable subsidies from the EU, specifically targeting employment (J. Dijkstra, 2013). Of course this objective was not completely assigned to the new stadium, but the Euroborg was seen as an important element for these goals. This was also underlined by the alderman of economic affairs Koen Schuiling, who regarding the definitive ‘go’ decision stated: “you are talking about an area from which 37.500 people are directly dependent for their living; if you cross this off against each other, the risk of not proceeding is much larger” (Venema & Schoenmaker, 2015). So, employment was specifically an important element of the Europapark development, and the stadium was

considered so important in that this was seen as justification for providing a loan construction to the stadium project. What should be noted from the start, is that firstly this employment was of course not all ascribed to the new stadium; and secondly, that as we have seen the economic downturn has had a major impact on economic development in general and also for the Europapark. Therefore, also the employment effect is perhaps smaller than originally foreseen, and these aspects should be kept in mind when assessing stadium impact in this respect.

Based on the outcomes presented by the case study, it seems probable that the stadium has had a certain positive impact on employment, but that the exact scope of the effect is difficult to determine. Naturally, the construction phase of the stadium complex brought about some temporary employment, e.g. for consultancies, developers, architect, builders, et cetera; however, the main focus here is on structural employment effects. In that respect, surely the move to a new, larger and more modern stadium, equipped with more facilities has been accompanied by a 'professionalisation' of FC Groningen and its organisation, which has brought about an increase in jobs at the club (i.a. E. van der Kley; J. Kruizenga; W. Smink; B. Veenbrink, all 2016). Although this should not be overstated, Ben Veenbrink and Jaap Kruizenga estimate this at a few tens, or around twenty-five full time equivalents respectively. This could perhaps be considered the most 'pure' employment effect of the new stadium; other effects will mainly be related in a more indirect way to the stadium development.

Besides the football club related employment, the notion of employment effects of a stadium development of course depends largely on the ability of the stadium to attract other economic functions or activity. Therefore, this aspect is strongly linked with the outcomes found earlier regarding the attraction of other functions and economic activity around the stadium. There are two important elements here, that complicate the matter. Firstly, the question is to what extent can economic developments actually be ascribed to the stadium development, and secondly, are increases in employment really 'new' jobs, or is it simply a relocation of employment within the city?

Overall, the general understanding with stakeholders seems to be the employment effect should not be overestimated, but that – to a varying extent – there is an impact to be observed. Views on the exact magnitude of this effect are thus somewhat divided. As discussed earlier, a couple of functions in the Euroborg complex have been directly attracted by the stadium at the early stages, while for the establishment of some others – especially the office buildings outside of the stadium, and some businesses in the Euroborg Offices – the stadium might indirectly have had an influence. According to i.a. Jelle Dijkstra, Willem Smink, Ben Veenbrink, Jaap Kruizenga and Marieke Zomer (all 2016), it can therefore be concluded the stadium has brought about 'substantial' extra employment to the area. And while some functions were 'new' establishments, and thus brought about a seemingly autonomous employment growth (B. Veenbrink, 2016), this is of course only looking at the employment for the Europapark area. Trying to determine the 'real' impact of the stadium for the city as a whole in this respect, the question would have to include to what extent this is actually a net gain; so not a redistribution within the city (region), and that without the stadium would not have been realised in the Europapark nor the city (region). Some examples of a mere relocation of employment include the municipal 'SoZaWe' department office, Noorderpoort and Alfa-college. According to Willem Smink (2016), also functions such as the supermarket, cinema et cetera do not so much bring a net effect in terms of employment; because although these are 'new' amenities, if they had not been realised here these would simply have increased their activity (and thus employment) on another location within the city or region. Also for the Mediacentrale, even though he stated the stadium played an important role in attracting it to the Europapark, Smink argues that otherwise it would have established elsewhere in the city – which thus does not yield extra employment for the city. The biggest

employment effect, apart from that at the football club, he therefore sees in some of the offices, particularly Menzis, that otherwise perhaps would not even have established in Groningen, as well as some new or growing businesses in the office spaces in the Mediacentrale or one of the other office spaces in the area. Similar to Jelle Dijkstra (2013), Willem Smink (2016) estimates the total employment effect on a couple of hundred jobs. On the other hand, Harry Bouma (2016) and Ellen van der Kley (2016) both argue that the employment impact of the stadium, especially outside of the Euroborg complex, is rather limited. They do not see an important aspect in the attractive force of the stadium, and do not see a very substantial net employment effect, that would otherwise not have been the case.

So, all in all it can be concluded the stadium has had a certain impact on economic activity, and thereby employment, in the Europapark – in part direct and partly indirect. However, to a certain extent this is only a redistribution within the city (region), while a share of this would otherwise have been realised on another place in that city (region). So, the exact extent to which the effects can be accounted to the stadium, and are actually a ‘net increase’ in employment for the city as a whole, is very difficult to determine and prove (J. Dijkstra, 2013; B. Veenbrink, 2016) – on which thus no definite answer can be given based on this case study.

### *5.3.3 Property values*

Property values are of course a rather quantitative indicator within a qualitative case study; but as discussed experiences from different stakeholders will be assessed, supplemented with basic property value statistics on the neighbourhood level (the same data as used in the quantitative analysis), to form a more diversified view. Similar to the area development dimension, the main focus will be the Europapark area, as most interviewees also regard this as the scale of impact in this respect. To start with, the indicator of property values has two sides to it, looking at the Groningen case. On the one hand the development of land and property values in the Europapark area over time, comparing pre- and post- stadium development; and on the other hand the property values in the Europapark compared to other areas, Groningen as a whole, or similar locations elsewhere without a stadium. Regarding the first aspect, before the stadium development the Europapark was a rather uncultivated area, that after the relocation of the former industrial function was merely unused. So, as Jan Voorrips (2016) and Ben Veenbrink (2016) state, from that perspective clearly an increase in land – and therefore property – values can be observed. This is then of course not so much in terms of values of individual properties, but more related towards the value of land – i.e. the fact that the area simply got a new function, also legally in terms of zoning (‘bestemmingsplan’). The fact this also meant a value increase in practice, was then influenced by the locational characteristics, but also the fact the municipality actively positioned the area as an important development location, further exemplified by the inclusion of the stadium. Ellen van der Kley (2016) also sees a positive influence of the stadium in this respect, arguing that otherwise the area would probably not have been developed, or at least not to this extent and at this pace. This whole notion of ‘value leap’ was also an important element in the development of the Euroborg itself and the Europapark overall, and was in part also used to finance the (uneconomic) stadium part (B. Veenbrink, 2016; J. Voorrips, 2016).

However, when comparing the Europapark to other, non-stadium areas, a more mixed outcome can be observed. This does not so much entail a comparison of before and after the stadium development, as before the number of properties in the area was very limited; so with most developments having taken place simultaneously or after the stadium development, there is not so much an impact on existing property values; and with the development of new real estate, the presence of the stadium was thus also taken into account (B. Veenbrink, 2016; J.

Voorrips, 2016). So the – somewhat hypothetical – question is then whether there is a certain difference in property values compared to when the stadium would not have been realised there. Overall, the various stakeholders do not experience or expect a very notable influence of the Euroborg on property values in the area – in a positive nor negative sense. A couple of interviewees do argue that in general the development of the area has a positive effect also in terms of property values; and as discussed earlier, the stadium has played a part in this, directly or indirectly. Nevertheless, despite this the main factors contributing to the property values in the area are regarded location, accessibility, the train station and additional facilities – in fact rather similar to the relevant factors found for the area development impact (J. Dijkstra, 2013; A. Grootjans; E. van der Kley; J. Kruizenga; M. Zomer, all 2016). And while Willem Smink (2016) expects this, and particularly the train station and other infrastructure, might also trickle down to surrounding neighbourhoods, other actors mainly seem to agree on an ‘impact area’ limited to the Europapark.

Nevertheless, when looking at residential property values, there does not seem to be a positive influence comparing to a situation or area without a stadium (H. Bouma, 2016; R. Doppenberg, 2016). As Harry Bouma (2016) and Marieke Zomer (2016) also conclude, there is not really an intrinsic added value of living close to a football stadium per se (apart from perhaps the one die-hard FC Groningen supporter). People want to move there because of the aforementioned characteristics of the area (location, infrastructure, facilities), and dwellings themselves. On the other hand it appears the stadium should also not be seen in a very negative sense; while for some potential residents it might be a factor to at least consider, the issue of actual nuisance due to the stadium is not regarded an important element (i.a. R. Doppenberg; A. Grootjans; E. van der Kley; M. Zomer, all 2016). In practice nuisance and problems related to supporters are rather well-controlled, and if anything it is more the inconvenience regarding parking and match day visitor peaks (R. Doppenberg, 2016). A certain difference can be observed though when looking into distance to the stadium. Looking into experiences from the different stakeholders, perhaps close to the stadium the issues of (expected) inconvenience due to the close alignment of the functions might be somewhat more dominant, while for residential (and other) properties farther away this is not so much the case, where the more positive aspects such as additional facilities are prevailing (R. Doppenberg; A. Grootjans; M. Zomer, all 2016). So, this could indicate a certain distance effect in this respect; while overall the stadium might – indirectly – contribute to the overall quality of the Europapark area, and in that capacity property values in the area as such, in the immediate surrounding of the Euroborg complex this does not seem to outweigh an element of (perceived) inconvenience (J. Voorrips, 2016).

However, this concerns mainly the development of the property values in the area itself, over the course of time. When comparing the different functions with equivalents on another location, or perhaps to an ‘ideal’ situation for these functions, the understanding is that the property values are generally somewhat lower. As Jan Voorrips (2016) concludes regarding the economic functions in the stadium complex, “in the end, when you look at what the real estate was sold for, that is somewhat lower than when you would have put it on the optimal location for that function”. So although this was factored in in the whole development project, it is not that the location in or around the stadium makes the property values by definition higher than on another location. According to Jan Voorrips a couple of factors play a role here; being an integrated building, the location is suboptimal for other (economic) functions in terms of design and practical elements as a consequence of the different functions closely packed together; and on the other hand, also the location brings a lower value when compared to the actual city centre. Furthermore, he draws a similar conclusion regarding the residential function next to the stadium, the apartment towers, that underlines the distance effect described earlier; as developer he reflects this project has been quite a challenge, stating

that “on a place where it is not extraordinarily attractive to live [such as Amsterdam, with a huge housing market], you will not compensate this” (2016). As concluded before, he also limits this impact element to the Europapark area.

To add to these outcomes, a quick glance can be taken at the neighbourhood data on property values, as used in the quantitative analysis. Looking at the data, displayed in table 5.1 and figure 5.1, some observations can be made. What should be noted before anything, is that the ‘Industriebuurt’ comprises a somewhat larger area than what is often referred to as the Europapark; however it is the smallest statistical entity for the stadium area. First of all, what comes to the fore is that over time property values in the area have increased, between 1997 and 2014; and also when looking at the period since the stadium development (2006), property values increased, even at a faster rate than the municipality as a whole. This seems to confirm the notion of an area in development, in which along with its further development property values have risen. However, this cannot solely be related to the stadium development; early on the area was performing similar to the municipality as a whole, in the late ‘90s even slightly worse, and since the turn of the century the neighbourhood developed into an area with generally higher property values than average for Groningen, until now. So overall the neighbourhood has grown faster in terms of property values than the municipality as a whole. This paints the picture of an area in development – in particular the Europapark – within the municipality, in which the stadium then got a place, and directly or indirectly also had its impact.

Nevertheless, what can also be observed is that the values for the Industriebuurt are somewhat more fluctuating than those for the municipality. An explanation for this might be the limited number of properties in the area; while in 1995 the housing stock was only 250, in 2014 this was 1400. However, this means that the average property value can rather easily be influenced by a sudden increase in real estate (i.e. housing stock). For example, in 2010, the housing stock had suddenly risen by over 350, an increase of 46%; this might then be an explanation for the sudden increase in property values that can be seen from 2010. So, if the new development is then of another value level than the existing stock, with such a limited ‘population’ this can of course strongly influence the average property value of the area. So, actually a proper comparison or analysis of the impact of a new development, in this case the stadium, on property values, would include the same real estate stock throughout all years, to be able to determine their development over time. This also raises the issue of average property value of an area versus the value of individual properties. The first can be seen as increasing, but the second cannot exactly be determined due to the issue mentioned before. Therefore, the results looking at these data may indicate a general development of the area (higher property values as indicator for the overall ‘quality’ of the area), but do not necessarily show an impact on, or development of the values of individual properties per se. That means, whether property values of individual properties have in fact increased, and more so than a general trend or what would have been without the stadium.

Property values (‘WOZ-waarde’) (in €)		
Year	Groningen (Municipality)	Industriebuurt (Neighbourhood)
1995	-	-
1997	55.000	44.000
1999	55.000	54.000
2001	74.000	102.000
2003	-	-
2004	78.000	115.000
2005	129.000	176.000

2006	129.000	175.000
2007	149.000	209.000
2008	169.000	239.000
2009	177.000	232.000
2010	178.000	227.000
2011	176.000	256.000
2012	172.000	258.000
2013	166.000	247.000
2014	157.000	216.000

Table 5.1: Property values for Groningen municipality and Industriebuurt neighbourhood. Source: CBS Kerncijfers Wijken & Buurten [multiple years, composed research dataset].

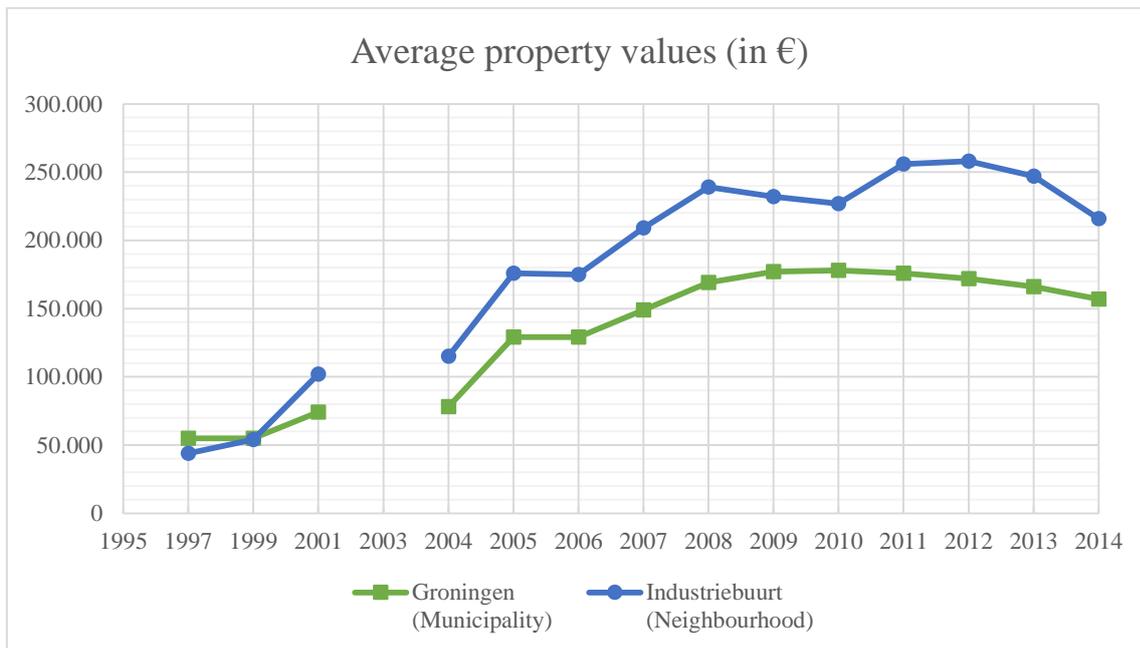


Figure 5.1: Property values for Groningen municipality and Industriebuurt neighbourhood. Source: CBS Kerncijfers Wijken & Buurten [multiple years, composed research dataset].

So, taking these outcomes together, it can be concluded that overall the stadium does not seem to have a very large impact on property values in the area, but that there might be some minor and mainly indirect effects. Looking at the property value data for the neighbourhood, overall an increase in property values can be observed, both over time and relative to the city as a whole. Taking the average property value as an indicator, this indicates at least the general development of the area. This is also something that is underlined by some of the stakeholders in the case study; the overall development of the area positively influences property values. The stadium is considered to have a role in this, although probably not directly, and main factors contributing to the ‘value’ of the area are aspects such as location, infrastructural features and additional facilities or functions. In any case, the actors in the area overall do not experience a negative impact; although in the direct vicinity of the stadium the aspects of inconvenience might weigh somewhat heavier than farther away within the Europapark. A limitation coming from the data is that while a clear increase in overall property values can be observed, looking at the changing real estate stock it does not necessarily mean an increase of all individual property values as such, or at least it does not show to what extent; and thus also not the difference with a general property value trend, or what then a possible ‘impact’ of the stadium might be compared to a situation without a stadium. Furthermore, this is mainly

regarding property values within the area itself, over the course of time; looking at property values compared to what would be the ideal situation for such functions, property values in the Europark are considered to be generally somewhat lower. So, that means it is not that the location in or around the stadium makes the property values by definition higher than on another location.

#### 5.4 Socio-cultural function

The socio-cultural dimension of impact is perhaps the least concrete, or measurable of the three. Therefore, for this aspect particularly the analysis of a case study might provide some interesting insights. The indicators defined for this dimension are the entertainment function for the city, quality of life in the stadium area or city as a whole, the neighbourhood function of the stadium, the aspect of urban identity, pride and binding, and the element of branding or 'city marketing' for the area or city as a whole. What should be noted beforehand, is that – as discussed also at the beginning of this case study – such socio-cultural aspects have not been very important elements in the stadium development process. Contrary to area and economic development, socio-cultural impacts have not so much been formulated as explicit objectives for the new stadium. Therefore, as will become apparent later in this section, some of those aspects have not really been given much attention or priority in the whole process. That means impact in certain areas might be somewhat limited; but then the fact this was also not really planned as such should be kept in mind.

##### *Entertainment function*

Firstly, the most basic indicator in socio-cultural terms, that resembles the classical notion of 'bread and circuses', is the amusement function of the stadium for the city. And to evaluate the impact of the new stadium, of course comparing the situation in the new venue with that in the old stadium. This functioning of the club and stadium as entertainment amenity, can most obviously be assessed by simply looking at the visitor numbers of the stadium. The new stadium has a capacity of 22.550 seats, which almost doubled the (due to renovations somewhat fluctuating) capacity of the old stadium (Voetbal International, 2016). Looking at the average attendance rates over the past twenty-one football seasons – ten seasons in the old Oosterparkstadion and ten in the new Euroborg; the club moved halfway through the season 2005/2006 – a very clear increase in visitors of the stadium can be observed (see figure 5.2). The last ten (full) seasons in the old stadium, the football matches attracted on average around 11.250 people; while in the first ten seasons in the Euroborg, just over 20.800 spectators visited the stadium each match. That means, the new stadium overall attracts more than 9.500 people more per match than the old stadium did, in its last years; over the course of a whole season (league matches only), this adds up to over 162.700 additional visits, on average each year. Based on these outcomes, it can thus be concluded that the function of the football club and its stadium as an amusement amenity for the city has grown considerably in size, and that the Euroborg compared to the old stadium provides a large increase in 'entertainment visits' in the city.

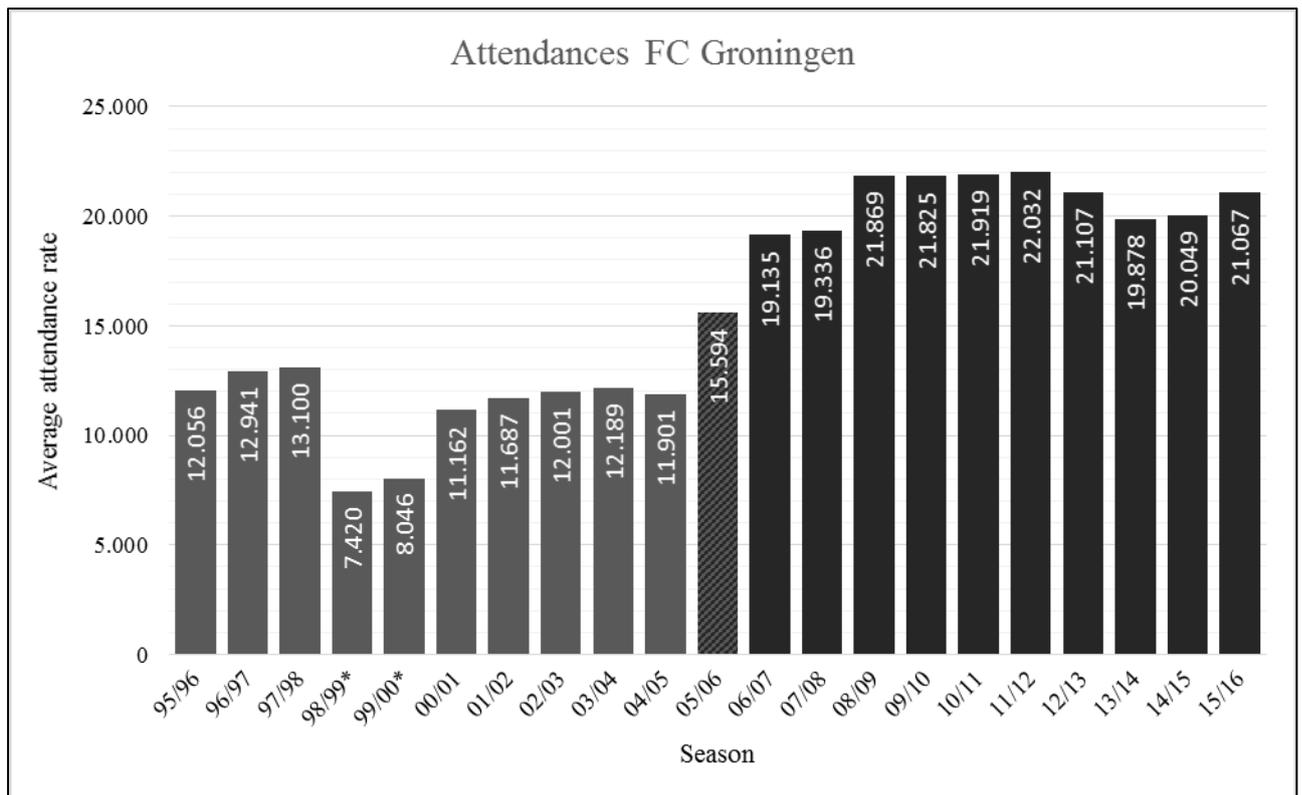


Fig. 5.2: Average match attendances of FC Groningen; grey = Oosterparkstadion, black = Euroborg; season 2005/2006 has been half-half, with the club moving over halfway through the season; \*: season in the second division (*Eerste Divisie*). Source: Voetbal International (2013; 2016).

Looking at the interview outcomes, overall the different stakeholders also agree that this function of the stadium has increased with the realisation of the Euroborg. Another element that came to the fore here, is that it seems the new stadium also attracts a more varied audience, that it has become an entertainment facility for a wider public within the city (region). Stakeholders experience that for example more families, children, women find their way to the stadium to visit the football matches in comparison with the old stadium (A. Grootjans; J. Dijkstra, 2013), but also elderly and disabled people, business people and city officials, et cetera – a better reflection of society (B. Veenbrink, 2016). Important reasons for this besides the increased capacity are the improved facilities in terms of comfort, safety and security in the new venue. Also issues such as security and parking are better organised and controlled on the new location. These factors – together with a better performing club, has to be said – have also contributed to the disappearance of the negative atmosphere around the club, as was the case in the last years of the old stadium, where problems in terms of insecurity, nuisance and supporters incidents and violence placed a negative mark on the club and stadium. The move to the new stadium thus contributed to turning this around, making it attractive also for a larger and wider audience in the city and region to visit the football matches. As said, this does also function together with the performance level of the club; but as some interviewees argue, this is strongly related to the financial resources of the club, which have increased with the new stadium (i.a. J. Kruizenga; B. Veenbrink; J. Voorrips, all 2016). On the other hand, another point that was mentioned by a couple of stakeholders in the case study, is that the entertainment function of the stadium remains mainly limited to the – twenty or so each year – football matches, and that no other large-scale events, such as concerts, and little other events are being held in the stadium. As described earlier, this was initially also the idea, but these plans were dropped during the process. Nevertheless, these actors see a missed opportunity in this, that could have made for a larger overall entertainment

function of the stadium for the city much (e.g. Venema & Schoenmaker, 2015; H. Bouma; R. Doppenberg; A. Grootjans, all 2016).

### *Quality of life*

The indicator of quality of life, or liveability, of the area can be divided into two main aspects; the area as a place to visit, be, 'hang around', and the area as a place to live. As 'quality of life' is perhaps a rather broad concept, here it is mainly regarded as simply the question to what extent visitors and residents experience the area as a pleasant place to be or live respectively. As a start, when simply comparing the area pre and post stadium development, for both aspects it can be concluded the liveability of the area has generally increased. However, given the fact that before the area only had an industrial function, and became vacant after the relocation of that function, this is not so much of a surprise. Nevertheless, the Europapark development, including the stadium and a couple of other functions, meant the area has been given a new use, become more a part of the city, that for various purposes attracts more people than it did before. The stadium, as described before, has played a role in this, as something that provides the area with some brand awareness and an influx of visitors, as well as infrastructural improvements and a couple of additional functions. On the other hand, the entire area development has taken place at a slower rate than originally planned, and the area is by no means 'filled' or completed yet. Furthermore, as found earlier the quality of the public space has been rather lacking in certain aspects, as the different stakeholders experience.

The liveability of the Europapark for visitors has thus increased, first of all given the fact that the area has in fact become a place to visit; or where due to the different functions that have been realised people go or choose to go – to work, to go to school, or for leisure purposes. Nevertheless, the movements of people to the area remain predominantly destination traffic; people go there for a specific purpose, i.e. one of the abovementioned functions. It is not so much an area where people go just because it is a nice area to be, to walk or hang around, et cetera, while also 'combination visits' are not a regular travel behaviour here (H. Bouma, 2016; J. Voorrips, 2016). Such aspects were envisioned in the original plans of municipality and architect, but the extent to which this is realised thus seems to be more moderate. A couple of reasons can be identified for this; firstly, despite being rather close to the city centre it has long been and to a lesser degree is regarded as a somewhat remote area, due to both mental and physical barriers (J. Dijkstra, 2013; B. Veenbrink, 2016). Furthermore, the number of really crowd-pulling functions remains rather limited, and what particularly comes to the fore in the stakeholder interviews is that activities, events, et cetera outside of the football activity, that might breathe more life into the area, are rather scarce; so as a consequence, the general understanding here is that outside of the football activity there is not so much going on (i.a. H. Bouma, 2016; E. van der Kley, 2016). Furthermore, as identified earlier the lacking quality of the public space, as well as some slow traffic infrastructure, does not make the area a particularly pleasant place to 'hang around', if not for a specific purpose; as most stakeholders argued, the area has long been, and to a certain extent still is experienced as rather grey, chilly, windy – not a pleasant place to reside (i.a. E. van der Kley, 2016; B. Veenbrink, 2016). Finally, according to Jan Voorrips (2016) this is also generally just not how many people tend to act; they mostly make targeted visits, and purposefully travel to a certain destination, i.e. spatial function. This is particularly perceptible in areas outside of city centres.

The second element of quality of life concerns the area as a place to live. In the Europapark, housing has been realised in the apartment towers directly next to the stadium, the residential quarter De Linie to the east of the Europapark, and more recently the youth

housing complex Hete Kolen across the street from the Euroborg complex. The residential function of/in the area is about to expand, with new residential development projects in the pipeline for a residential care complex and a private commissioning housing project. Finally, the Europapark is bordered by the residential neighbourhoods Helpman to the south and the Oosterpoortbuurt on the north-east side; but these are generally considered to be too far away to experience a very substantial impact from the stadium. For residents of the area, the general conclusions drawn before also apply here; the general development of the area, in terms of other functions and infrastructural improvements, contributes to the quality of life of the area. The additional functions do ensure a higher amenity level for the neighbourhood, particularly the 'local' facilities such as the supermarket or fitness centre. The stadium itself, as well as some of the other functions, could be considered more as urban functions, but can of course also be used by the local residents. The lack of a neighbourhood function, as will be discussed in the following section, does however limit a further impact in this respect. In terms of infrastructure particularly the train station contributes to the liveability of the Europapark. On the other hand though, the lacking quality of public space, for example the absence of the city park, has not been favourable for the liveability of the area. And while as seen the stadium may not so much cause the 'conventional' supporter nuisances, the football activity may pose some inconveniences for residents. As before, however, it should be noted that not all of these developments or issues can of course entirely be ascribed to the stadium.

Regarding this quality of life for residents of the area, a difference can also be observed between residents in the direct vicinity of the stadium, i.e. the apartment towers, and those living farther away, in De Linie on the Europapark and the other surrounding neighbourhoods. First of all, the football activity inevitably brings about some nuisance for inhabitants of the apartment towers, mainly due to the fact these are built so closely together. This concerns issues such as littering and bustle around the football matches, the latter also making the area poorly accessible around match times, the impractical side of the design in terms of 'findability', but most importantly the issue of parking (R. Doppenberg, 2016). The main parking facility is the parking garage under the Euroborg, which is used for all the functions in and around the stadium complex. That makes that with the heavy traffic around the football matches, it is rather difficult for residents to access their own parking space. Also, the fact the garage is a paid parking facility brings inconvenience in terms of receiving visitors. Similar problems can be found regarding bicycle traffic; during the matches the apartment towers are hard to reach, while bicycle parking for visitors is limited (H. Bouma; R. Doppenberg; J. Kruizenga; E. van der Kley, all 2016). Aspects of safety and security on the other hand, do not seem to be an issue at all for the residents, both in the apartment towers and the area as a whole, as this seems rather well controlled. So, while Ria Doppenberg stresses the negative side should also not be given too much weight, a couple of inconveniences make that the stadium does not foster the quality of life particularly in close proximity of the stadium, and has rather a negative influence than a positive effect. In this respect clearly a difference can be observed between the residential function directly adjacent to the stadium, and the housing somewhat farther away. As the stakeholders note, apart from the traffic flows around the football matches such negative elements or inconveniences are not so much experienced in De Linie and surrounding neighbourhoods (R. de Boer; A. Grootjans; M. Zomer, all 2016).

An important aspect here, similar to the experiences of the businesses in the Euroborg complex discussed earlier, there seems to be a general lack of coordination and alignment between the different functions, in particular then the stadium and the residential function. There seems to have been limited attention for the practicality of the apartment towers in the design of the complex, in terms of findability, accessibility and parking (H. Bouma; R. Doppenberg; E. van der Kley, all 2016). Furthermore, the residents of the Stoker and Brander

are sometimes given the impression that they pose not equally important users of the area, only coming in second place after the football club c.q. stadium. They experience a general lack of involvement, coordination and cooperation with the other users of the area, the football club and the other businesses, and not being heard in their issues and problems by both the football club and municipality (R. Doppenberg, 2016). So, while in the initial plans the apartment towers were envisioned to create a multifunctional area, that would bring some more 'life' to the area, and were also regarded as landmark elements for the appearance of the complex as a whole, the impression cannot be avoided that this residential function was perhaps in the first place simply also a financial matter; a 'cost carrier' for the stadium. And while this should also not be dramatised too much, these issues in a sense appear to confirm that the primary concern seems more related towards the success of the stadium complex, and well-being of the football club, than to create an optimal living environment for these apartments. This comes to the fore in both design elements and in operational/coordination terms. As Jan Voorrips (2016) then also concluded in relation to property values, this location directly adjacent to the football stadium is probably not ideal for the residential function; and even expressing his doubts on whether to realise such a combination again in the future.

Looking at the combination of a football stadium and a residential function, this might be somewhat easier a bit farther away from the stadium. As Marieke Zomer (2016) argues the functional combination with regard to the (sub-)neighbourhood De Linie does function rather well; and is also something she thinks can work out, if special attention is given to a certain separation in both design and functional terms. And as concluded earlier, the overall understanding is that when taking a bit more distance the potentially – direct or indirect – positive influence on quality of life (e.g. in terms of additional functions, infrastructural features), outweighs the possible inconveniences.

As a final element, for the quality of life in the city as a whole, the situation on the old location is of course relevant as well. Whereas the old stadium was an important social element within the Oosterparkbuurt (as also described in the following section); especially in the last years the stadium caused problems in terms of parking, nuisance and supporters problems; the stadium increasingly became a burden on the neighbourhood, posing an unsustainable situation. In fact, this posed one of the main arguments behind (the urgency attached to) the move to a new location. And while in the beginning local residents also complained about the disappearance of the stadium, in the end it did solve some pressing problems in the neighbourhood; so in that light it can be argued the new stadium indirectly had a positive effect on liveability on the old location, and thus in the city as a whole (W. Smink, 2016; J. Voorrips, 2016).

### *Neighbourhood function*

The next socio-cultural function is the neighbourhood function of the stadium. To get straight to the point, the Euroborg does not really seem to have such a neighbourhood function. So although this was not a specific goal before the development, it is also not something that has been realised. According to the various stakeholders, the stadium does not accommodate something of a community or neighbourhood centre, or really function as a meeting place for local residents (i.a. R. de Boer; R. Doppenberg; A. Grootjans; W. Smink; M. Zomer, all 2016). Furthermore, specific neighbourhood projects or events hardly take place in the stadium. In a certain way the stadium is considered a meeting place for people, but specifically related to the football matches (J. Kruizenga, 2016; M. Zomer, 2016). Besides that, the football club does engage in various social or societal projects and events, but these are also related to the football club, and more on the level of the city as a whole, and not really aimed at the neighbourhood (H. Bouma; J. Kruizenga; B. Veenbrink, all 2016). So in

short, the stadium does not seem to have a strong neighbourhood function; and the social impact it does have in this respect is mainly related towards the football club, and more on a city-wide level than specifically for the neighbourhood. The general understanding among stakeholders is also that an important reason for this is that the area is not really a (densely populated) residential neighbourhood, making the development of an actual neighbourhood function more difficult and less likely (i.a. J. Kruizenga, 2016; B. Veenbrink, 2016). The surrounding neighbourhoods on the other hand are more focused on themselves, and have their own neighbourhood or community facilities (A. Grootjans, 2016).

When comparing the impact of the Euroborg with the old stadium in the Oosterparkbuurt, this neighbourhood function might even have declined with the move to the new stadium. The Oosterparkstadion was situated in the middle of a residential neighbourhood, and the two were strongly interlinked. As all interviewees seem to agree, the old stadium therefore really had an important neighbourhood function. The stadium 'belonged' in the neighbourhood, and to its residents; so it posed an important element of identity and pride, and despite the inevitable nuisances around the football matches it also formed a part of the 'neighbourhood routine', bringing some life into the area (i.a. H. Bouma; A. Grootjans; W. Smink; J. Voorrips; M. Zomer, 2016). On the other hand, especially in the last years the stadium increasingly caused problems in the area and became more of a burden to the neighbourhood, somewhat overshadowing the positive neighbourhood function (W. Smink, 2016; J. Voorrips, 2016).

Nevertheless, the question is also to what extent such a real neighbourhood or community function, as was clearly the case in the 'working class neighbourhood' that is the Oosterparkbuurt, can really be reproduced when moving away to a new stadium on a new location; which is then also not a predominantly residential area. On the other hand, this should also not be considered as a major deficiency of the new stadium development. It was not an important goal beforehand, and most stakeholders do not seem to consider this a great shortfall of the development. While some acknowledge the potential of a stadium in this respect (e.g. B. Veenbrink, 2016), and some think it is something that should or could have been elaborated upon, others do not really see a missed opportunity in this respect (e.g. A. Grootjans, 2016; M. Zomer, 2016). In Groningen therefore a socio-cultural aspect is not so much found on the neighbourhood level, after the leaving the old stadium that did have a particular neighbourhood function, and should mainly be seen in relation to the club, on a city- or region-wide level.

#### *Identification, binding and pride*

For the indicator of identity and pride, the exact size and importance is of course difficult to express, as it is a rather abstract concept. However, the experiences and opinions of the various stakeholders on the concept will be leading here. All the interviewees in the case study agree that FC Groningen and the Euroborg have an important social function for the city, in aspects such as identity and pride. As found in the previous section, this does not anymore entail a real neighbourhood effect, but should be seen on the level of the city (region) as a whole. As described, the old stadium was strongly interlinked with the surrounding Oosterparkbuurt, the stadium was considered an important part of the neighbourhood, providing residents also with a sense of pride and identification. The new stadium does not so much invoke such effects for the residents of the Europapark and surrounding areas (i.a. R. de Boer; A. Grootjans; W. Smink; M. Zomer, all 2016). In that sense, it might be argued the social element of identity within the city has somewhat declined. However, an important notion is that this is and remains mainly related towards the football club; which, on the other hand, now also has a more positive image and attracts more people.

Opinions on the role of the stadium are somewhat divided. Some see a certain iconic function of the stadium in itself, contributing to such aspects (e.g. J. Kruizenga; W. Smink; M. Zomer, all 2016), others see it merely as just the place that houses the club and accommodates its home matches (e.g. H. Bouma, 2016; A. Grootjans; B. Veenbrink, all 2016). Or as Harry Bouma puts it, the club is the ‘Trots van het Noorden’ (pride of the North), and “it does not matter where they play, as long as they win”. Nevertheless, looking at some of the stakeholder responses it seems the stadium does play a certain role in this; for example, with the stadium commonly referred to as the ‘groene kathedraal’ or ‘groene hel’ (green cathedral, green hell), it seems the stadium is also an important element in this aspect of pride and identification (e.g. R. de Boer, 2016; Venema & Schoenmaker, 2015). Also interviewees that are not specifically interested in football or FC Groningen acknowledge this function of club and stadium; and in general it is also considered as something of a landmark or point of recognition for the city (J. Kruizenga; W. Smink; M. Zomer, al 2016). Furthermore, the ‘outrage’ caused by the change of the stadium name (mid-2016 the official name changed from Euroborg to NoordLease Stadion), implies a certain value that inhabitants attach to the stadium as such (e.g. A. Grootjans, 2016; M. Zomer, 2016). Looking at the stadium on its own from an architectural point of view, the overall understanding is that impact is limited. Specific attention for architecture has ensured the Euroborg is perceived to express a certain quality, expensive and unique appearance (J. Dijkstra, 2013; E. van der Kley; W. Smink; B. Veenbrink, all 2016); but on the other hand, overall opinions regarding the appearance of the stadium seem to be rather mixed (H. Bouma; J. Kruizenga; J. Voorrips; M. Zomer, all 2016). Furthermore, as Ben Veenbrink (2016) concludes, such aspects do probably not so much apply to most of the inhabitants of the city itself, and is more an effect outwardly. And for the football supporters, it is of course mainly the relation to the club and functional design and value of the stadium; they visit the place where FC Groningen plays, and do not really think of it as an ‘icon’ of architecture. On the other hand, for other citizens the stadium architecture is probably somewhat too modest to be able to really speak of an ‘icon’ on its own, that people feel proud of or identify with. So, while the new stadium does seem to offer a certain contribution in this respect, it does not take away from the notion that overall the actual feelings of pride and identification are primarily linked with the football club – which now does have a new quality stadium to play at, that offers a better spectator experience to more people (J. Kruizenga, 2016).

As a final note, since the club appears to be the key element in this respect, a factor of influence is then also the performance level of FC Groningen; it can be argued that there is a positive correlation between performances on the pitch and a sense of pride and identity among the population (J. Kruizenga, 2016). Furthermore, it can be argued the new stadium has had a positive effect on the performance level of the club; this strongly correlates with the budget of the club, which the stadium helped to structurally increase – as was also an important goal of the new stadium development (J. Kruizenga; W. Smink; J. Voorrips, all 2016). This link is backed up by the league performances of the club over the past twenty years; since the first season in the new stadium, the final rankings of the club in the league have been at a considerably higher level than before (Voetbal International, 2016). Finally, this improved performance level of the club, together with the new stadium also solving some of the growing issues around the old venue, completely turned around the negative image that formed around FC Groningen in the 1990s. Therefore, it might be argued that the new stadium, in part also indirectly through accommodating a better performing club, has in fact contributed to aspects of binding, identification and pride among the population of Groningen (J. Kruizenga, 2016; W. Smink, 2016). However, as found this is particularly on a city (region) level, and in the first place linked with the football club, and mostly not primarily the stadium building as such.

### *Image effect and city marketing*

Similar to the previous indicator, for the appearance effect of the stadium for the city outwardly, it is difficult to exactly determine the size and importance of the effect. In a way, the indicators are also rather similar; whereas the previous indicator looked at the social meaning and appearance effect of the stadium within the city (region) itself, here this role of the stadium for the city outwardly is discussed.

Most actors seem to agree that the stadium does have a certain showcase or appearance function for the city, to the outside world; the club and the stadium as an ‘iconic’ element, a ‘sign board’ or ‘business card’ for Groningen. Similar to the earlier findings, opinions are mixed regarding the exact roles of the club and the stadium in this. According to some interviewees, also here the football club functions as the main ‘sign board’, for which the stadium is merely just its accommodation (H. Bouma, 2016; R. Doppenberg, 2016). On the other hand, looking at the visions on this aspect of the other stakeholders, it seems there is a somewhat larger role of the stadium itself, in terms of architecture and appearance as an ‘iconic’ building. A particular requirement during the development process was also the involvement of the architect Wiel Arets, specifically targeted at creating such an impact of the stadium – something which according to various stakeholders has also been realised (J. Dijkstra, 2013; E. van der Kley; W. Smink; B. Veenbrink, all 2016). And as Ben Veenbrink concluded, while this did not play a particularly big role within the city itself, outwardly it has been an important ‘boost’ for Groningen, putting the city on the map as a progressive city, that wants to realise special, new and unique architectural projects (2016; W. Smink, 2016).

Nevertheless, that does not take away the fact that the stadium will always be closely interlinked with the football club. As Andrina Grootjans (2016) combines the two, “I think that (appearance effect) is more aimed outside of the city; a stadium does appeal to the imagination (...); and if you want to ‘mean something’ as a city, well you have to have a professional football club, and that needs a representative stadium”. Similarly, Marieke Zomer (2016) notes that “you are a ‘real’ city when you have a really beautiful football stadium; so in that respect the Euroborg contributes to this”. Although both do argue that such an effect would have been greater if the stadium would also host events such as concerts. However, the inseparability of stadium and club, means that this intangible external social impact of the new stadium is also – again – strongly related to the performances of FC Groningen on the pitch. This branding element of club and stadium for the city, often comes with the question, ‘where does the club stand in the league table?’; so when the club is not a stable contender in the Eredivisie (highest tier), that does not really work out in terms of image effects (W. Smink, 2016). This works both ways of course, as a couple of actors argue it is problematic for a city when its football club is in trouble and getting negative attention, both performance-wise and financially – but positively the other way around (Idem; B. Veenbrink, 2016).

Taking this element one step more concrete, what can be reviewed is the use of the stadium as an element in city, or area marketing strategies. First of all, looking at the Europapark area, it appears the Euroborg has been explicitly used in marketing strategies for its development. From the early stages of the Europapark plans on, the area development has been coupled with the new stadium project. This can already be seen in the apparent connection in names, but was also explicitly expressed by the municipality throughout the entire process and in its policies (e.g. Gemeente Groningen, 1997; 1999; Venema & Schoenmaker, 2015; J. Dijkstra, 2013). As observed for the area development dimension, although not completely interdependent both developments have thus been strongly tied together. Directly or indirectly, the central presence of the stadium for some actors posed an

interesting element in terms of brand awareness, and indicator of the intentions of the municipality. Specifically, the 'Euroborg' brand was also used for the office functions in the area; the office park that was planned in the area was branded as the 'Kantorenpark Euroborg' (Van Tiel, n.d.), while the offices in the stadium building were marketed as 'Euroborg Offices'. While the success of both developments can be debated – the former has largely not been realised due to the economic and office crisis, and the latter have for a couple of reasons seen a predominantly short-term stadium impact – it does emphasise the new stadium has specifically been used as an element for city marketing purposes. In fact the image and 'brand' of the stadium were even placed at the heart of this. For both, the stadium, and its central role within the Europapark development, were actively used in their recruitment strategies (Van Tiel, n.d.; E. van der Kley, 2016).

Looking at city-wide uses of the stadium in this respect, this is not so much the case. While most actors do see a role of the stadium in terms of city marketing, or at least recognise the potential of the stadium in this respect, this remains largely limited to rather vague notions. Willem Smink (2016) states the Euroborg has been used as a city marketing 'image', also in publications on the city of Groningen. However, this is not something that seems to be specifically recognised by other stakeholders (e.g. E. van der Kley; J. Kruizenga; M. Zomer, all 2016). Also, when looking into recent relevant policy documents, such as the municipal structural vision 2008-2020 (Gemeente Groningen, 2009), cultural policy documents for 2013-2016 and 2017-2020 (Gemeente Groningen, 2013; 2016c), as well as the city marketing website of Groningen (Marketing Groningen, 2016) do not contain substantial, or in fact at all mentionings of the Euroborg or the football club. As a.o. Jaap Kruizenga (2016) also argued, this is an element that could still be further exploited. Therefore, the role of the stadium in this respect should perhaps mainly be seen as city marketing in a 'passive' sense; people reading about the stadium, or seeing it on television, et cetera, and then linking this with the city of Groningen. It seems this is currently not really actively being pursued in policy documents. As a final note, the question is of course also to what extent a stadium would actually be able to have a 'city marketing' function in relation to visitors. As Jan Voorrips (2016) and Harry Bouma (2016) also stated, most visitors coming to the Euroborg and Europapark are 'destination traffic', people going there with a specific goal in mind. Whether the stadium would then be really able to contribute to a marketing strategy for the area, or even city as a whole, is somewhat questionable. Looking at the inextricable link with the football club, perhaps predominantly targeted at people interested in sports and football. Really as a marketing tool, perhaps the most viable or logical use would be for the Europapark, and in attracting businesses; even though the potential of a stadium on its own was found to be rather limited. For potential residents it is in any case not considered a 'unique selling point' (H. Bouma; E. van der Kley; M. Zomer, all 2016).

### 5.5 Other findings

In addition to the discussion of these various impact indicators arranged by the three main dimensions, some other important findings came to the fore during this case study, particularly in discussion with the various interviewees. These will be discussed in the following section. Although these elements often do link back to the impact aspect, and may have been mentioned incidentally before in the impact sections, they apply more generally and cannot be placed under one specific impact dimension, and will therefore be discussed separately and in more detail here.

First of all, a crucial factor that came to the fore, both as point of attention within the development process and a factor of influence for the realisation of impacts, that should be covered more comprehensively here, is location. As discussed earlier, the location of the

Europapark was an important element throughout the development process. After it became vacant, already early on in the stadium development process both ‘lines were tied together’, and the developments have been strongly coupled ever since. And while that implies that both posed a convenient solution for the purpose of realising the other, the site was eventually selected as stadium location for a couple of reasons. Apart from its availability, the Europapark posed a rather rare combination of being close to the city centre, with also good accessibility via both major roads and rail lines; which Willem Smink dubbed as a ‘golden formula’. So in practical terms the location met the requirements for a stadium function, while a location close to the city was considered desirable in line with the overall urban development policy of Groningen, as well as with regard to keeping the football club really within the city (Venema & Schoenmaker, 2015; J. Dijkstra, 2013; W. Smink, 2016). Furthermore, as described in detail earlier on the stadium was then also considered as an opportunity, and subsequently integral part of the Europapark development plans. Particularly due to its location, the Europapark was envisioned as a vibrant, multifunctional area that would be an integral part of the city. A new stadium was then regarded as potential pull factor providing exposure and ‘brand awareness’, and function as a ‘flywheel’ for further economic and area developments.

In this capacity, looking at the case study results it seems the location of the Euroborg actually has also played an important part in the impacts it – directly or indirectly – generated. All of the stakeholder interviewees seem to emphasise this, arguing that due to the location in the Europapark the impact of the stadium is probably bigger than would have been the case on a more peripheral or out-of-town location (‘somewhere on a meadow’), which were also considered during the process and as in some cases is also preferred for new stadium developments (i.a. E. van der Kley; B. Veenbrink; W. Smink, all 2016). Analysing the various manifestations of impacts, it became clear that location plays a role for all three impact categories. As found earlier, the stadium has attracted a couple of other functions, predominantly in the early stages and in the direct vicinity of the stadium, and particularly those included in the Euroborg complex and its financial construction. However, besides that the impact of the stadium in attracting other functions has probably been mostly indirect. While for some of those functions the stadium explicitly played a role, in terms of brand awareness or as an indication for the future further development of the area, the role of the Euroborg has mostly been more indirectly, for example in terms of improved infrastructures and some other facilities attracted earlier on due to the stadium, or simply the opportunity it offered for development. However, for all additional functions a crucial factor, and for most perhaps even the most important, or only reason for establishing in the Europapark was the location of the area, close to the city centre as well as major infrastructural networks. Regarding businesses, this was perhaps most obviously exemplified by the marketing of the office park ‘Kantorenpark Euroborg’ (that eventually largely did not come off the ground, due to the economic and office market crisis). While it was clearly linked with the stadium looking at the name, the slogan actually says it all: ‘Locatie Locatie Locatie’. So even though a link was made to the stadium, and was even marketed as such, the main factor in attracting businesses should probably be seen in the location of the area (Van Tiel, n.d.; H. Bouma, 2016; E. van der Kley, 2016). Looking at the residential developments, it is also clear that the locational choice was not so much affected by the presence of the stadium, but again the location within the city and accessibility. This applies to both developing parties, for which the Europapark simply posed and poses one of the few development opportunities in the city/region on such a good location, and potential residents, for whom the presence of the stadium also does not seem to offer added value (i.a. H. Bouma; R. de Boer; R. Doppenberg; A. Grootjans; E. van der Kley; M. Zomer, all 2016).

While some interviewees expect that without the stadium the area development would not have taken place at all, or at least at a slower rate, others note that particularly the location of the Europapark formed its attractiveness for other functions – economic, residential, other amenities – and thus that development would have taken place there regardless of a stadium development. Nevertheless, as discussed earlier the development of and in the Europapark happened at a somewhat slower pace than originally intended. Undoubtedly, the economic downturn has played a part in this; however it also shows that the location in itself, nor the presence of the stadium, have been able to ensure a completed development until now.

Besides this, also in socio-cultural terms the location plays a role. Although the socio-cultural impact of the stadium turned out rather limited overall, and the particular neighbourhood function the old stadium had for the Oosterparkwijk could not be reproduced on the new location, with that in mind the situation of the Euroborg still rather close to the inner city seems to be a positive factor in this respect. So while the new stadium is less part of a (residential) neighbourhood, and lacks the potential social functions that might bring, and thus only has more of a city-wide function, particularly the fact that it still lies within the city, and supporters can go there by foot or bike, is experienced by stakeholders as an important element in the socio-cultural function of the stadium (i.a. W. Smink; B. Veenbrink; M. Zomer, all 2016). This applies particularly to the perception of the local population with regard to (the access to) the amusement function, and aspects of pride and binding. On the other hand though, some also underline that despite this, it has long been and perhaps still is somewhat perceived as a backwater area, especially due to the somewhat lacking development of the area, in terms of other functions and functional and aesthetical area design (i.a. A. Grootjans; B. Veenbrink; M. Zomer, all 2016). Additionally, according to some interviewees the location south of the city, where the majority of the people coming to the city come from, alongside and visible from the rail line, contributes to the ‘iconic’ or ‘symbolic’ function of the Euroborg, for inhabitants of the city as well as outwardly (i.a. B. Veenbrink, 2016; M. Zomer, 2016).

As a final note regarding the location aspect, it should be said that even though it turned out a very important factor in terms of stadium impact, and stakeholders seem to agree that it is an aspect that should be given specific attention in the development process, there is certainly also a factor of chance, or luck involved. Taking a more pragmatic approach, it is also simply the question of what locations are available within the city, that meet the minimum requirements for a stadium function, at that particular moment in time (W. Smink, 2016; B. Veenbrink, 2016). As Ben Veenbrink therefore also stated, the choice of location for a new stadium development should not be approached too scientifically; it cannot be solely based on characterising the ideal location, but is also a matter of choice within the limited possibilities that are available.

Another factor that clearly came to the fore in the stakeholder interviews, particularly related to the development of other functions around the stadium, but touching upon different aspects of ‘impact’ is the alignment and coordination between different functions. This aspect has been mentioned a few times throughout the analysis, but will be discussed a bit more comprehensively here. Before, this case study showed that at least a stadium could have a place in a broader area development. What is crucial for this though, is the integration in and alignment and coordination with the context of the area, the city, but also the other functions surrounding the stadium. Although to a certain extent a decent mix of functions has been established at this point, the case of the Euroborg and Europapark does show some room for improvement. This is most evident (or evidently missed) in the direct vicinity of the stadium, and for the functions in and around the Euroborg complex. For example, conversations with directly involved stakeholders revealed that the coordination with business functions, both the

in-building Euroborg Offices and the other business establishments in and around the Euroborg complex, has not been and is not yet functioning optimally. The combination of functions so closely packed together of course brings some potential challenges, in terms of coordination of activities, conflicting use of space et cetera. To deal with such issues, a business platform is established, in which all actors can voice their opinion and concerns. This ensures a certain coordination between the functions, and to a limited extent cooperation or exchanges between functions (H. Bouma; J. Voorrips, 2016). Nevertheless, what came forward is that these businesses seem to experience a certain unequal position compared to the football club, that often gets more attention and prioritised in that context. The general understanding among other businesses is that the club ‘takes’ more than it ‘gives’, in this respect, and that the other users of the area have to adjust to the football club more than the other way around (H. Bouma, 2016).

Also in terms of design, the stadium complex does not seem fully optimised with regard to other functions. This was an issue taken into consideration in the development process though, as it posed an important reason for separating the apartment towers from the stadium complex, and abandoning the idea of one central entrance for all functions – which would potentially give rise to conflicts in different usage patterns and characteristics of the various functions (J. Voorrips, 2016). Nevertheless, stakeholders still seem to experience some deficiencies in this respect. In general for the Euroborg complex, this is for example reflected in limited and lacking shared spaces, and a lack of connection and appearance to the ‘outside world’ which makes it a rather enclosed complex, where from the outside it is not visible which functions it actually accommodates. Furthermore, actors note a lack of common or public spaces outside, and inconvenient or lacking parking for visitors and bicycles respectively (H. Bouma; E. van der Kley; J. Kruizenga; J. Voorrips, all 2016). This is particularly, or even more so, the case for the Euroborg Offices. Ellen van der Kley (2016) emphasises that especially with regard to design these have not been optimally integrated in and with the stadium. In practical terms, the general lack of outside connection mentioned above is expressed by limited findability, internal and external signage, and the impression of being ‘hidden’ inside the building. At a micro level, there are issues of inconvenient measurements and daylight for the office spaces themselves. Meanwhile, this is also combined with relatively high rental rates (E. van der Kley; J. Kruizenga; J. Voorrips, all 2016). In more aesthetical terms, Ellen van der Kley also notes that the view to the football pitch is generally limited – so what could potentially form the binding element to the stadium, seemingly does not really come off. Furthermore, limited outward visibility and possibilities to express an own identity, combined with the perceptions of a somewhat ‘barren’ surrounding area, are considered problematic factors in this respect; which are expected not to be outweighed by the mere name of the stadium, and which for some actors may have posed some disappointment (H. Bouma; E. van der Kley; J. Voorrips, all 2016).

So, stakeholders seem to experience a certain lack of coherence and connection with the stadium, both visibly (design, connection with the pitch) and functionally (practical design issues, cooperation, joint activities, et cetera), while there is also limited coherence between the businesses and functions themselves. All in all, that leads to a feeling that there is not much going on, and not a very lively, thriving (economic) climate or atmosphere is created (H. Bouma, 2016; E. van der Kley, 2016). So, while the brand awareness, parking facilities and presence of some other businesses are noted as positive factors of the stadium, that means besides this the stadium location itself seems to not offer optimal added value for the economic functions; after a novelty element has somewhat died down, the mere fact of being in the football stadium poses limited extra value when there is no substantial sustainable or long-term coherence and connection with both the stadium and other economic functions (i.a. H. Bouma; E. van der Kley; J. Kruizenga, all 2016). The actors do see room for improvement

on this aspect though; particularly in the approach of both FC Groningen and the municipality. Recent recoveries from the economic downturn, and new developments starting to take place, are also expected to offer opportunities in this respect. However, to a certain degree it would also have to involve physical or architectural adjustments of the stadium building, which seems rather unlikely due to fragmented ownership, high costs and architectural standards that are defined – and would thus also be an aspect that should be or have been taken into account beforehand (H. Bouma, 2016; E. van der Kley, 2016).

Furthermore, also the integration of the residential function, in particular the two apartment towers adjacent to the stadium, still seems to leave something to be desired. This is perhaps not primarily related towards the ‘common’ issues such as safety and nuisance, which is mainly limited to littering, but mostly in more practical terms with regard to issues such as parking, traffic, accessibility and findability (H. Bouma; R. Doppenberg; E. van der Kley, all 2016). The fact the apartments are incorporated into the stadium complex ‘mound’, among other things means they are not situated facing a street, which makes it somewhat inconvenient especially for visitors; in terms of findability and accessibility for visitors, but also parking which is only allowed in the paid parking garage under the complex. Furthermore, at match days the traffic to and from the stadium makes the apartments hard to reach by both car and slow traffic, for visitors but also the residents themselves. All in all, this does not pose an ideal situation for a residential function (R. Doppenberg, 2016); and, also looking at the economic side, is a point to reconsider in future developments (J. Voorrips, 2016).

While this would implicate the importance of aligning and coordinating both functions, there seems to be rather little coordination and cooperation between the two, where the residents, similar to the businesses, feel they are not on even terms with the football club and activity. In fact, that FC Groningen has priority in the area, and they are considered less important. Regarding such issues, there is limited coordination and consultation, and residents generally feel unheard by both the municipality and the business platform (R. Doppenberg, 2016). All this, sometimes even gives the residents the impression that it is only troublesome, a nuisance that there are people living in the vicinity of the stadium, instead of an integral part of the area (Idem). Furthermore, also a more social element of the integration of both functions, as users of the same area, has not been established. As described earlier, the Euroborg does not really have a neighbourhood or community function within the area; and while that was not a goal beforehand, and is something that can probably not really be reproduced from the old location, that should probably not be regarded as a big shortfall or missed opportunity – and it seems is generally also not regarded as such (i.a. R. Doppenberg; A. Grootjans; M. Zomer, all 2016). Nevertheless, the issues described above indicate that there are some deficiencies, or areas of improvement with regard to the general alignment of the residential function, that affect the quality of life for inhabitants of the area, and in particular the apartments adjacent to the stadium.

So to conclude, there seem to be no optimal alignment or coordination between the various functions around the stadium. To a certain extent, the impression cannot be avoided that the combination with other functions, both economic and residential, has been more of an economic matter, than that it was really designed as an integrated and well-thought out concept. Both businesses and residents experience a certain priority position of the football club, and coming on second place themselves. And while on that level there may be room for improvement, which the stakeholders seem to acknowledge, to a certain extent this is also related to design and architecture. Nevertheless, this highlights the importance of the alignment of different functions. For residents, apart from social impacts such as binding and a community function, which may not always be fully reproduced from the old stadium, at least this brings a certain justification, mutual understanding and acceptance and a better

living environment and quality of life. For economic functions, it may simply be beneficial for the overall attractiveness and economic climate of the location, and with that area and economic development impact. Without proper coordination, the stadium will become a stand alone, not an integral part of the area; when there is too little binding with the surroundings and other users of the space, there will probably not be a long term impact, or fruitful situation for other developments or functions. Potential stadium impacts will then probably remain largely limited to the short term; in the beginning the stadium may have a ‘novelty’ effect, but that would fade away over the course of time when there is no binding, connection or at least coordination with other functions in the area. And although most users – residents, businesses and other functions – around the Euroborg in Groningen did and do not seem to consider actually leaving the location, they do state they would think twice if they would have to make the same decision again (H. Bouma, 2016; R. Doppenberg, 2016). The issues described above, combined with somewhat lacking developments of other functions and area design, play a role in this. For the Euroborg Offices this is slightly different, as these businesses are more footloose and concern more short term leases; as a consequence, terminations of lease can be observed here, and the spaces are not completely filled at the time of writing, and in fact for over longer period of time. And while this has also to do with the changing demands in the office market, and they may be somewhat ‘caught up by time’, the aforementioned factors do play a role here (E. van der Kley, 2016). From these experiences of the different stakeholders, it may be concluded that this coordination and alignment of functions is something that has not been properly and sufficiently addressed in Groningen. Finally, it shows that such issues may perhaps not always be reflected in (a lack of) visible impacts, as the developments have already taken place and the functions have been taken up, but – and this should also not be overestimated – that there has perhaps not been created an optimal economic climate, living environment and quality of life around the stadium.

As became clear in the analysis so far of the Groningen case, the municipality held and holds a central position in the stadium and area development process, both financial- and policy-wise, and thereby also the realisation of impacts. Overall, the various stakeholders also seem to agree that, although the extent to which may differ, there is an important role to be played for a municipality in such developments, particularly with regard to urban development goals (i.a. J. Kruizenga; W. Smink; B. Veenbrink; J. Voorrips, all 2016). As seen before there are also some critical voices, especially from the functions directly surrounding the stadium, particularly regarding the attitude and (lack of) acting of the municipality after the stadium development, which led to some disappointment among those actors. Looking at the development process beforehand though, the overall understanding is that the municipality acted rather well and sufficiently with regard to realising certain broader impacts for the city, and that they actively engaged in coupling the stadium with the area development, marketing the Europapark as an important development location and (initially) investing in base infrastructures. Despite that, the main point of critique here was the financial involvement of the municipality in the stadium development. As described earlier, opinions were divided on this issue; while most stakeholders seem to agree the municipality in return also had to stimulate the broader developments, some do not see any justification at all in this respect. Nevertheless, from this case study it may be concluded that the policy and involvement of the municipality has ensured at least a certain broader development impact; which, as also found, on the other hand turned out smaller than perhaps originally envisioned.

This brings us to another factor to discuss; what clearly came to the fore in the interviews with the various actors, is the influence of the economic downturn. Almost unanimously, and perhaps also not surprisingly, they state that the economic downturn has been a major factor

that limited the impact of the stadium. As funding a stadium development in general, and realising particularly area and economic development impacts, are largely also a financial matter, this strongly depends on market interest from funding or lending parties (investors, banks), developers and buyers c.q. tenants for particular functions, as well as financial resources from (local) governments. In Groningen, visible stumbling blocks in this respect included the banks deciding not to fund professional football clubs, the collapse of the office market shortly after the development, but also before that the sale of additional land went rather slowly, as developers eventually even moved their share back to the municipality, but also governmental resources such as for landscaping and area design. Relating back to the role of the municipality, and goals set beforehand, some observations can be made. While some stakeholders expect the economic downturn is the major or only factor here (i.a. W. Smink; B. Veenbrink; M. Zomer, all 2016), others argue that perhaps the impact expressed beforehand has also been somewhat overestimated, and that the actual ‘attractive force’ of a stadium is smaller than was expressed in the plans beforehand (i.a. H. Bouma; E. van der Kley; J. Voorrips, all 2016). And while frankly from a certain point of view that may also boil down to the same thing, there are a couple of critical notes made by some interviewees in this respect. Some argue that this can only be stated in hindsight, and that the issue of new insights is intrinsic to spatial planning (W. Smink; B. Veenbrink; J. Voorrips, all 2016). Others however, argue that the municipality may also have been a bit too strict and directing with its policies and demands (E. van der Kley; J. Voorrips, 2016). Despite the emergence of the economic downturn, perhaps for too long the municipality stuck too rigidly to certain predetermined plans, for example in terms of volume, locations and phasing of offices in the office park; and at the time the developers eventually even pulled out and returned the land to the municipality, the businesses were bound to certain contractors and developers (E. van der Kley, 2016). So, aside from the obvious impact of the economic downturn, in certain areas the municipality may perhaps have been a bit rigid, or ‘stubborn’, in terms of demands and requirements, also at times this was being caught up by a changing (economic) context/reality. So while the general understanding remains that there is an important coordinating role for the municipality, this also highlights the importance of looking closely at changing market conditions. In that respect, Ellen van der Kley (2016) even advocates for a more organic, flexible approach of area development; by mainly establishing a framework and guidelines for development, without establishing too many strict regulations. While that brings more uncertainty, that might be more efficient in adapting to quickly changing circumstances in the context of planning and area development. In recent years, development seems to be picked up again, of course now the economic tide seems to turn again, but also strict initial plans and requirements particularly aimed at an office park have been abandoned or broadened, also formally in the land use plan (‘bestemmingsplan’) for the area, for example making way for more residential functions (H. Bouma, 2016).

So, on the one hand this might indicate the stadium in itself did at least not have a decisive role in attracting other functions to the area; and, of course also affected by the economic downturn, the initial plan for the Europapark to be completed by 2015 has not been achieved. On the other hand though, others noted that this is both intrinsic to area development in general, and was also not realistically expected from the stadium alone (J. Dijkstra, 2013; W. Smink; B. Veenbrink; J. Voorrips, all 2016). In fact the architect envisioned already beforehand that the development of the whole Europapark would be a long term project, over the course of perhaps thirty years (Wiel Arets, in Venema & Schoenmaker, 2015). Within that, it was also never the understanding that the stadium would entirely and solely ‘fill up’ the area (J. Voorrips, 2016). In this respect, Willem Smink in fact states “I don’t think the situation is much worse, or less developed than what was expected – or what the real expectation was; because you always try to market it a bit more ambitious, to be more

appealing'. Notwithstanding the influence of the economic downturn, he thus argues in the end the tempo of development has not been that far off from what could realistically be expected. And in the end, looking at the municipal land exploitation as indicator for the development of the area, also a positive balance emerges (W. Smink; B. Veenbrink; J. Voorrips, all 2016). Nevertheless, it is the question to what extent such a construction, or in fact arranging a different one still able to realise the stadium, would still be possible in present times. Opinions of the various actors in Groningen regarding this question of whether a stadium development would still be viable under the current circumstances, are rather divided. Some interviewees do not see the changes in the practice of area or project development as ruling out a stadium development (to take place) per se (e.g. J. Kruizenga, 2016; B. Veenbrink, 2016), some are undecided while others think it might be difficult to pull such a project off the ground, in the current situation or the near future (e.g. Hans Nijland, in Venema & Schoenmaker, 2015). Based on this research alone, no conclusive answer can be given in this respect; it seems in any case, this is strongly dependent on the local context.

The case study has revealed a couple of other factors external to the project, that are more 'internal', or specific, to the local context. First of all, the location and size of the city of Groningen seemed to be factors of influence, particularly in terms of the local development market, or attracting market interest for additional developments. While on the one hand this may have been somewhat more difficult than for example a larger city or city in the Randstad area, on the other hand Groningen is the largest city of the northern Netherlands, and thus does pose the main location for development and 'growth' within the wider region (J. Dijkstra, 2013; J. Voorrips, 2016). Furthermore, the case showed that the political culture and colour of the municipality clearly influences the decision-making process, in terms of policy formation but also the level of involvement within such a development project. For example, the decision of the executive board and approval of the city council to provide a loan to the club, and thus becoming also financially involved and even owner of the stadium, in the end saved the stadium project (Willem Smink, in Venema & Schoenmaker, 2015). Related to this, is the overall budget of the municipality, which determines the (im)possibilities to provide financial support in the first place, but also the resources available for additional investments in issues such as infrastructures and public space. Furthermore, the overall urban development concept of a 'compact city' used by the municipality of Groningen contributed to the selection of a location close to the city core over more remotely situated locations, emphasising importance of existing municipal policies and integration in broader visions and policy objectives (J. Dijkstra, 2013; W. Smink, 2016). Following on the findings discussed earlier on, the element of location was to a certain extent also an external factor; most obviously its availability. As discussed the choice of location should not be viewed too scientifically, and was simply also a matter of which locations were available within the context of the city at the time the project started to emerge (B. Veenbrink, 2016). Within the selected best option (i.e. the Europapark), the characteristics of this location then in a way also posed an external context element. On the one hand, its location close to the city, well accessible through already existing infrastructures, and relatively large empty space posed positive elements for the overall attractiveness of the area as a development location; while on the other hand its relative spatial isolation, emphasised through landscape and infrastructural features, created certain mental and physical 'barriers' for the area, something which has only slowly and partly been improved upon, and thus limiting the integration within the broader urban structure (i.a. J. Dijkstra, 2013; A. Grootjans; W. Smink; B. Veenbrink, all 2016). Furthermore, the lack of a present residential function, and surrounding neighbourhoods mostly focused on themselves, meant that no real neighbourhood function has been (re)produced (R. Doppenberg; A. Grootjans; M. Zomer, all 2016). Finally, the fact that the

location was predominantly empty beforehand, meant that on the one hand there was more space for additional developments and functions (and creating a ‘value leap’), but on the other hand that when development falls short, this poses a risk of a somewhat ‘uncompleted’, or less dense area.

A final element that came to the fore, of course inseparable from a football stadium development, is the football club. First of all, the size and character of the club and its fan base, posed important factors in the development process and eventual impact of the stadium. FC Groningen is one of the few professional clubs in the northern Netherlands, and largest (and currently only) in the province, that various actors describe as a ‘people’s club’, deeply rooted within this hinterland and with a strong binding with its fan base, both in the old stadium neighbourhood and in the whole region (i.a. A. Grootjans; W. Smink; B. Veenbrink; M. Zomer, all 2016). In the development process, this then provided the input or justification for the increased capacity of the new stadium – which seems to be confirmed by the observed average attendances (Venema & Schoenmaker, 2015; Voetbal International, 2016). In general, the situation of and around the old stadium also seemed an important aspect. Apart from the club’s wishes to expand its capacity and facilities, particularly in the final years of the old stadium parking issues and increasing supporters problems and incidents more and more posed a burden for the neighbourhood. It can be argued that this also contributed to the urgency attached to the new stadium project in the decision-making process (Venema & Schoenmaker, 2015; J. Kruizenga; W. Smink; B. Veenbrink; J. Voorrips, all 2016). These issues were however not so much regarded as a structural problem of the club’s supporters; therefore it was not so much a consideration in the choice of location, but was a factor taken into account in designing the stadium and its surrounding area – which seems to have had its effect given the absence of incidents (Venema & Schoenmaker, 2015; R. Doppenberg; W. Smink; B. Veenbrink, all 2016). On the other hand, the strong neighbourhood connection of the old stadium for the Oosterparkbuurt and its residents, could not be reproduced with the new stadium (and thus in fact declined); this was also something that particularly initially was something that had to be taken into account in deciding and justifying the relocation of the stadium (i.a. J. Dijkstra, 2013). Looking at the impact of the new stadium, as described earlier, the attractive force for people and businesses, and particularly the social impact, it seems is actually to a considerable extent related to the football club. The role of the football club, then, is strongly influenced by the overall ‘mood’ around the club. Overall, it seems the new stadium has positively affected this, solving the problems on the old location, simply improving the accommodation of the club, and in that capacity, also indirectly the performance level of the club. The stadium has structurally increased the budget of FC Groningen, and there is a generally understood relation between the budget and performance level on the field – something which seems to be confirmed by the league results since the new stadium (i.a. Voetbal International, 2016; J. Kruizenga; B. Veenbrink; J. Voorrips, all 2016). Nevertheless, the intrinsically uncertain element of the football activity thus always plays a role in this respect.

## **6. Conclusions & Reflections**

The goal of this research was to investigate the impact of football stadia in the Netherlands on – broadly defined – urban development, and what then the influences and interrelations are of or between the local context, the realisation processes, location and again the eventual impact of such amenities in a city, for recently developed stadia, but with a perspective towards the future. Based on existing literature, on urban development, planning and decision-making processes and concepts in general and cultural amenities and sports stadia impact more in particular, a framework was constructed to tackle this. To apply this to the Dutch practice, a method of analysis consisting of two main elements was chosen: a quantitative data analysis and a qualitative case study. The former looked into various indicators in neighbourhood data for all Dutch stadia (meeting certain thresholds) combined, seeking for potential similarities and common outcomes among stadia overall, i.e. whether an overall picture emerges for football stadium areas in the Netherlands – with variations in ‘stadium area’ definitions in terms of both distance and time of development. This analysis was therefore mainly concerned with the impact side of the research question. The case study then provided a more in-depth analysis of one particular, recent stadium development case (Euroborg, Groningen), that besides the impact element also provided insight into the underlying reasons, and realisation and development processes. The results of both analyses will be summarised here, linking back to the research problem and goal of this research, to answer the research questions defined at the beginning of this thesis; as well as the notions and concepts from the theoretical framework, to reflect upon those and interpret the results from this study also in that light.

### **6.1 Stadium impact**

#### *6.1.1 Stadium impacts*

Starting with the impact element, results from the quantitative and qualitative analysis are combined here, to draw a picture of stadium impact in the Netherlands as found by this research. As a first step in the analysis, the descriptive statistics and non-year-specific regression models indicated that stadium areas (i.e. ‘buurten’, neighbourhoods around football stadia) in the Netherlands overall are rather different from non-stadium areas, on a number of aspects. These stadium areas turn out to be relatively urban areas, although not unanimously reflected in all indicators, but seem to be generally underperforming in both economic and social terms. This urban character is reflected by aspects such as urban land use, amenity level scores, housing stock and address densities; but only not so much in terms of population. The distance element in Model I then added that the former two are more concentrated around the stadia, while densities tend to be somewhat lower in close proximity to the stadia; which does not seem particularly unexpected. Nevertheless, the overall picture remains that ‘urbanity’ indicators in stadium impact areas in fact somewhat decline moving further away from the stadium. In economic terms, while the descriptives highlight a higher amount of business activity accommodated in these areas, Model I only finds this for business vehicles, and business establishments turn out even relatively low. This somewhat contrasts the idea of stadia in ‘business-heavy’ areas, and a conclusive reason cannot be given based on the data alone; possible explanations might be related to the different definitions of ‘stadium area’ observations in both models, and perhaps also related to types of businesses. For both analyses, outcomes on property values, quality of public space, income and employment variables clearly sketch a generally underperforming character of stadium areas. Finally, this seems to be reflected as well in more socio-cultural terms, as overall stadium areas seem to

underperform on the Leefbaarometer liveability scores compared to non-stadium areas; visible in the overall scores, and particularly also reflected in the safety and security indicator. So concludingly, both analyses provided an overall image for stadium areas in the Netherlands, but did not yet say a lot about the actual stadium impact. Most notably, they do not yet incorporate a pre-post element. Nevertheless, they do pose an interesting outcome, indicating that seemingly the areas where stadiums are generally located in are substantially different from non-stadium areas in many respects; regardless of whether or not the stadia were deliberately placed there, and/or influenced by the stadium since. The latter, was then further investigated with Model II, and also in the subsequent case study.

In the following sections, the conclusions of this research regarding stadium impact will be presented. Per dimension, subsequently the results from the quantitative neighbourhood data analysis (Model II) and the qualitative case study will be briefly summarised, after which these are brought together in overall conclusions, also linking back to the research goals and questions and theoretical notions regarding impact. These conclusions are summarised in table 6.1.

Starting with the area development dimension, in the quantitative analysis mixed results were found. Firstly, data on urban land use and address density in the base model both clearly underline the earlier finding of stadium areas as generally urban areas, post-development compared to both pre-development and non-stadium areas. And while this might suggest a certain impact, such results were not reproduced for the model variations, contradicting the suggestion of an impact on those indicators when looking into recently developed stadia or a short-term impact period. An explanation may lie in the definition of the post-development group; as the base model incorporates all stadia, the post-development stadium areas consist also of ‘buurten’ around older stadia, generally understood to be located in somewhat more urban areas, and for which only post-development observations occur. The model variations only include more recent stadia, which a.o. means that compared to the base model the post-development ‘buurten’ consist of relatively many observations affected by the recent economic downturn; possibly also contributing to the difference between the models in the differences observed between pre and post. Nevertheless, making a more proper pre-post analysis by looking at a more even distribution of pre and post development ‘stadionbuurt’ observations with the model variations, overall these stadia do not seem to have caused a substantial impact. Specific reasons for that may of course differ per individual case. Rather comparable outcomes were produced for the housing stock indicators, both quantitative and qualitative; whereas the base model indicates a relatively high score for post-development stadium areas, these results are not maintained looking into the model variations. Looking at the Leefbaarometer indicator on public space, in general the stadium areas clearly seem to be underperforming. However, after stadium development these areas appear to score better compared to pre-development; therefore, results indicate a potentially positive stadium impact on the quality of public space. This seems particularly the case for recent stadium developments, where post-development, and somewhat concentrated in areas closer to the stadium location, scores are even similar to non-stadium areas. On the short term such a positive impact can be observed as well, although a smaller increase suggests this effect is not yet optimised after five years. Finally, stadium areas score relatively high in terms of the amenity level; particularly when including all stadia, and somewhat toned down for the model variations. Again, this might be influenced by the inclusion or exclusion of older stadia – generally understood to be in somewhat more urban areas, closer to the city core – in the base model and model variations respectively. Nevertheless, from these data it can be concluded that the stadium developments may have caused, or in any case coincided with, an increase in the amenity level in the surrounding areas. A reason for this could be the development of

additional functions in and around the stadia, but looking at the scale of the outcomes it might also be partly due to a broader development in general. It should be noted, that for both the public space and amenity level scores the explanatory power of the model was rather limited, so these conclusions should be regarded with some reservation.

Looking more in-depth at the specific case of Groningen, the case study revealed a slightly more positive area development impact. This is particularly to the Europapark development, the area the stadium was explicitly coupled with already from the early stages. Overall, clearly a development of this previously vacated industrial area can be observed, since the development of the stadium. First of all, a couple of additional functions have been realised together and directly coupled with the stadium; this is something that was both desirable, policy-wise related to the area development, and necessary, for the financial construction of the stadium. In that way, in and around the stadium complex, a supermarket, cinema, restaurant, casino, fitness centre, school, hospitality spaces, offices, and two apartment towers have been realised. For some of those the stadium had a direct influence in terms of brand awareness, emphasising expectations for the Europapark and its crowd-pulling character, while for others the location, Europapark plans, infrastructures or simply the development opportunity were more important factors. Outside of the stadium complex, it seems the impact of the stadium is rather limited, and mostly indirect. Overall, the area development has turned out more limited than originally envisioned, although that should not all be ascribed to (a lack of) stadium impact. For some functions that established in the area, the stadium posed an additional location factor, particularly in the earlier stages. For some office establishments, this may be seen in the brand awareness, 'symbolic' value, the presence of some other functions (directly attracted by the stadium), indication of commitment of the municipality, and (prospect of) good infrastructures. Furthermore, the stadium contributed to the viability of the new train station. However, for most functions the most important factor should be seen in the general locational characteristics; something that is rather strikingly summarised by the marketing for the 'Kantorenpark Euroborg', carrying the slogan 'Location Location Location'. Perhaps the most evident impact, may be found in the infrastructural improvements; due to the stadium, it seems more or at least earlier on specific attention has been given to base infrastructures: accessibility of and in the area, road networks, parking, public transport, et cetera. An urban function in itself, but this in turn then also posed a location factor for further development of urban functions. Moving to the next indicator, it seems this heightened attention has been mostly limited to the practical aspects; although the quality of the public space has improved compared to before, this is generally experienced as something that has been and is lacking. The envisioned 'high quality' public area has not entirely been realised, and in turn the area has often been experienced as rather 'barren'; e.g. due to lacking landscaping and area design, public green, lighting, some slow traffic infrastructure and bicycle parking, et cetera. And although this has of course also a strong financial component, and seems to be picked up again with the recent issues of land, it does show that the impact of the stadium has remained mostly limited to the necessary or practical element of infrastructural improvements. So, although more limited than originally intended, undeniably a certain area development has been realised in Groningen, in which the stadium – directly or indirectly – played a role. Really a thematised district, however, has not emerged with this. It does seem the area has become a more urban, recognisable and recognised district within the city; in that respect, the stadium has put the area more on the map, as to a certain extent it has long been and perhaps still is seen by many people as the place where the football stadium is located. Furthermore, it simply draws large numbers of people, and also attracted some other developments to the area. However, its impact should not be overestimated; location relative to the city centre is also a crucial factor, and as the stadium only attracts such large quantities bi-weekly, other functions also play a part in this respect.

Nevertheless, the stadium and area attract predominantly destination traffic, and the emergence of a vibrant 'visitors area' is further hindered by lacking further developments in and of the area. Finally, the Groningen case emphasised that the old location should also be taken into account looking into area development. Despite a slow start fairly recently the developments on the old stadium site seem to move towards a successful redevelopment, and while this cannot be directly credited to the new stadium project, in terms of stadium impact and in time, it can inextricably be considered an impact as a result of the move to a new stadium.

Looking at the findings from both analyses, the outcomes on the impact of stadia on area development are somewhat ambiguous. The most obvious indicators for this dimension, increases of urban land use and functions, are not substantially reflected in an overall sense when looking into all the recent stadium developments in the Netherlands. The means, this is not an effect that is evident (in neighbourhood statistics) for recently developed Dutch stadia in general. The Groningen case study, however, shows that a certain area development impact can be realised. Such an impact, i.e. the attraction of other urban functions, seems most notable in the earlier stages, and either in direct combination through the financial construction of the stadium, or more indirectly as a location factor in terms of brand awareness, visitor streams, as implication of further developments to come, infrastructural improvements and the directly attracted other functions. Although somewhat weakly, such an impact does seem to be reflected by the amenity level scores around all the recent stadium developments. However, at the same time the case study also shows the actual stadium impact is rather limited; although the strong connection between stadium and area development, also policy-wise, seems to have contributed, and the stadium appears to have had some indirect effects, general locational characteristics remain crucial factors in terms of 'attracting' other urban functions. Perhaps the most evident, clear-cut stadium impact, may be found in the improvements in base infrastructures due to the stadium – among others, internal and external road accessibility, parking, contributing to the viability of a train station, and other base infrastructures. Such increased attention for public matters, associated with a stadium development, to a certain extent also seems to be reflected in the quality of public spaces around stadia. As the quantitative analysis showed, although generally underperforming compared to non-stadium areas, post-development stadium areas score significantly better on the quality of public space than pre-development stadium areas. This is particularly evident for recent stadiums, and also somewhat concentrated around the venues. However, the case study paints a somewhat more nuanced picture. While it can be argued that also in Groningen the public space has overall improved since the stadium development, on the other hand this aspect is also considered as a clear lacking element of the stadium and/or area development; in terms of both aesthetical and practical area design, and in the direct surroundings as well as the wider area. However, there seems to be a strong relation to the general economic climate, and related to that the issue of land and resources of (public) actors. But as the quantitative analysis also showed, such an effect is generally not yet optimised on the short-term. Nevertheless, it seems that the direct stadium impact is mainly limited to a practical, or necessary aspect (i.e. infrastructure). Regarding the third indicator, district formation, no conclusive evidence has been found with this research. As the Groningen case illustrates, a stadium might contribute to the emergence of a more recognisable, and recognised city district, particularly through the brand awareness and influx of visitors it provides; although the latter remains largely limited to destination traffic. Nevertheless, the formation of a clear new city quarter, or in fact a thematised district, is also strongly related to other functions attracted to, or establishing in the area. Finally, the case study also revealed that in fact an important impact of a new stadium development in terms of area development for a city, is formed by the redevelopment on the vacated old location. As in the Groningen case, this

poses the opportunity for example for residential developments, on often good locations within the city. And although not directly related to the new stadium project, in terms of stadium impact or in time, it can inextricably be considered an impact resulting from the move to a new stadium.

Secondly, the economic effects. To start with, the quantitative analysis did not show a clear stadium impact in economic terms, and in some instances even a somewhat negative effect. The models on business activity, as the first important indicator, did not provide unanimous results. Looking at business establishments, when including all stadia in pre-development stadium areas this number was relatively high, while post-development stadium areas appeared generally underperforming. A possible explanation, but more an educated guess, might again be that this model includes older stadia as well, generally located in more urban – and often residential – areas, while pre-development includes only observations for more recent stadia, generally more placed on business or industrial locations. In the more balanced model variations, these results are somewhat flattened out, particularly for recent stadia. In this model, it even appears that in the immediate vicinity of the stadia, within 500 metres, a slightly positive impact on business establishments can be observed. Nevertheless, outside of that both model variations do not suggest a positive impact, and if anything a slightly negative development. The economic downturn might pose an uneven influence in these outcomes, but that would not explain the stronger negative outcomes in the base model. Interestingly, the outcomes on business vehicles are not entirely similar. While for the base model in post-development stadium areas this is relatively high, this is somewhat reversed looking into recent stadia; a short-term impact period does not show any significant differences. Generally lower numbers only for post-development, might suggest a decline in business vehicle densities in areas around recently developed stadia. A viable explanation for these contrasting outcomes, compared to the base model and to business establishments, cannot be derived from the data alone. It could be something related to types of businesses, for example that businesses around recently developed stadia would be more service-oriented, and less transport-heavy businesses; however this is more based on guessing and cannot be so boldly stated from only these data. Perhaps a more viable explanation might again be the economic downturn, especially affecting the model variations. Anyhow, these indicators do not suggest a clear impact on business activity of stadia on their surroundings, and if anything, but probably also prompted by the economic climate, a slightly negative development rather than positive. Finally, for property values the outcomes turned out rather clear, indicating underperforming areas, and potentially a negative stadium impact. Such outcomes are clearly visible in all models and even until the largest impact zone, although no clear distance pattern can be observed. These differences are even somewhat stronger when only looking at recent stadia, and a short-term impact; this might imply that such negative effects in fact somewhat even out over time. On the other hand, the aforementioned economic downturn is probably also a factor of influence, that could explain the overall negative outcomes and in particular those even stronger differences in the model variations. Nevertheless, the results are of such an evident nature, that it is the question whether this accounts for the entire magnitudes of outcomes; i.e. it seems likely these would still indicate a certain negative impact of the stadia on property values – something the new generation of stadia seemingly have not been able to improve upon. However a proper analysis of individual properties, incorporating correcting elements for factors such as the economic crisis, would have to confirm this.

These findings have been somewhat nuanced by the case study. As found earlier, a couple of business establishments have been directly attracted by the stadium development in Groningen, particularly in the stadium complex. And while the reasons for the individual businesses differ and were partly practical, and also related to general locational

characteristics, for some the stadium posed an additional factor; mainly found in aspects such as its brand awareness, crowd-pulling capacity and reflecting a general implication or belief in the Europapark development. In any case, these have been directly included in the (financial) construction of the stadium. For the occupancies of the in-building offices, as well as the hospitality facilities hosting non-fixed economic activities, it seems to a certain extent the stadium also posed a certain positive factor, in particular representing a certain branding, publicity and 'symbolic' value, but this was particularly evident in the first years, and somewhat flattened out over time. Outside of this, the overall understanding was that the stadium impact is rather limited; the stadium has been deployed as a marketing tool, and for a few businesses their office establishments were indirectly influenced by the presence of the stadium; however, as even the slogan for the office park Euroborg strikingly summarises, the main factor for businesses remains 'location location location'. However, this does not take away from the fact that the overall economic development of the area has been more limited than envisioned; and although unarguably this could not all be ascribed to (a lack of) stadium impact, the fact remains the economic impact of the stadium seems rather confined. A couple of external but also internal factors of influence were identified in this respect. Most notably, the economic downturn, and in particular also the collapse of the office market, has led to cuts in resources and market interest, and thus moderate development of other economic functions. Furthermore, it turned out in practice the 'magnet' function of the stadium is more limited than expected, attracting mainly destination traffic, while to its attractiveness for businesses there also seems to be a certain temporal 'novelty' element. Some internal factors include somewhat strict municipal conditions regarding additional office developments, suboptimal aesthetical and practical design of and around establishments in the stadium complex, a general lack of coordination and alignment between functions and the stadium, little joint activities, or in fact other events outside the football activity. All together, this does not ensure an optimised, thriving economic or business climate. Overall, it seems the stadium impact has been mostly concentrated in the first years; aside from the businesses directly included in its financial construction, according to stakeholders its attractive force on other businesses was most evident at the early stages, when the novelty, branding, appearance and symbolic value of the football stadium posed interesting elements. Over time it seems these aspects have somewhat flattened out, leaving the location, accessibility, infrastructure and other facilities as the main locational factors. The stadium was and should in any case not be expected to 'fill' an entire area; however, a couple of factors came to the fore that have prevented the most optimal stadium impact, c.q. environment for business activity. Secondly, a very important economic justification of the stadium in Groningen was the realisation of additional employment. As found in the case study, the stadium has ensured some structural employment, directly through expansion or 'professionalisation' of the football club. Apart from that, employment effects are mostly related to the previously discussed attraction of other economic activity, directly or indirectly. In that respect, the main issue is to what extent employment can be ascribed to the stadium, and poses a 'net effect' for the city as a whole. This is difficult to determine exactly, and opinions among stakeholders also seemed to be divided. Overall, it might be argued the stadium has had a certain, mostly indirect impact on economic activity, and thus employment, in the Europapark; however, to a certain extent this poses only a redistribution within the city (region), and in part would probably have been realised somewhere in the city regardless of the stadium. Finally, to the degree this can be assessed, it seems also for property values the Groningen case shows slightly more positive results than the quantitative analysis. Looking at the average property values, a clear increase can be observed, both over time and relative to the city as a whole; taking this as an indicator, that indicates at least a general development of the area. As found earlier, and acknowledged by different stakeholders, the stadium might have indirectly contributed to this, although main

factors contributing to the 'value' of the area include location, infrastructure and accessibility and other functions. However, as many real estate in the area have been newly developed, this does not necessarily mean an increase of all individual property values as such, or at least does not show to what extent – also when compared to a general trend or situation without a stadium (and thus also what the actual stadium impact might be). Overall, actors do not seem to experience a strong effect on individual property values, positively nor negatively; although close to the stadium inconveniences may weigh somewhat stronger than further away, where the potentially positive elements may be more prevailing. Adding to this distance element, stakeholders generally limit this to the Europapark area. Finally, it can however be argued that compared to an optimal situation for the different functions, property values in the Europapark are generally considered to be somewhat lower; that means, the location around the stadium does not make property values by definition higher than on another location.

Assessing the potential economic impact of football stadia, as measured by the main indicators of business activity, employment and property values, the analyses in this research provided some mixed results. Looking into multiple stadia combined, the analysis of the surrounding neighbourhoods suggested a slightly negative rather than positive impact on business establishments, something that is not reflected in the case study. However, when looking only into recent stadia, in their direct vicinity overall a slightly positive impact can be observed. Such an impact is then confirmed by the Groningen case, where the stadium has at least coincided with an increase in business activity, particularly within a certain area around the stadium; that to a limited but certain extent can be ascribed to the stadium development, some in direct conjunction with the stadium project, some more indirectly. When looking at business vehicles, the overall image emerging for all stadia does suggest a higher level of business activity, although around recent stadia even a negative effect can be observed in this respect. While this cannot be explained by the data alone, and such results are not particularly validated in the Groningen case study, the businesses around this stadium in fact do seem relatively little dependent on vehicle use. The case study further suggests a stadium might have a certain indirect impact on less- or non-fixed business activities, but particularly on the short-term. Finally, the case revealed some internal and external factors potentially hindering the realisation of an optimal economic climate; most notably the economic climate, potential to overestimate the 'magnet' function for visitors (predominantly destination traffic) and businesses (partly temporal effect), municipal conditions regarding additional developments, aesthetical and practical design of business spaces in the stadium complex, the coordination and alignment between the different functions, and limiting (joint) activities and events taking place. In terms of employment, as the case of Groningen highlighted, the most concrete impact could be found in some FTEs directly related to (the expansion of) the club; further effects are related to the attraction of further economic activity, as described above. And while to a certain extent this may pose only a redistribution within the city, or would have been realised regardless of the stadium, and in fact opinions are somewhat divided on the issue, the overall understanding is that the stadium has brought along some extra employment. While the exact extent of this is difficult to determine, it is undoubtedly less than originally intended; however this was and should not all be ascribed to the stadium, and the economic downturn played a major part here. Nevertheless, it was also one of the main arguments put forward around the decision for the municipal loan construction for the stadium, perhaps raising some issues regarding this element of justification. Finally, both analyses seem to yield little evidence on a positive impact on property values. Looking into the neighbourhood statistics for all stadia, as well as (and even more so) only recent stadiums, results in fact show a negative development comparing pre- and post-development, possibly suggesting a negative impact of the stadia on property values. But, as discussed, for post-development observations affected by the economic downturn are relatively overrepresented, compared to pre-

development. This could be an explanation for the results acquired in this analysis. Nevertheless, the evidently large magnitude of the differences observed still gives the impression that there might in fact be a certain – negative – influence of the stadia at play. Turning to the case study, this conclusion c.q. presumption is however not so much reproduced or confirmed. Overall, the average land and property values in the Europapark area have clearly increased over time, already before but also since the stadium development. This indicates at least a general development of the area; and as found earlier to a certain extent the stadium might have indirectly contributed to this, or in the least place, had a place within this. Nevertheless, as also discussed, this does not necessarily mean an increase of all individual property values as such, or the development compared to a general trend or situation without a stadium. And although stakeholders do not seem to experience a large influence in that respect, positively nor negatively, there seems to be a certain distance element, in that properties closest to the stadium are more affected by its possible inconveniences, while for the properties farther away within the area positive elements seem to be more evident. Outside of the Europapark area, though, actors in any case do not expect a substantial influence of the stadium. Furthermore, results suggest the location around the stadium seems suboptimal for most functions, and thus does not make property values by definition higher than on another location. Contrasting some earlier research on this matter, this study does not find a very broad evidence base for an impact of Dutch stadia on property values. What does seem to be in line with earlier findings, looking at the Groningen case, is that a possible – indirect – impact of the stadium lies within a certain, rather concise impact area, and that within this, close to the stadium the effect might be more negative, then increases moving farther away, and then decreases to zero again – thereby defining the impact zone.

The third and last dimension, concerns the socio-cultural function of a stadium. In the quantitative analysis, this was assessed based on Leefbaarometer scores. While the overall scores emphasised the generally underperforming character of Dutch stadium areas, all models in fact show that post-development stadium areas overall score somewhat higher than pre-development observations. Although not evenly clearly reflected in all definitions, this might implicate a certain stadium impact on overall liveability in the surrounding areas; and while it remains the question to which extent this can be ascribed to the stadia, in any case it shows that both all and only recently developed stadiums seem to have come along with a positive development in liveability scores, and already visible on the short-term. Secondly, the subscores on social cohesion also implicates a certain stadium impact; overall scores for post-development stadium areas compared to pre-development turn out relatively high, most evident for the recent stadiums, while the short-term model lies in between. So while this might suggest a certain social and ‘binding’ function or impact of the stadia, somewhat ambiguous outcomes related to the distance element, combined with (informed) reasoning, it is the question to what extent this outcome can actually be ascribed to the stadium, or might also be related to other characteristics or developments, which cannot conclusively determined from the data alone. Finally, as Model I also showed, stadium areas score relatively low on safety and security. What became evident in Model II, is that this is only the case for post-stadium development; that might suggest in fact a negative stadium impact, corresponding to the understanding of stadia, particularly football matches and supporters, that cause nuisances and problems for their surrounding areas. Interestingly, when looking at all stadia this difference can be found for the entire impact zone, while for the recent stadiums this is concentrated only directly around the venues (i.e. areas within 500 metres), and farther away such an effect cannot be observed. A possible explanation could be found in the different inclusion of stadia in both models; only the base model also includes older stadia,

that are understood to be generally located in somewhat denser urban areas. As discussed earlier on, these are more often associated with problems and nuisances in their surrounding neighbourhoods; in fact, for many recently developed stadiums this was one of the main factors in both leaving the old location and selecting and designing the new. The outcomes found here may indicate that overall stadiums do seem to have a certain adverse effect on safety and security, but that for older stadia these issues cause negative safety scores spread over a larger area, while for recent stadiums attention for this e.g. in terms of locational choice and design ensures this remains restricted to a smaller zone. Finally, on the short-term the model does not produce significant results; while this stadium 'impact' is expected to be related to the football activity, this would suggest it only becomes apparent over a longer period of time. A sound explanation for this cannot be distilled from the data.

Analysing the Groningen case, the first important indicator concerns the entertainment function. Simply looking at the number of visitors the new stadium attracts, the average match attendances clearly show an increase compared to the old stadium; on average, taking the last and first ten years of both venues respectively, the Euroborg attracts 9.500 spectators more per match, which means 162.700 additional visits over the course of a league season. Furthermore, the various stakeholders also acknowledge that this comprises a wider audience, a broader reflection of the city's population. All in all, this clearly shows an increased entertainment function of the stadium for the city. The actors do note that this remains mostly limited to the football matches; the stadium hosts little other – small or large – public events. Secondly, looking into quality of life, this rather broad notions has two main components; the area as a 'pleasant' place to visit, and live. Regarding the first, it can be concluded the stadium area has become more a place to visit within the city, compared to before the development. The stadium of course provides an influx of people, but also the other functions that are realised in the area. On the other hand, the Europapark has, unlike the original plans, not become a place to visit, reside or pass by as such; it predominantly attracts 'destination traffic', people only going there for a specific purpose. And while this is simply also a consequence of behavioural patterns of people, factors contributing to this include mental and physical barriers, as described a somewhat lacking development of the area, also with rather limited crowd-pulling functions, while outside of the football the stadium hosts little other activities or events, and also the lacking quality of public space and slow traffic infrastructures (of course, this cannot all be ascribed to the stadium though). As a place to live then, the Europapark has been and particularly recently is increasingly becoming an area with a residential function. However, apart from the two apartment towers the role of the stadium seems limited in this respect. In general, the stadium might have indirectly contributed to the living environment though, as found earlier, particularly in terms of other functions and infrastructures. Nevertheless, there seem to be some lacking, or even negative elements as well; for example, the public space is generally experienced as lacking, while there seems to be no clear neighbourhood function either (although not particularly missed; see also below). Furthermore, a few aspects more directly related to the stadium came to the fore, and as a consequence, are felt particularly by residents closer to the stadium. The football activity does cause some nuisance, or inconveniences, in the direct surroundings. This is not so much experienced in the commonly understood terms of safety or security, but mainly related to issues of littering and bustle around matches, accessibility and parking problems on these moments, but also impractical design and findability issues, also regarding (bicycle) parking, particularly inconvenient for visitors. Furthermore, also post-construction residents seem to experience a lack of alignment, coordination and cooperation between the different functions. So, while this should not be overestimated, it seems a couple of inconveniences make that the stadium does not foster the quality of life in close proximity to the stadium, where it has rather a negative than a positive effect. Such limited attention both during and after the

development gives the impression that the combination with the residential function (i.e. apartment towers adjacent to the stadium) was primarily a financial matter, rather than to create an optimal living environment. Finally, despite the neighbourhood function of the old stadium, as it was causing nuisance and problems for area the relocation to the new stadium has also improved the overall liveability in that part of the city. On the third indicator, the neighbourhood function, as already shortly mentioned the Groningen case does not show a clear impact. The stadium does not so much function as community centre, meeting place for residents or place for neighbourhood activities or events. Such a social function as meeting place or through hosting projects, is mostly related to the football club, and more on the level of the city (region) as a whole. In fact, looking at the previous situation, a certain community function within the city might even have declined; the old stadium did have a specific neighbourhood function for the Oosterparkbuurt in which it was located. Of course, it is the question to what extent something like this can be reproduced on a new (and also less residential) location, and as it seems, this was neither a specific goal nor is it experienced as a major deficiency. In line with these findings, it seems that the stadium also has a certain function in terms of identification, binding and pride, indeed not so much on the neighbourhood level, but for the city as a whole. Again, this is primarily related to the football club though; opinions the actual role of the stadium are somewhat divided. While some see a certain 'iconic' function of the stadium in itself, others see it merely as the place accommodating the football club. Overall the understanding seems to be that in architectural terms the stadium does not stand out that much to be a real symbol or icon on its own, although it is considered as something of a landmark for both the area and city. Further and most impacts of the stadium, are then related to the football club. For football supporters it possesses functional architectural quality and a symbolic value, while in general it offers a better spectator experience to a larger group of people. Furthermore, as the new stadium structurally improved the financial situation of the club, and this strongly correlates with a club's performance levels, the stadium indirectly also contributed to the level of football on the pitch. Together with solving the problems on the old location, this has radically improved the image, and thereby social function of the club within the city. The last indicator, concerned such an image or symbolic function more outwardly. Overall, the understanding in the Groningen case is that the stadium does have a certain showcase function, a 'sign board' or 'visiting card' for the area and city. And while again this appears to be strongly related to the club, the stadium does seem to have a certain role, in any case as a certain 'iconic' building, or development project. More concretely, the Euroborg has been strongly coupled with the Europapark area development, not only in names but also policy-wise by the municipality. In that respect, to the outside it provided some brand awareness and posed a sign of intent regarding the Europapark development. Specifically, the stadium has also been actively deployed in the branding of office spaces, i.e. the 'Euroborg Offices' and 'Kantorenpark Euroborg'. The success of both can be debated though, and thus also the eventual impact of the stadium, however as discussed the economic downturn also played a major part here. On a city-wide level, finally, it seems the stadium has not really been used for city marketing purposes; this should thus mainly be seen as limited to 'passive' city marketing rather than something actively pursued.

Reflecting on the findings of both analyses on socio-cultural effects, this research does not provide similar evidence for all elements of impact, in the Dutch context. The most basic soci(et)al function of stadia, their entertainment function, did come forward as an important aspect in the case study; in Groningen, the new stadium provides entertainment for a considerably larger group of people, that also seem to consist of a broader reflection of the population of the city (region). A further socio-cultural function within the city, in terms of quality of life, a specific neighbourhood function, or contributing to identification, binding

and pride among the population, can be observed but to a somewhat more limited extent. The neighbourhood statistics suggested a positive development of overall liveability (scores) in stadium areas, comparing pre- and post-development. Such an overall development could also be observed in the Groningen case; however, making a distinction between the area as place to visit and place to live, the case study also uncovered some limitations in this respect. First of all, it is clear that with the area development in which the stadium was incorporated, the area has in fact become (increasingly) an area to both visit and live. Particularly in the former, the stadium has had a certain role, being a crowd-pulling amenity itself, as well as directly or indirectly attracting a couple of other functions. And while aside from the apartment towers the residential functions seem not related to the stadium, it could be argued the overall living environment has somewhat improved by the impact of the stadium on area development, as described earlier (e.g. other functions, infrastructures). On the other hand though, it appears the attraction of visitors remains mostly limited to destination traffic; for a couple of reasons, and not all related to the stadium, the area is mainly used by people making targeted visits, and has not so much become a place to reside or visit as such. Also in terms of a living environment, a couple of factors seem to hinder an optimal situation. Some of those may in fact be more directly related to the stadium though, which seems to cause a certain distance effect in this respect (i.e. concentration around the stadium). Going back to the neighbourhood statistics, these also suggested a possible negative impact of stadia on safety and security scores; and while for stadia overall this encompassed the entire impact zone, for recent stadia this remained limited to areas in the direct vicinity; implicating that for recent stadia, perhaps more attention in terms of location and design would have been given to such issues. Surprisingly, no differences occur on the short-term. The case study, seems to confirm at least this rather concentrated pattern of such negative externalities. In Groningen this is not so much experienced in safety terms though, but the football activity does seem to cause some nuisances or inconveniences in the direct surroundings. Overall, a lack of attention for the alignment of the different functions, both in terms of practical and functional design and post-development coordination and cooperation, does not seem to ensure an optimal living environment in the direct vicinity of the stadium. The neighbourhood statistics did seem to indicate a certain positive development in social cohesion in Dutch stadium areas, most evidently around recent stadia; however, a direct relation with the stadia appeared somewhat questionable. The subsequent case study of Groningen, did also not illustrate a specific neighbourhood function of the new stadium. In fact, this particular case shows this could even somewhat decline, when a clear community function within its neighbourhood of the old stadium, as was the case in Groningen, is not reproduced on the new location. However, relating back to the quality of life indicator, it seems that – due to increasing problems generated by the old stadium – the move to a new stadium can on the other hand lead to an increase of the overall liveability on the old location. Nevertheless, in Groningen the new stadium is thus merely a city-wide facility. In line with that, it seems that also its social function in terms of identification, binding and pride, something that clearly comes to the fore in Groningen, can be mostly found on the level of the city as a whole – again, perhaps somewhat contrasting the higher social cohesion scores observed in post-development stadium areas. However, as the Groningen case also highlighted, it is the question to what extent this can actually be ascribed to the stadium itself. Especially when it does not specifically functions as neighbourhood or community facility, but most likely in any case this seems predominantly related to the football club – in which the impact of the stadium should then primarily be seen in a certain ‘iconic’ value, and accommodating a – better performing – football club. Finally, regarding a more outwardly directed socio-cultural function, based on the Groningen case it seems a stadium can have a certain ‘showcase’ or ‘visiting card’ function, for an area and city as a whole. But also here, this seems primarily

related to (the performances of) the football club. As a more concrete element of city marketing, the impact appears rather limited though. While the stadium has been strongly interlinked with the area development, which did seem to have contributed in terms of (brand) awareness and putting the area on the map, more specifically the active use of the stadium image as a branding element particularly for office spaces, as described earlier has only been to rather mixed success – although undoubtedly the economic downturn also played a major role here. Furthermore, on a city-wide level at least in Groningen no active use c.q. impact of the stadium in this respect can be identified; this remains at most limited to more ‘passive’ city marketing.

Dimensions/ Indicators	Theory/ Hypotheses	Quantitative analysis	Qualitative analysis	Interpretation/ Conclusion
<i>Area development</i>				
Land use & Other urban functions	Stadium as flywheel for attracting other urban functions; and with that intensification of land use (i.e. area development)	> Urban land use, address density, and housing stock generally high in post-development stadium areas; but not produced looking into model variations, indicating no clear area development impact; amenity level scores are relatively high, but particularly in base model, and not particularly concentrated	> Some additional functions, directly in and coupled with the stadium (in financial construction); role of stadium varied per case; > Outside the complex: indirect influence only for some offices, and train station; > Most notable influences: brand awareness, visitor streams, sign of intentions, other functions, infrastructures; > Infrastructural improvements perhaps the most evident/direct impact.	Results somewhat ambiguous, but might indicate a limited but certain impact. In the quantitative analysis only reflected in amenity level; the case study reveals certain impact in attraction of other functions, some directly (particularly in early stages; e.g. coupled in financial construction), others more indirectly (see factors of influence). Perhaps most evident impact are improvements in infrastructures.
Quality of public space	The development of a stadium leading to extra attention for and investments in public spaces (practical as well as aesthetical)	Stadium areas score generally low, but post-development better than pre-; particularly the recent stadia, and somewhat concentrated around the stadia; implicates possible stadium impact, that seems not yet optimised after five years.	Improvement pre-post, but generally lacking, in direct surroundings and wider area; experienced as limited, rather ‘barren’; lacking public green, landscaping, lighting, ‘slow’ infrastructures; recently picked up with new issue of land; stadium impact seems mainly limited to practical aspects, i.e. infrastructures.	Both analyses implicate a certain positive impact, comparing pre- and post-development; but as the case revealed, this may still be rather limited, and perhaps not up to a level envisioned or expected; also a highly financial matter; stadium impact seems mainly limited to practical aspects though, i.e. infrastructures.
District formation	The emergence of a certain thematised district around a stadium (e.g. sport, leisure, business oriented)	No statistical data on this indicator.	No thematised district; area has become more recognised/-able city district, in which – also due to lacking further developments – the stadium has a central position; but, in terms of creating	Based on only the case study, no clear impact on district formation; perhaps only contributing to the emergence of a more recognised urban district; in general, indicator strongly related to the

			liveliness, the stadium impact is rather limited.	realisation of other functions or developments.
Development old location	The relocation to a new stadium offering opportunities for redevelopment of the old location, often also rather central urban areas (e.g. residential)	No statistical data on this indicator.	Former location seems to move towards successful (mostly residential) redevelopment; although not directly related, inextricably an impact resulting from the move to the new stadium.	Again only based on the case study, a clear stadium impact can in fact be redevelopment of/on the old location – for example, residential functions.
<i>Economic impact</i>				
Business activity	Stadium as a flywheel for attracting businesses to the area; may also include 'non-fixed' business activity (e.g. conferences, 'b2b', et cetera).	No clear impact, overall slightly negative rather than positive; for all stadia, post-development lower number of business establishments; flattened out for recent stadia, and in direct vicinity perhaps even slightly positive impact; In turn, in base model relatively many business vehicles post-development, while somewhat inverted for recent stadia.	> Some businesses directly attracted, particularly in stadium complex; > Aside from that – in-building offices, non-fixed business activity (some but no constant activity), and establishments further away – limited direct impact, at most additional factor; attractive force/ added value particularly in first years (novelty, branding, symbolic value, coupled Europapark development); flattened out over time, becoming mainly indirect or overshadowed by locational factors. Both external and internal factors hinder an optimal business climate.	Ambiguous results; overall quantitative analysis suggests rather slightly negative impact, contrary to the case study; but slightly positive effect directly around recent stadia; confirmed by the Groningen case; stadium coincided with increased business activity, some directly attracted (particularly in (financial) stadium construction), to some additional or indirect factor (e.g. offices in, and around stadium, some non-fixed activity); but attractive force particularly in earlier stages, over time more indirect or flattened out. External, but also internal factors may hinder optimal business climate.
Employment	Stadium development leading to the creation of jobs, temporary and structural; both related to club and stadium and through additional business activity and functions.	Apart from the findings for the business activity, of course related with employment, no other statistical data on this indicator.	Important argument in municipal policy beforehand; direct, structural effect mostly club- or stadium-related employment; other effects related to – direct or indirect – attraction of economic activity; but to certain (and rather ambiguous) extent also redistribution, or no net stadium effect.	Looking at the case study, a certain employment effect, but only fraction of what was envisioned; most concrete structural employment effect related to club and stadium itself; other effects related to attraction of other functions, but then in part also redistribution or relocation.
Property values	Stadium development leading to increasing development and attractiveness of surrounding areas,	Stadium areas generally underperforming; furthermore, models suggest a certain	No clear impact; perhaps indirectly, overall increase of land/property values, indicating general	Contrasting outcomes; while probably unevenly affected by the economic downturn,

	reflected in higher property values.	negative stadium impact, even slightly stronger for recent stadia; differences of such evidence, implicate this can probably not all be explained by other factors.	development of the area; but not necessarily on all individual property values as such, also compared to general trend or situation without stadium; positively nor negatively; though there seems to be a certain distance effect related to the stadium; Overall, property values not by definition higher on stadium location.	quantitative findings still seem to indicate negative impact; in the case study though, overall land and property values in the area have increased, an indication of general area development, perhaps indirectly affected by the stadium; however not necessarily increase in individual property values.
<i>Socio-cultural function</i>				
Entertainment function	Primary function of stadia; the extent to which it functions as entertainment amenity for the population.	No sufficient statistical data on this indicator.	Clear increase in visitor numbers; according to stakeholders also attracting a wider audience; function remains limited to the football activity though.	In Groningen, the new stadium clearly attracts more visitors, and also a broader reflection of the population; no further amusement activities though.
Quality of life	Stadium contributing to the quality of life of surrounding area, as place to visit and live; through additional physical developments, but also social function.	<ul style="list-style-type: none"> <li>&gt; Generally underperforming, but overall post-development stadium areas score higher than pre-, possibly indicating positive impact;</li> <li>&gt; Social cohesion scores also relatively high post-development, most evident around recent stadia; although relation to stadia questionable;</li> <li>&gt; Safety and security scores relatively low, only post-development; implicates negative stadium impact; contrary to base model, for recent stadia only limited to areas in direct vicinity; may indicate more attention for such issues in recent developments; Surprisingly, no short-term impact.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Stadium and other functions made the area a place to visit; but mostly limited to targeted visits.</li> <li>&gt; Place to live: development of residential functions; quality of life positively affected by overall area development; but limited by lacking public space, and especially close to stadium some inconveniences and lack of alignment and coordination, not creating an optimal living environment. However, cannot all be ascribed to (lack of) stadium impact.</li> <li>&gt; Old location: despite the neighbourhood function, relocation has improved liveability here.</li> </ul>	Overall, both indicate a certain positive influence on quality of life; the pre-post development on liveability scores, seems to be reflected in the case study, both as place to visit and live; however, also rather limited, due to different factors no optimal visiting or living environment emerged. The positive social cohesion impact implicated by the statistics, is not so much reflected in the case. On the other hand, the negative impact on safety and security, apart from some inconveniences, in Groningen not so much an issue. Finally, relocation can also improve quality of life on old locations.
Neighbourhood function	Stadium may function as a particular neighbourhood facility, as community centre, meeting place for	No statistical data on this indicator.	No particular neighbourhood function; in fact, might even have declined, as old stadium did specifically have such a function. New	No indications for a neighbourhood function; case study revealed this might possibly even decline, when connection with a residential neighbourhood of the

	residents, or hosting projects and events.		stadium is merely a city-wide facility.	old stadium is not reproduced on a new location.
Identification, binding & pride	Stadium evoking feelings of identification, binding or pride among the population, with the city, neighbourhood, or club; through the football club, and/or architecture.	As described above, results suggest possible positive impact on social cohesion; but no further data on this indicator.	No such function in the neighbourhood, but for city as a whole, it seems to produce a certain impact; but primarily related to the football club, not only the stadium itself; mainly in a certain 'iconic' value, and accommodating a better performing club.	The quantitative analysis showed a possible impact on social cohesion, but link with stadia debatable; case study showed a certain impact of binding and pride, but for the city as a whole, and in the first place related to the football club.
Image effect & city marketing	Social effect outwardly; stadium functioning as icon, symbol, 'business card' for the city or area; specifically, usage for city marketing purposes.	No statistical data on this indicator.	Stadium has a certain 'showcase' or 'visiting card' function; but again primarily related to the club; stadium image strongly coupled with area development; specifically, as branding element for offices. For city as a whole, mostly limited to 'passive' city marketing.	Only based on case study, stadium can to some extent be a 'visiting card' for area or city; also as image or branding element in area development (only to some, but overall limited success); on city-wide level, not so much identified, and mainly limited to 'passive' city marketing.

Table 6.1: Overview of stadium impacts, combining theory, quantitative and qualitative results.

### 6.1.2 Stadium impact – reflections

Following the discussion of stadium impacts, a few 'side' reflections can be made. First of all, the 'impacts' found should not entirely be regarded as undisputed facts. As discussed earlier, the outcomes of the quantitative analyses have their limitations, do not reflect (differences between) individual contexts, and it is the question to what extent outcomes can actually be fully ascribed to the stadia. And in the qualitative case study, most impacts are not 'measurable' exactly, and rely in large part on the (researcher's interpretation of) more qualitative information from stakeholder interviews; and, as this research has shown, these are in part also dependent on their involvement in or relation to the stadium (development process), and their personal stances towards the stadium and club.

Looking at stadia in the framework of cultural amenities that was constructed at the beginning of this research, it might be argued that football stadiums can be considered as cultural amenities, but as also described beforehand, a rather specific or unusual form of cultural amenity. Simply put, a stadium is an entertainment amenity that attracts large numbers of people, and as in Groningen, a new stadium substantially more than the old one. And while Kloosterman (2014) stated that such large-scale mainstream amenities pose little added value to the 'quality of place', this should perhaps rather be seen as a different added value. As some of the stakeholders in the case study also highlighted, a stadium is rather incomparable to other cultural amenities, e.g. in terms of numbers and types of visitors and frequency of activity; but is not expected to have a smaller impact per se when compared to another large-scale cultural amenity being placed within such an area development. It can be argued, that a stadium would not pose an added value in all respects, for all functions and in all contexts; that is often also one of the reasons for locating new stadiums on at least

somewhat more remote locations. Also, as the Groningen case illustrates, particularly if not properly aligned and coordinated it may not pose an ideal combination with certain other (e.g. residential) functions; they might cause some nuisances, or at least inconveniences. Therefore, as the Groningen case also highlighted alignment and coordination between functions surrounding a stadium is a critical factor to consider, affecting the business and living environment, and thus quality of life and place. In that sense, it may perhaps somewhat differ from other large-scale amenities such as museums, cinemas, music venues et cetera. However, the neighbourhood statistics and particularly the case study showed that a stadium can have a certain influence on urban development, in broad terms. Apart from simply this obvious 'entertainment' function, and certain socio-cultural effects related to club and stadium for the city, the Groningen case showed that in the least place, a stadium can have a place inside a broader area development. It may attract a couple of other functions, directly or indirectly as an added value, or as a project simply offer development opportunities for some other functions. This might then also bring a certain economic impact; although this is not unambiguously reflected in actual values of properties. Furthermore, investments in infrastructure and public space seem somewhat more likely to be made due to a stadium project in a certain area, although mostly limited to more practical elements of infrastructures. Within this, clearly a factor of influence, and an element unique to football stadia, seems to be the important function and symbolic value of a football club for the city; in terms of urgency attached to realising such a project, but also its impacts, both area and economic developments and more intangible socio-cultural effects.

So although perhaps in certain aspects different from other cultural amenities, a stadium might actually contribute to urban development in a couple of aspects. However, another observation that can be made, is that a lot of the impact a stadium might generate stands or falls with the realisation of other developments around it; other functions, but also infrastructures, public space and landscaping features. Both economic and area development impacts depend largely on this; but also, more social or intangible effects such as quality of life, neighbourhood function and city marketing elements may in a way be affected by this. Further, mostly socio-cultural aspects, seem more related to the football club. So, the combination with other functions seems important in the creation of a wider stadium impact. And while this may also be necessary in terms of funding, an important and effective way to do so may be to incorporate some functions directly within the (financial) construction of the stadium. As can be seen in the Groningen case, this ensures at least a certain layer of additional functions, subsequently also contributing to a certain 'flywheel' effect of the stadium. In this respect, the attracting force of the stadium on its own should also not be overestimated though; both internal and external factors then influence the extent to which further impacts c.q. developments will take place. Most notable internal factors in this light include locational choice, accessibility and infrastructures, municipal policy, the coupling with a clear development area, and alignment and coordination between functions.

Looking further into this combination of functions, at least in the Groningen case it turns out that the synergies between different functions in practice are rather limited. The stadium area attracts predominantly destination traffic; people make mostly targeted visits, and to a limited extent combine between functions. The stadium itself attracts large numbers of visitors but only on a few very specific moments, i.e. the football matches, and hosts limited other events. This might thus perhaps be more concentrated than in the case of other large-scale amenities. However, some additional functions may then pose more useful or effective in creating more liveliness in an area. In Groningen, there are for example large-scale facilities such as the schools and supermarket, that ensure a more regular stream of people in the area; some other functions such as the fitness centre, cinema, restaurant, casino et cetera as well, but either only at more specific moments in time or to a somewhat smaller

extent. A residential function in general could have such a function as well; although immediately adjacent this may cause some inconveniences that would require explicit attention in terms of alignment and coordination. But, when both functions are to a certain extent functionally and physically separated, and well aligned looking into both their interests, this could pose an interesting possibility as well. Particularly also looking at the office market crisis, that also strongly affected the Europapark development in Groningen; in that light, it is also interesting to monitor the future development and performance of the area, which recently is increasingly getting a residential character.

Finally, some reflections can be made with regard to some more recent studies, looking into an element of distance, particularly for more quantitative or tangible indicators, and most notably probably property values. A few studies did find some positive effects on property values. However, this is not supported by the findings of this research; economic indicators do not show a clear positive, and in fact sometimes even negative impact; also when looking only at recent stadium developments. Of course, these data are influenced by the economic downturn, and post-development observations more so than pre-development; but also compared to other, non-stadium areas over the same period of time no substantial positive or negative impacts are found. Thus, also no clear distance effect can be observed. However, a clear shortcoming of this research is the aggregate data on neighbourhood ('buurt') level; an analysis of individual property values would probably give a more proper and detailed picture in this respect. An unambiguous or conclusive outcome on this could also not be found in the case study; although this seems in any case limited to the stadium neighbourhood. And while, as a development location, probably a positive impact on overall value of the area and properties is to be found, this cannot solely be ascribed to the stadium, neither is it the case for individual property values per se. Looking across the range of impacts, the quantitative analysis did not yield a clear, universal distance pattern for stadium impacts in the Netherlands. However, the outcomes did indicate that distance may be a factor of influence, although differently per indicator – and, but what this analysis does not show apart from differences between the models, also per case. For example, business activity seemed to have only a positive pre-post development closely concentrated around the stadium; on the other hand, the negative outcomes on safety scores, were also clearly concentrated in the areas closest to the stadiums. Some other indicators also showed differences related to distance to the stadium, but not forming a very clear pattern. Turning back to the case study, the more tangible impacts, i.e. economic and area development, seem mostly limited to the stadium district, in this case the Europapark. This may be also due to its rather enclosed form and character, and the explicit and implicit connection between stadium and area. Within this area, not a clear-cut overall distance pattern emerged, although the attraction of functions seemed predominantly evident in the vicinity of the stadium. What should be noted, is that inconveniences and potential conflicts of interest for other functions (particularly residential), may also be most evident close to the stadium; while the positive influence of the stadium for the overall quality of place might be somewhat stronger further away. Socio-cultural impacts, are not so much a neighbourhood-based effect in Groningen, and predominantly found on the level of the city (region) as a whole.

## 6.2 Internal factors: realisation and decision-making processes

Having dealt with the assessment of stadium impacts, the second key element in the conceptual model of this research, were the realisation and decision making processes. This comprises the involvement of actors and their roles within the process, the funding of such a project, the role of policy or objectives of the actors, and (choice of) location. These could be considered as the internal factors of influence (to the project); these are all elements of or

related to the stadium development process, and in that respect influence the realisation, and subsequently the impact of the stadium. In theoretical perspective, here there will be reflected upon the more general, broader models of urban development processes, but also the more concrete theoretical notions on the development processes more specifically related to football stadium developments. The conclusions here will be mainly drawn from the case study results, as this provided a more in-depth analysis of a particular stadium development case.

So as found, stadia seem to be able to produce a certain impact on urban development, although not all aspects clearly came to the fore in the analyses here, and, this will differ per case, and is dependent on various external and internal factors. The latter, are discussed here. Looking into the Groningen case, the stadium development process clearly included, and in fact such processes in general will inevitably consist of, a collaboration between public and private actors. The two core actors, involved from the very first beginning, are the football club and the municipality. The initial step – concerns regarding the old stadium c.q. ambitions towards a new stadium – of course comes from the football club; but often very soon the municipality gets involved, especially when ties between club and local government are close such as in Groningen, in the primary stages of brainstorming and discussion on the issues, viewpoints and directions to move ahead. Main objective of the club is generally rather clear: improving their offerings for visitors, both in a quantitative and qualitative sense, as well as its further commercial possibilities or facilities in the stadium – all with the overarching objective of increasing the club's budget, which subsequently is expected and has proven to be correlated to the performance level of the club. The stance or objectives of the municipality may be somewhat more diverse, and are therefore also discussed in more detail below under the header of policy. In general, as reflected by the Groningen case, this may consist of supporting the football club, solving certain 'urban' problems that emerged around the old stadium, or more pro-actively striving for additional (urban development) objectives. In any case, both actors the key stakeholders in every stadium development project; in which the role of the municipality can range from simply only facilitating a stadium development project (in the least case, through passive planning instruments of zoning or building permits), to more actively participating in the development process.

Looking back at the Groningen case, when things started to concretise, both together reached out to the developers market, with the question of realising a new stadium development project. So another main stakeholder at the table is the developer, or as in Groningen, a development group consisting of multiple developers – whose interest in such a development project is of course an economic one. A varying but similar composition of those three actors will always be present in stadium development projects. However, a crucial and generally understood notion, also voiced in the Groningen case, is that football stadiums in itself are intrinsically uneconomic developments, i.e. solely a stadium development project is not a profitable undertaking. And while none of the actors were able and/or willing to provide full funding for the stadium in Groningen, additional or alternative means of financing thus had to be found to realise the stadium. Therefore, in line with but aside from the area development motivations, a combination was sought with other – more profitable – functions, that could then serve as 'cost carriers' for the uneconomic gap of the stadium part of the development. These were then directly included in the (financial) construction of the stadium, and thus had to be taken up more or less simultaneously. And while this posed a rather challenging item in the process, this ensured that the new stadium could in fact be realised, and at the same time provided a base layer of at least a couple of other functions in the Europapark area development. However, on top of that, during the process it became clear that the club would not be able to provide its share of the stadium's funding; around this time, financiers (banks) decided not to finance professional football clubs anymore. This led to an

important turn in the process in Groningen, which meant the club would no longer be able to become owner, but at most tenant of the stadium. Eventually, the municipality of Groningen then decided to step in/up, and cover this funding deficit by providing a loan construction for the football club. With this, the municipality (through the Euroborg NV) would then effectively become owner of the stadium, renting it to FC Groningen, who would then repay this loan through the stadium rent. Within this entire construction, a clear division of tasks and risks was made between municipality and developers, obviously also reflecting their stances towards the development (public purpose versus private interests). A limited company (Euroborg NV) was started by both to take up all the elements of a more public nature, e.g. the land exploitation, public facilities, and eventually thus also the stadium itself. In respect of the latter, this limited company, with the municipality remaining as the only shareholder, then became the official owner and management entity of the stadium. The development group then realised all the other, commercial functions in the construction; and as discussed, the uneconomic parts of the development were then covered by the land values under all these additional functions.

So to conclude, in Groningen the realisation of the stadium required a combination with other – commercial – functions, to make an otherwise uneconomic project viable; and when it became clear the football club lacked financial possibilities, the municipality eventually decided to expand its involvement in the development process, stepping up in financial terms by providing a loan covering the emerged funding gap. The reason for doing so, discussed also further below, was the importance attached to both the stadium and area development, and the risk of jeopardising both if decided otherwise, given the situation that emerged. And while such involvement of actors and funding constructions are of course very case-specific, and this only concerns the particular Groningen case, looking at the generalisability of some of these circumstances, in broad terms these may probably be applicable to most recent as well as future stadium development projects (unless, of course, there is an external financier supporting the football club).

The aims of the football club in the stadium development process are of course mainly in their self-interest, and the involvement of commercial actors, i.e. developers and other ‘functions’, was in the light of the project necessary, but from their own perspective also of an economic nature. In the context of this research, special attention should be given here to the role of the municipality, in particular the aspect of ‘policy’. Primarily serving a public purpose, local governments are most obviously concerned with broader issues of urban development – which is at the centre of this research. And as the Groningen case illustrated, the municipality played a rather active role in this respect, clearly seeking a wider ‘benefit’ or impact for the city with realising the stadium development project – as found, expressed policy-wise but also through financial involvement. Starting with the former, first of all the project was initiated by the problems experienced by the football club, both financially and performance-wise, and also the increasing issues the old stadium caused for the surrounding neighbourhood. These already posed two important reasons for the municipality to support the realisation of a new stadium, that in a sense are also related towards urban development: supporting the football club was considered important due to its perceived ‘public’ character, and socio-cultural function for the city, while a relocation would also improve the quality of life in a certain city district (i.e. the old stadium location). But, also more directly related to the new stadium an important role of public policy can be observed in Groningen. Already early on a clear link was made between the stadium and area development (‘some lines tied together’), in name but also functionally. The municipality decided to incorporate the new stadium in the already planned (now-called) Europapark redevelopment plans, in which it was then considered as an important, according to some stakeholders even crucial, element. It was envisioned as a multifunctional facility contributing to a high quality of place, attracting

people and overall liveliness and functioning as a flywheel for a further area development. This was further emphasised by the involvement of a renowned architect; a specific demand made by the municipality, due to importance attached to the appearance of the stadium building and area. The architect provided the design of the stadium, placed within a master plan for the surrounding area – in that respect also contributing to the development of a vision for a stadium integrated into and interrelated with the wider surroundings. Later on, it was also used as an element of marketing deployed in attracting businesses. So in short, throughout the process a very strong and intentional coupling was made between the new stadium and the area development. This was considered so important, that it was also a reason to eventually even step in with a substantial loan construction, as described above. This comes on top of some other public resources already deployed for the area; as well as an annual contribution for stadium maintenance issues later on. While supporting the football club was one element in this, the stadium was also considered a crucial element in the physical and economic area development, and in particular the large employment effects of the area for the city, which would be dependent on realising the project. This policy attention, including the stadium in the area development, in the end even stepping up financially in order to realise this, the realisation of some other functions and particularly attention for issues such as infrastructures coming along with that, together with the ambitious plans or visions for the area created around that, in the least case posed an important sign of intent and commitment to other parties; the Europapark as the development location in Groningen for the foreseeable future.

While as observed the overall development has been more limited than originally envisioned, external factors such as the economic downturn played a major role in this respect (as will be discussed below), and it can be argued that the active involvement of the municipality and policy-making posed an important element in the Groningen case. However, there are also some aspects more specific to the project, i.e. also related to the policies pursued in the process, that either positively or negatively influenced its outcomes. A particular element of the decision-making process and policy, is the aspect of location, and the locational choice. Location poses a key decision in the stadium realisation process, but at the same time also an important factor of influence in terms of realising broader impacts for the city. On the one hand, particularly due to the problems of the old stadium a new location was sought providing more space and less nuisance, so really inner city or residential sites were out of the question. On the other hand, early in the process, a couple of alternatives were rejected by the municipality, due to being too remote, distant from the city core. Rather soon, the Europapark then presented itself as the best alternative, due to a – rather rare – ‘golden formula’ of availability, good accessibility through both major roads and rail lines, while still also being close to the city centre. So besides meeting the practical requirements for a stadium function, the relative location within the city would also ensure – or rather, preserve – a strong physical and social integration of the club and stadium within the city. Earmarked for redevelopment but still in need of new functions, the location of the Europapark was thus seen as an opportunity for the stadium and vice versa; while at the same time, also contributing to the described formation of policy visions and objectives to create a high quality, new ‘main’ development location for Groningen – which was also desirable in line with the overall urban development policy of Groningen, following the concept of a compact city.

Looking into the impact element, it seems location is an important factor of influence for all three dimensions of impacts. First of all, in the Groningen case, particularly the more tangible area development and economic impact seems to be mainly concentrated in the delineated surrounding Europapark area. However, this should not so much be regarded as a ‘limitation’, but rather as a positive consequence of the strong coupling of stadium and area

development; which, it might be argued, posed a beneficial element in realising stadium impacts. On the one hand, the stadium was located in a certain clearly specified, recognisable area, while on the other hand the area became more known as the place where the football stadium was located. As found, this link was specified both as a 'hard' connection incorporated in the municipal policy formation, and more 'softly' in people linking the area to the stadium and vice versa; something that may have contributed to the impact of the stadium. However, looking into the relative location of the site, it seems that the area and economic development that has taken place (although more limited than envisioned), can to a considerable extent also be ascribed to general locational characteristics – location within the city and relative to the city centre, accessibility, (pre-)existing infrastructures, et cetera. In fact, as found earlier overall for most additional businesses and other functions, these elements posed the major location factors, more important than the presence of the stadium. So while on the one hand this raises the question to what extent it is in the end then really the stadium that attracts the additional developments, on the other hand it could be argued that in any case the choice of location (that is, incorporating the stadium in a favourable development location) is an important factor in the realisation of stadium impacts; or generally additional developments around the stadium, whether specifically attracted by the stadium or not. More in socio-cultural terms, in Groningen the relocation from a residential neighbourhood to a less dense, initially mostly undeveloped and more mixed-use location, meant a specific neighbourhood function of the club and stadium within the city declined, or got lost, so to say. In general, it seems such a function of an old stadium is probably difficult to reproduce, at least on the short-term. However, on the other hand, selecting a new location still within the built environment of the city, within walking distance of the city centre, was an important element of preserving the strong link and sense of binding between the club (and thus stadium) and the city and its citizens.

So in general, it seems a certain contradiction emerges with regard to the locating of new football stadia. On the one hand, it is often not desirable, and perhaps not even possible to locate a stadium in an all too dense, urban area, in particular city centres or residential neighbourhoods; hence also the overall trend of Dutch stadia moving away from mostly residential areas to somewhat more out-of-town locations. On the other hand though, as the results of this research suggest a more 'urban' location may ensure a stadium can bring about certain additional impacts for a city, more than it would on locations further away from the urban core. And in particular when a municipality is strongly involved or interfering in the realisation of such a project, whether or not also in financial terms, this is also something that is generally deemed desirable. Overall, on such locations it seems more likely that additional businesses and other functions establish in the area around the stadium, both simultaneously (contributing to the financing of the stadium) and over the course of time (due to being a more attractive area). So, even when it is then not the stadium attracting other developments, it is in any case more likely the locational characteristics will do so in those cases. Furthermore, also the socio-cultural function of the stadium for the city may be positively affected by a more in-town location, compared to being more remotely situated. Nevertheless, there is also a more practical and pragmatic side to the issue of location; namely, it is simply also a question of which location(s) are available within a city at a particular moment in time. Therefore, the choice of location of a stadium should also not be approached too scientifically; often it is not the case that objectively the best possible or ideal location can be determined, on which subsequently the stadium can be placed. There is simply also an element of chance or luck, and dealing with the – limited – possibilities at hand in place and time.

Aside from the location element, a couple of other internal factors have been identified, i.e. that fall within the field of influence of policy, that may potentially influence the impact of a

stadium. A few main findings coming from the Groningen case should be mentioned in this respect, which in fact particularly came to the fore as areas for improvement in this case. First of all, the aspect of stadium and area design. While as discussed the involvement of the architect may have posed a positive item for the stadium project, and the stakeholders generally agree the stadium appearance reflects a certain quality, on the other hand the overall design and appearance of the stadium and its surrounding public area are experienced as rather limited, or lacking, in a sense that it is somewhat 'grey' and 'barren'. And while this is of course also a financial matter, restrained by the influence of the economic climate, resulting in cutbacks in resources of all actors in the process, further reinforced by the limited issue of land in the area, the general understanding is that there might or could have been some more attention to such issues. Secondly, also related to policy and design issues but more in a practical sense, the Groningen case study illustrated that when a stadium development is combined with other functions, an important aspect is the alignment between the different functions. As found, the reasons for making these combinations were twofold: the economic or funding argument, as well as creating a more lively Europapark area. However, from stakeholder experiences it appears the alignment between those functions is an important factor of influence and thus to consider, and regarding which in the Groningen case not the optimal result seems to have been produced. This should be seen in terms of design, both aesthetical and practical, as well as post-development coordination and cooperation between the various users. Particularly in the direct surroundings of the complex, certain shortcomings in this respect implicate that, regardless of other factors, not the optimal living or business environment has been created. In that respect, the Groningen case somewhat gives the impression that these functional combinations were in the first place made on financial grounds, and post-development the football club poses the main focus of attention, rather than to create primarily an ideal environment for all other functions; or, at least, that perhaps not sufficient importance and attention has been and is attached to such issues of alignment. Furthermore, and to a certain extent related, a common complaint or consideration among stakeholders is that outside of the football activity, limited activities take place in and around the stadium, limiting the use of the stadium, creation of more liveliness in the area and with that synergies with other functions. And while large-scale events were considered but found not viable before the development, and would also require physical adjustments to the stadium building, and for neighbourhood events in the Europapark itself grounds are limited, while surrounding neighbourhoods have their own facilities, this is also not actively pursued – or in fact even kept away mainly to prevent conflicts with the football club. Although the case study results did not so much yield specific suggestions in this respect, it does seem something that could perhaps be given more explicit attention, or in general at least poses a factor to critically consider around a stadium development. Finally, some notes can be made regarding the spatial (zoning) policies concerning the development of the area somewhat further away from the stadium. This is less directly related to the stadium though, but more the area development in general, in which the stadium is embedded. In the first place, looking at Groningen zoning of course made the realisation of the stadium and other functions on the location possible, while it also created the value leap of land through the other functions, turning the project into a profitable undertaking. However, it appears the municipality has rather long stuck with certain rather strict conditions for the further 'infill' of the Europapark area, specifically for the envisioned office developments. Of course external factors such as the economic climate strongly affected this as well, it seems that to a certain extent this sticking with such policy conditions meant scaring off or rejecting actors interested in realising functions not meeting those requirements. Only more recently, these have been loosened, e.g. more areas assigned with possible residential functions, enabling the observed recent residential developments taking shape. Of course, this is looking in hindsight to a

situation where large-scale planning was still more common practice, and the economic downturn and its full scope had not yet emerged, but it could be argued that this has somewhat limited or stalled the overall development of the Europapark. Particularly with regard to future projects, this seems an element to take into account; while on the one hand policy is an important element, generally presenting the area as new development location, while also the combination and alignment between different factors requires specific attention, on the other hand and particularly in the light of the changing context of planning and development too many or strictly defined requirements or outlines may in fact pose hindering elements.

Nevertheless, also linking back to the theory, in general the role of the municipality, and creation of policy around such a project seems an important element in realising a stadium and stadium impacts. Briefly looking back at the quantitative analysis, while this did not incorporate details from individual cases (e.g. policy goals constructed beforehand), some of the differences observed between the base model and recent stadia model, ignoring for a moment the different divisions among the 'stadium area' observations, here already posed a possible indication or reflection of the general supposition that particularly in the more recent stadium developments there is increasing attention for additional (urban development) objectives. The case study then, as discussed in more detail above, seemed to confirm this presumption. In Groningen, the rather active stance of the municipality was generally experienced as a positive and desirable role in the development process and the realisation of additional impacts. On the financial involvement, opinions are generally more divided, both within the local government and among the general public; however, it should be noted as well that this consisted mostly of a loan construction, in which the municipality would be repayed by the club through the rent. And, aside from that, the land exploitation also shows a positive balance, indicating the overall area development has in fact been a profitable venture, and is in fact not that far off from 'realistic' expectations beforehand. Nevertheless, such involvement of the municipality has to be and is often then justified by a combination of more and less tangible arguments of additional impacts for the city. However, as a final note here, as the Groningen case illustrated these presumed additional effects and the exact contribution of the stadium in that respect, even the more 'tangible' aspects, often retain a certain level of vagueness and non-specificity. For example, the main arguments in Groningen included, apart from solving the problems on the old location, the importance of the club for the city, the stadium as a crucial 'flywheel' for the Europapark development, and the large employment effects of this area development for the city. And while before sounding cynical these were probably the result of actual ambitions; however, it seems more a consequence of (overly) ambitious urban development policy, perhaps also to stimulate further development through setting such high ambitions, and with that also a means of justification for the project, rather than serving as specific hard development conditions or targets. This is further underlined by the fact that once the project is realised, there are no ex post evaluations of the project and stadium impact taking place, or consequences when certain objectives are not realised. Notwithstanding the impacts found earlier, at least the visions and objectives used in justifying the project have not all entirely been met; despite their rather broadly defined character, especially the realisation of a lively urban district, large-scale office park and grand employment effects turned out more limited than originally envisioned. It should be noted though, that in this case also some external factors have had a severe impact, particularly the economic downturn (also discussed below); and as a consequence goals and policies were somewhat readjusted along the way. Furthermore, the development of the Europapark was never entirely or solely ascribed to the stadium – and thus its limitations should also not all be regarded as a lack of impact. Nevertheless, despite that, but to a certain extent also

interrelated, it seems the impact of the stadium might have been somewhat overestimated. And while it could be argued this is intrinsic to urban development and planning, dealing with the changing context and circumstances and adjusting expectations and objectives accordingly, it is something that should be critically examined. Regardless of that, some internal elements were observed that did show some room for improvement. And while perhaps a new stadium project in Groningen is not something to be expected soon, evaluating the project may be helpful in future stadium developments elsewhere, as well as comparable large-scale projects in or outside of the city.

Finally, based on these findings some reflections can be made on the theoretical notions and concepts on realisation and decision-making processes discussed earlier in this research. As the Groningen case illustrated, the main actors in the development process are in any case the municipality, the football club and private developers, while in order to arrange the financing of – intrinsically uneconomic developments that are – football stadia, other private actors may be involved as well. Clearly, there is thus a form of public-private partnership involved in stadium development processes. The exact composition of and division of roles within this may of course vary per case, and is also dependent on the financial and institutional position and possibilities of these core actors, their goals, and in particular municipal policy objectives, as well as other elements of the local context. During the process, as the case study also showed, this may also change due to a changing context, or positions of other actors. All getting together at the same time in order to realise the project, therefore also posed a rather challenging item. These findings seem to be in line with those by a.o. Thornley on PPPs in stadium developments; although despite the changing composition of actor involvements posed a rather complex task, in the end the network of actors in Groningen did remain relatively clear or uncluttered.

Looking into the Groningen case, elements of all the meta-theoretical concepts can be recognised, although some more evidently than others. First of all, it might be argued that the stadium development project (implicitly) posed an important element of the ‘urban growth machine’. The stadium was deployed as a growth strategy, functioning as a potential catalyst for intensification of land use and growth of local revenues. This was the simple reason for the involvement of the private developers and other market actors. From a municipal perspective it might indeed be seen as an investment to promote a broader growth agenda, particularly beforehand considered a crucial element and flywheel for realising area and economic development; and, that aside from these urban development objectives, would perhaps also potentially yield revenues from local taxes and the land exploitation. This particularly follows the later stances on the growth machine approach, acknowledging the increasing importance of consumption and cultural amenities, that are not only following urban growth but could function as potential catalysts of such growth. In that respect, the metaphor of the entertainment machine, and amenities as drivers of growth rather than solely maximisation of economic growth and land use intensification, seems to be reflected here as well. However, the impact of the stadium should be more seen as an – often supplementary – aspect in attracting business establishments or other functions, and the socio-cultural function or value of merely the amenity and its user (the football club) itself for the city and its population, as reflections of ‘urban development’, and not so much in terms of (contributing to) the attraction of human capital as a way of seeing urban growth that Clark speaks about. However, as the impact section has shown, the extent to which the stadium has contributed to ‘urban growth’, has been somewhat confined/limited. While certain impacts could be observed, and also both developers and municipality have been able to create revenues (commercial developments and positive land exploitation respectively), the stadium failed to realise or attract the growth that was envisioned beforehand. Of course, both internal and external factors played a role in this, particularly also the economic climate, which limits the

power or relevance of the growth machine approach, that also largely ignores such factors. Furthermore, the approach is somewhat too narrowly focused on the economic aspect, i.e. urban development through economic development, and emphasising the role of businesses and the private sector. As the Groningen case illustrated, there is a key role for the local government, and policy-making in such a project; and in that respect, the division into three broad 'urban development' dimensions and the results found on those in this research indicates such a purely economic scope is too narrow, and urban development or growth may also – and perhaps even more so – consist of non-economic, often less tangible, aspects.

Nevertheless, what the case study did show, is that certain growth coalitions form around such a project, in the end to realise a form of 'growth'. The overall notion of the 'growth machine', and particularly related to entertainment amenities, thus seems to have been present in a certain way; particularly reflected in the ambitions beforehand, while post-development (and, post-economic downturn) only to a certain extent realised. However, given the discussed limitations of the concept, especially the importance of a broader involvement of various, also non-economic, non-private interests in the decision-making process, the theory of 'urban regimes' comes in. Regime theory places more emphasis on coalitions and cooperations of various actors (regimes), that is less focused on purely economic motives and also includes a more important role of policy and politics. Such regimes are then formed by a combination of different public and private actors, in order to jointly realise certain policies or projects; and while these may all have their own interests and desired outcomes, they perceive it as in their best interest to stay within this coalition. This is something that was clearly exemplified by the stadium development process in Groningen; here the coming together of the football club, local government (both administrators and politicians), project developers and other market parties (buyers c.q. renters for other functions) formed a coalition or 'regime', aimed at realising the football stadium. And while all had their own specific interests in doing so, all were necessary to ensure the project could be realised. As the various stakeholders in Groningen also emphasised, even though at times this posed a rather challenging process, bringing and holding together all these actors, the general understanding was that 'moving forward' was the only possibility, and that in the end the stadium has been realised because all actors had a serious interest in the project. And while the impact of the stadium itself might be considered at least somewhat more limited than perhaps envisioned, it seems that similar to findings of Mason (2012) the interest in and appearance of the football club to a certain extent contributed to the understanding among the actors – even if not directly football supporters – in the 'regime' that with this broader development goals could be achieved. Furthermore, and contrary to the growth machine approach, the regime theory also emphasised more specifically the importance of the (local) context in the involvement and roles of the various actors within these coalitions, and thus the functioning of the regime; this is something that also clearly came to the fore as a crucial element in the case study in this research. Particularly in the light of a strong involvement of a municipality, justification for the formation and outcomes of such a regime poses an important aspect as well. In Groningen, this was mainly narrated through the large impacts the stadium would bring for the city: catalysing and defining the Europapark area development, and particularly the enormous employment effects that would be directly dependent on that; and aside from that, the importance of a well-performing football club for the city, and solving the problems emerged on the old stadium location. This composed set of reasons was thus used justifying the project and involvement of the municipality, and particularly around the decision to provide a loan construction for the club. However, it seems this posed mainly a politically challenging process, causing some political struggles for the executive board (College van B&W) of the municipality. In terms of outward justification, aside from the statutory planning procedures, this was at most indirectly through the city council, 'responsive to electoral

imperative', rather than developed and justified in collaboration or dialogue with the general public, or an 'interactive and engaged process of arguing for the merits of a stadium development project' (Pacione, 2009; Mason, 2012). So in this respect, it could in fact thus be seen as a form of decision-making process through 'urban regimes'.

Building on the government and policy perspective, the stadium development in Groningen can be considered a large-scale urban development project that bears resemblance with the neoliberal form of urban governance of the 'New Urban Policy' described by Swyngedouw et al. (2002). The stadium clearly posed a form of project-based urban development, around which as observed earlier a coalition of public and private actors was formed, with an interest in realising the project – indeed, the formation of a project-focused public-private partnership. Similar to the projects analysed by Swyngedouw et al., the municipality of Groningen played a central role in the development process, not only facilitating but taking a rather pro-active (or even, 'entrepreneurial') stance within the development project; and with that, conducting a more pluralistic stakeholder-oriented urban governance. The municipality attached additional urban development goals to the stadium development project, most notably coupling it with the Europapark area development, and related to that economic effects such as employment. In this sense, the project could be seen as a place-based municipal urban development policy instead of traditional 'blanket' or city-wide redistribution policies. Particularly the argumentation used around the 'loan construction' decision for the stadium, stating that the risk of cancellation of the project was greater than proceeding (with this financial support), specifically due to the large employment effects 'directly dependent' on the area and thus stadium development, was evident in this respect. This decision clearly emphasised the importance attached to the project as an urban development policy for the city. It could thus be argued that, in line with the theoretical notions, the comprehensive planning is here 'replaced' by a spatially targeted, emblematic project as instrument in realising urban development; that aims at physical improvements and (socio)economic development objectives, at the same time coupled with a certain symbolic impact – something which besides design and grandeur commonly associated with large-scale UDPs, in this case specifically also concerns the symbolic value of the football club. In this respect, a 'framework of exceptionality' attached to such projects that Swyngedouw et al. (2002) speak about, seems to be applicable to stadium development projects as well. However, in Groningen there was clearly still also a strategic planning aspect, particularly in the municipal plan and policy-making for the Europapark area development, in which the stadium project was incorporated. Despite these additional objectives, what remains an underlying rationale in such projects is the creation of a value leap or increase of the urban development land. In Groningen this was also an important notion, both in the realisation of other functions and developments, and with that financing the stadium. This is also clearly reflected looking at the division of tasks and risks between public and private sector. The principle posed the mere reason for the involvement of the private developers and market interest, looking to reap the benefits through profitable real estate development; made possible by state planning, zoning and investments in infrastructures and facilities (and it was argued, also the stadium). From the municipality's point of view, as a central actor within the development coalition, this was simply also a necessary element to include, to contribute to financing the intrinsically uneconomic development of a football stadium 'sec'. In that respect, the image of a purely pro-growth development project, only targeting the most high-end or profitable urban functions, does not fully apply here; notwithstanding the existing Europapark development intentions, the direct inclusion of some other functions also served the purpose of 'cost carrier' for the uneconomic football stadium. Eventually, when the end user (i.e. the football club) fell short in terms of funding, it even required additional public support through the municipal loan construction. Nevertheless, the municipality carried out

the land exploitation, that despite certain setbacks eventually also showed a positive balance, while it could also create additional revenues through land rent and property taxes. Finally, and as also observed earlier, similar to the large-scale UDPs discussed by Swyngedouw et al. (2002), it seems the stadium project has been mainly the arena of a rather exclusive pro-growth coalition, consisting mostly of certain political, economic and technical elites – an ‘elite playing field’, as they phrased it. Indeed, apart from the football club related arguments it seems the project was legitimised with a certain ‘developmental view’ and ‘boosterist’ discourses of regeneration and success, highlighting the importance of such a ‘milestone’ development for the future of the city, rather than through direct public involvement or collaboration. However, despite the divided opinions on the financial involvement of the municipality and the political struggles this caused, looking at the experiences in Groningen and the seeming lack of serious opposition or controversy the notion of ‘democratic deficit’ seems somewhat strong in this context – perhaps also strengthened by the perceived (socio-cultural) importance or function of the football club as a particular characteristic of this project, as well as the growing problems on the old location. Nevertheless, this also indicates both ‘growth machines’ and ‘regimes’ notions to a certain extent apply here, and specifically, geared towards large-scale UDPs.

Briefly reflecting on this with a view towards the future, it could be argued that as at least until the emergence of the economic downturn this neoliberal ‘NUP’ through large-scale ‘UDPs’ functioned as a prime model of urban development, stadium projects posed a clear example of this. However, it is the question to what extent these would still be viable, in the current ‘age of austerity’ Kloosterman (2014) spoke about; and what the impact of the changes in this context of urban planning and development, particularly emphasised by the economic downturn, would be for the further development of impacts c.q. developments around existing stadia, and the realisation of new stadium projects and impacts in the future. To what extent do the crucial underlying notions of growth and value increase fit within this context? In general, there seems to be somewhat reduced focus on, or possibilities for urban expansion and growth; but, on the other hand, such rather extraordinary large-scale projects as stadiums may perhaps pose an exception, through the framework of exceptionality these UDPs were already associated with. The fact remains though, that overall both the public and private side have less resources at their disposal, and will be less willing and able to take risks, as these will be generally larger with a smaller chance of returns; however, this poses a crucial element in the realisation of large-scale urban development projects. As the case study of Groningen shows, both will be necessary in realising a stadium project, while neither the club, the municipality nor the private developers seem to be able or willing to finance and realise it on their own. In any case, a certain form of PPP thus seems to be inevitable. When there is no external financier (e.g. Alkmaar) or affluent municipality (e.g. The Hague) such as in Groningen, and the football club does not have a strong financial position, a certain combination of government support (e.g. through a loan construction) and ‘cost carriers’ contributing to the funding of the stadium seems necessary. Less government involvement would thus require a financially stronger football club, or may implicate either a more sober stadium development project (i.e. less attention for additional urban development objectives), or perhaps an even stronger necessity of combining the stadium with other functions, that are (still) profitable. As discussed before, there are some difficulties that have emerged in this respect, but perhaps still also some opportunities. Nevertheless, it seems the storm of new stadium developments that was blowing over the Netherlands in the past twenty or so years has somewhat died down, since 2008. In part of course also because the number of clubs potentially in need of a new stadium has now decreased; but perhaps also because the attractiveness, allurement or feasibility of such projects has somewhat decreased compared to before. However, on the other hand the pro-growth, boosterist discourses around football

stadia do not seem to have disappeared though, for example only looking at the plans for a new stadium and 'Feyenoord City' in Rotterdam. Stadium plans have been simmering for years here, but it seems these are slowly starting to concretise (at the time of finishing this thesis, end of 2016), into a stadium-led urban development concept of unprecedented scale in the Netherlands. It should be noted though, that this in fact concerns one of the largest cities, clubs and stadiums in the Netherlands, and thus probably not an entirely representative situation. To conclude then, in line with reflections from this and the following section, what is probably most important – and more than such general outcomes cannot be given based on this research – is that this is strongly case- and context-dependent; both the formation of coalitions, and their composition of different actors and interests, and the realisation of stadium impacts. So, apart from the internal factors discussed in this section, this also depends on the local context – influenced by both local and supralocal factors.

### 6.3 External factors: local context

Having discussed the internal factors of influence in a stadium development project and decision-making process, some reflections on the external factors can be made. In concurrence with the internal factors, external is here understood as external to the project. In that respect, these can in fact thus be considered as the element of 'context'; which is here dubbed as the local context, simply because a development project of course always takes place within a certain locality. So, these external factors may be aspects specific (and thus in a sense, 'internal') for the locality, but also ('external') external factors of a wider scope, influencing the locality and thus local context. And while the local context is of course to a greater or lesser extent related to the development project that takes place within it, these factors are thus considered external in the sense that they are not something that is or can be influenced by (decisions in) the development process. They should however, as will be argued here, pose an aspect to critically take into account in that respect. As these factors are thus out of the influence of the project and its decision-making processes, and have been discussed throughout the sections above, they can be discussed rather briefly here.

What the outcomes of this research have clearly shown, in line with notions of some recent literature (e.g. Mason, 2012), is the general importance or influence of context for a stadium development project; in the decision-making processes and in realising stadium impacts. First of all, a couple of factors emerged specifically related to the city. In general, the size and relative location of the city could be important, for example in the attraction of market interest for additional developments. For Groningen, on the one hand this may probably be more difficult than for example a larger city in the Randstad area; while on the other hand, the city is the largest in the whole northern Netherlands, and in that capacity the main place for development and 'growth' within the wider region. Aside from that, also the character of the municipality in general, outside of the project, plays a role. The political culture and colour within the municipality inevitably affects decision-making processes, in terms of policy formation, as well as the level of involvement of the municipality in such a project. For example, the decision of the executive board and approval of the city council to provide a loan to the football club, and thus becoming also financially involved and in fact owner of the stadium, in the end saved the stadium project in Groningen. An additional factor in this respect, is of course the budget of the municipality: the mere (im)possibilities to provide such financial resources or support; but also, the extent to which additional investments in infrastructures and public spaces can be made. Furthermore, existing – broader, or city-wide – municipal policies are something to be taken into account in new development projects; and, despite the notion of exceptionality often attached to such projects, integrating the project into the broader context of existing (urban development)

visions and objectives. Looking at the Groningen case, the overall urban development concept of a 'compact city' used by the municipality, contributed to selecting a location rather close to the city core, over more remotely situated locations. On a more practical note in that respect, as discussed a major factor in the choice of location is the location availability; simply which locations are available within a city at a particular moment in time. So as found this cannot be approached too scientifically, and is simply also dependent on the city context. Furthermore, once a location has been chosen, the various characteristics of this particular location, of course in part based on which it was also selected, are also in a sense 'external' factors, particularly influencing the realisation of impacts. Apart from its situation within the city, the size of the (vacant plot on) the location, former and current uses, existing infrastructures within the area and links with other parts of the city, geographical and landscape features, as well as characteristics of the surrounding neighbourhoods, could all be additional factors affecting the development project and its 'urban development' impacts – as discussed in detail earlier on. In the first place these may contribute to or hinder the overall attractiveness of the area and thus realisation of area and economic developments; but for example the 'physical' and 'mental' situation within the city may affect the socio-cultural impact of the stadium. Furthermore, the lack or presence of a residential functions, and connections with adjacent residential neighbourhoods, affects the potential for the stadium to take up a certain social 'neighbourhood' function. In general, the degree to which the area is vacant or contains other functions seems to pose an important factor. On the one hand a practically vacant area makes the realisation of such a project easier, as there is more space and less need to coordinate with existing functions, and more opportunities to create a 'value leap' and/through additional developments, and is often even particularly selected for that with regard to safety and accessibility and parking issues. On the other hand though, this means that more additional developments are needed in order to create a certain liveliness – or in other words, when further developments are lacking there is an increased risk of a more 'stand alone' stadium or at least the appearance of a somewhat 'uncompleted' area. In any case, it seems important to integrate the stadium within the existing urban structure.

Another crucial factor inseparable from a football stadium development, is the size and character of the football club and its supporters/fan base. The 'size' of the football club may be determined by its level of performance or tradition, but can most effectively be measured by its fan base; character may be related to history and tradition, geographical location, hinterland, type of binding with this and its supporters, et cetera. For a new stadium development, this determines the potential in terms of visitors, i.e. capacity, as well as for further socio-cultural impacts, but also the extent to which safety is an issue to take into account in the choice and design of a new location. FC Groningen is one of the few professional clubs in the northern Netherlands, and the largest (and currently only) club in the province of Groningen, and is commonly described as a 'people's club', deeply rooted within this hinterland and with a strong binding with its fan base, both in the neighbourhood of the old stadium and in the region as a whole. This provided the input/justification for an increased capacity in the new stadium – which seems to be confirmed by the observed average attendances. On the other hand, particularly in the final years of the old stadium there were increasing supporters problems and incidents taking place; although this was also not regarded as a structural problem of the club's supporters. Therefore, this was not so much a consideration in the choice of location, but was a factor taken into account in designing the stadium and its surrounding area – which seems to have had its effect given the absence of incidents. Finally, as found earlier the performance level of the club greatly affects the mood around and attractive force of a club and stadium. However, the inevitable element of uncertainty attached to this, is to a certain extent also an 'external' factor; this is only partially and indirectly influenced through the structurally increased budget that a new stadium

provides. Finally, to a certain extent somewhat related, the situation of and around the old stadium is also a factor that can be considered ‘external’ to the development process of a new stadium project. This concerns the degree to which it is (considered) insufficient for and by the football club, in conjunction with aforementioned characteristics, in terms of capacity and facilities; but also its position within that particular urban area. In Groningen, on the one hand the old stadium had an important neighbourhood function in its Oosterparkbuurt, with a strong binding with the neighbourhood and its residents; but on the other hand, problems in terms of parking, nuisances and supporter incidents increasingly posed a burden for the area. It can be argued the latter contributed to the urgency attached to the new project in the decision-making process, while these elements were also taken into account in the locational choice and design. And while this particular neighbourhood function could not be reproduced on the new location, it was taken into consideration in deciding on and justifying relocating the stadium.

Another crucial external factor, already often mentioned throughout the analyses, is the economic climate, and more recently specifically the economic downturn or crisis that emerged around 2008. Rather concretely, in general this has led to shrunken (financial) resources of both public and private actors, and thus less possibilities for investment. A critical element in the realisation of a stadium project, as well as additional ‘physical’ impacts (through area and economic developments), is the involvement of market actors; either developers, private parties taking up other functions c.q. real estate, and possibly external financiers (e.g. banks). As this is determined by the local economic climate and markets, this is unambiguously affected by the supralocal – (inter)national – impacts of the economic crisis. Also for (local) governments, this imposed budget cuts; something which, aside from possibly supporting a football club, may affect the risks these are willing to take in area or project developments, and simply also the resources available for investments in infrastructures and public spaces. Looking into the Groningen case, this only really affected post-stadium construction impacts or developments; these implications were not yet as evident around the realisation of the (financial) construction of the stadium. Particularly in light of the strong focus on office development, the total crash of the office market severely affected the stadium impact, and Europapark development overall. Fairly recently, policy and zoning have been somewhat eased, and development seems to be picked up again, but seemingly more towards a residential character, and not so much related to the stadium anymore. Looking at future projects on the other hand, this may perhaps pose a complicating factor also in terms of obtaining the required financing of the stadium. In general, the question remains how and to what extent the economic climate continues to have an impact on such projects; how it affects the (local) development market, and different sectors within this, which combinations with other functions might be (im)possible, and more generally the extent to which the old models of value increase, on newly developing locations, on which such large-scale projects are based, are still relevant and applicable. Looking at Groningen, this concept has only in part been realised, and particularly in the years after the development somewhat been caught up by a reality of economic decline; the question to what extent this may be the case in new projects, in the context of another place and time, remains to be seen. This may in itself also be influenced by some of the factors discussed here; for example, perhaps the larger cities, where most football clubs and stadia are located in, may be less affected than others. But also other external and internal factors discussed above may indirectly be of effect here. An important notion is perhaps that – and that is not necessarily new to planning – there is an aspect of uncertainty about the future related to such developments, that particularly for such large-scale projects may pose some challenges.

What might be a conclusion, consequence or opportunity in this respect, is that perhaps less focus should be on pre-determined, ‘blueprint-like’ master plans for additional

(area) developments (as for example in Groningen with the office park projection), and more on a more flexible setup or approach. This would leave the exact specification to a larger extent to market interests, or the wishes or demands of end users, developers or financiers. While certain sections of a certain wider area could even take a more 'organic' form of development, additional functions necessary for the stadium funding would require a more organised approach. However, there will always remain an important role for planning and policy; in creating certain urban development policies, area or city marketing, and at least defining guidelines, but perhaps only somewhat less strict than before, as well as in creating public facilities such as infrastructures. Furthermore, as this research has shown, an important aspect is to keep an overview on the overall alignment of different functions within such an area development. Nevertheless, as this section has shown this is always strongly dependent on the local context; therefore, no comprehensive or uniform outcome or model can be constructed here, based on this research. Each specific stadium development project will be different, taking place within its own specific context, and should be approached as such. What is important, as perhaps the most important conclusion coming from this research in this respect, is to critically consider and examine the internal factors of influence discussed in the previous section; while the influence of external factors, the 'context' as discussed in this section, that cannot be influenced itself, should be explicitly taken into account and adapted to in doing so.

#### 6.4 Thesis reflections

To conclude, a few final reflective notes can be made more regarding the general process and eventual result of this thesis. As stated already in the foreword, the creation of this thesis has been a rather long, and not always as efficient process – and one almost as often frustrating as it has been satisfying. Despite the lengthy process, towards the end it still required quite some rushing in a final sprint to get it fully wrapped up. However, paradoxically this has also made the final thesis longer, or in fact somewhat too long; overall, the thesis could and should perhaps have been somewhat more concise. But, when time is running short, I seem to lose some sense of overview or limit, while in the end there is then no sufficient time left to really cut down certain segments, or make them somewhat more concise and to the point. For example, the final conclusion could perhaps have been somewhat sharper and more succinct. So, this thesis has become a rather lengthy piece; and while more might not necessarily be better, it seems this has slipped in regardless.

Nevertheless, despite the lengthy process and size, there are also a few somewhat more content-related reflections or remarks to be made here. Particularly, the limitations of the quantitative analysis, I am not entirely satisfied with. Quite a lot of time went into reading into, researching and working through this statistical analysis. Conducting the eventual statistical models, then posed a long process of trial and error; composing the dataset, finding and correcting flaws and discrepancies in the data, but also the selection of the most appropriate statistical approach or model (moving from propensity score matching to a more standard GLM), determining specifications and setups of the models (how to properly measure stadium impact, which variables to add, et cetera), and finally interpreting the outcomes. So, constraints in the data available, but also the technical (statistical) knowledge or expertise, and eventually also in time (to further correct flaws later on), have hindered or limited this analysis. Therefore, and to my own dissatisfaction, this has not resulted in a perfect analysis, and has a couple of flaws or shortcomings. In technical terms, perhaps the most obvious limitation is formed by serial autocorrelation. This is an element that in the end has not been corrected for, due to initially technical and eventually time constraints. And while this is the case for all observations, so both the treatment and control groups, it is a

factor unrightly affecting the model outcomes, and thus a limitation to be taken into account. Furthermore, also some other statistical assumptions, e.g. normality and independence of errors, are not met in all models. While this may not necessarily discredit the findings, conclusions should be drawn with a certain reservation in this light. Finally, the explanatory power of the models differs per indicator, and falls somewhat short for a few models; that means, a fair share of the variation cannot be explained by the model and its explanatory variables, which may thus limit the results found on stadium impact. Also in more practical or functional terms, some limitations can be found. The availability of data meant not an entirely ideal or perfect matching set of indicators for the three dimensions could be used, so a more pragmatic approach had to be taken. Besides that, the dataset comprised of data on the aggregate level of neighbourhoods ('buurten'), as the lowest data level available. That means, data and thus model outcomes are not 'individual' values or observations, but always reflect aggregated values for certain larger (and varying in size and shape) entities. Particularly in the distance measures, this poses a limiting aspect in the outcomes from the analyses. Furthermore, as observations for multiple data years and multiple stadia are taken together, differences between various cases and specific contexts are of course overlooked, and in fact also causes the issue of serial autocorrelation; however, it also implicates a rather uneven distribution of pre- and post-development observations. There is not a 1:1 pre-post comparison, in which for each stadium (impact area) an equal amount of pre and post stadium development neighbourhood observations is taken into account. This would of course be the ideal situation, to properly analyse the impacts of stadium development(s) on the surrounding 'buurten'. The model variations somewhat improved on this aspect, but still did not compose a flawless setup. Somewhat related, the expected influence of the economic downturn, has not been explicitly taken into account or corrected for in the statistical models. This is particularly a limitation in the sense that especially the post-development observations are affected by this, while all pre-development observations are from before 2008. As no statistical measure or correction is used for this, it is an element to be taken into account interpreting the results.

To conclude, the quantitative analysis has proven interesting and useful in providing more information on stadium impacts. However, both better data (indicators, control variables, lower scale c.q. individual objects, more or more even data years, et cetera) and methods (e.g. correcting for autocorrelation and other violations) would be needed to be able to make precise or robust statements. The qualitative analysis then, posed a valuable addition to this, and provided useful further insights into a particular stadium development project and its underlying processes and factors of influence. The most important limitation in this respect, apart of course from only looking into one case, is that it mainly relies on a (varied but only) couple of stakeholder interviews. In general, the implications of the findings regarding future projects are only of a limited extent; as no 'real-time' analysis has been made, but a project developed in the preceding period, only some further post-development impacts could be observed affected by the changing circumstances, and the experiences of experts and stakeholders, and their thoughts on such a project in the future. Main element or added value in this respect might thus be the in general placement of a stadium realisation and additional impacts explicitly linked to the specific internal and external factors of influence. So, as a final note, a further and more advanced quantitative statistical analysis, and/or other case studies adding to the evidence base on other specific (and more recent) contexts, might be subjects for further research.

## References

- Aalst, I. van. (1997). *Cultuur in de stad: Over de rol van culturele voorzieningen in de ontwikkeling van stadscentra*. Utrecht: Van Arkel.
- Ahlfeldt, G. & Kavetsos, G. (2014). Form or function?: the effect of new sports stadia on property prices in London. *Journal of the Royal Statistical Society A*, 177(1), 169-190.
- Ahlfeldt, G. & Maennig, W. (2009). Arenas, arena architecture and the impact on location desirability: the case of 'Olympic Arenas' in Prenzlauer Berg, Berlin. *Urban studies*, 46(7), 1343-1362.
- Ahlfeldt, G. & Maennig, W. (2010). Stadium architecture and urban development from the perspective of urban economics. *International Journal of Urban and Regional Research*, 34(3), 629-646.
- Ahlfeldt, G. & Maennig, W. (2010b). Impact of sports arenas on land values: evidence from Berlin. *The Annals of Regional Science*, 44, 205-227.
- Ahlfeldt, G. & Maennig, W. (2012). Voting on a NIMBY facility: Proximity cost of an "iconic" stadium. *Urban Affairs Review*, 48(2), 205-237.
- Baade, R. & Matheson, V. (2011). Financing professional sports facilities [Working paper]. *IASE/NAASE Working Paper Series*, 11(02), 1-32.
- Bale (1993). The spatial development of the modern stadium. *International Review for the Sociology of Sport*, 28, 121-133.
- Bale, J. (1993b). *Sport, space and the city*. London: Routledge.
- Bale, J. (2000). The changing face of football: Stadiums and communities. *Soccer & Society*, 1(1), 91-101.
- Barghchi, M., Omar, D. & Aman, M. (2009). Sports facilities development & urban generation. *Journal of Social Sciences*, 5(4), 460-465.
- Berry, J., Carson D. & Smyth, M. (2007). A multi-purpose sports stadium: In-town versus out of town location. From: Belfast City Council & University of Ulster. Found 7 February 2013, on: <http://www.belfastcity.gov.uk/news/stadiumreport.pdf>.
- Bockma, H. (2011). Bezuinigingen cultuur: hardste klappen bij theater en beeldende kunst. Found April 2015, on: <http://www.volkskrant.nl/politiek/bezuinigingen-cultuur-hardste-klappen-bij-theater-en-beeldende-kunst~a2444074/>.
- Brown, A. (1998). *Fanatics!: Power, identity, and fandom in football*. New York: Routledge.
- Buitelaar, E. (2010). Grenzen aan gemeentelijk grondbeleid: Continuïteit en verandering in de rol van gemeenten op de Nederlandse grondmarkt. *Ruimte & Maatschappij*, 2(1), 5-22.

CBS. (2016). CBS StatLine. Retrieved July 2016, from:  
<http://statline.cbs.nl/Statweb/dome/?LA=nl>.

Chapin, T. (2004). Sports facilities as urban redevelopment catalysts: Baltimore's Camden Yards and Cleveland's Gateway. *Journal of the American Planning Association*, 70 (2), 193-209.

Clark, T. (2004). *The city as an entertainment machine*. Amsterdam: Elsevier.

Coates, D. & Humphreys, B. (1999). The growth effects of sport franchises, stadia and arenas. *Journal of Policy Analysis and Management*, 18, 601–624.

Coates, D. & Humphreys, B. (2003). Professional sports facilities, franchises and urban economic development. *Public Finance and Management*, 3(3), 335-357.

Corwin, C. (2011). Impacts of professional sports stadium development projects on urban areas. Found 17 February 2013, on: <http://krex.k-state.edu/dspace/bitstream/handle/2097/8523/CharlesCorwin2011.pdf?sequence=1>

CPB. (2010). Stad en land. Den Haag: Centraal Planbureau.

Dam, F. van (2000). Refurbishment, redevelopment or relocation? The changing form and location of football stadiums in the Netherlands. *Area*, 32(2), 133-143.

Davies, L. (2008). Sport and the local economy: The effects of stadia development on the commercial property market. *Local Economy*, 23(1), 31–46.

Dehring, C., Depken, C. & Ward, M. (2007). The impact of stadium announcements on residential property values: evidence from a natural experiment in Dallas-Fort Worth. *Contemporary Economic Policy*, 25(4), 627–38.

Draaijer & Partners. (1997). Financiële verkenning Europapark versus Oosterpark. [copy archive record, 11 June 2013].

Eisinger, P. (2000). The politics of bread and circuses: Building the city for the visitor class. *Urban Affairs Review*, 35(3), 316-333.

Euroborg. (n.d.). Sportief en doelgericht ondernemen in Euroborg Offices | Groningen lééft in Euroborg [brochures]. Groningen: Euroborg.

Evans, G. (2001). *Cultural planning. An urban renaissance?* London: Routledge.

Evans, G. (2009). Creative Cities, Creative Spaces and Urban Policy. *Urban Studies*, 46(5-6), 1003-1040.

Evans, G. & Foord, J. (2008). Cultural mapping and sustainable communities: planning for the arts revisited. *Cultural Trends*, 17(2), 65-96.

- Feng, X. & Humphreys, B. (2008). Assessing the economic impact of sports facilities on residential property values: A spatial hedonic approach. *IASE/NAASE Working Paper Series*, 08(12), 1-19.
- Feng, X. & Humphreys, B. (2012). The impact of professional sports facilities on housing values: Evidence from census block group data. *City, Culture and Society*, 3, 189–200.
- Finn, G. & Giulianotti, R. (2000). *Football culture: Local contests, global visions*. London: Routledge.
- Florida, R. (2002). *The rise of the creative class: And how it's transforming work, leisure and everyday life*. New York: Basic Books.
- Florida, R. (2005). *Cities and the creative class*. New York: Routledge.
- Frank, S. & Steets, S. (2010). *Stadium Worlds: Football, Space and the Built Environment*. Oxon: Routledge.
- Franklin, A. (2010). *City life*. London: Sage.
- Gemeente Groningen. (1997). *Nieuwe doelen van het Europapark*. [copy archive record, 11 June 2013].
- Gemeente Groningen. (1997b). *Nieuwe doelen – locaties voor FC Groningen (B&W besluit)*. [copy archive record, 11 June 2013].
- Gemeente Groningen. (1999). *Startnotitie: Het nieuwe FC Groningen-stadion in het Europapark*. Found April 2013, on: <http://www.commissiemer.nl/advisering/afgerondeadviezen/1024>.
- Gemeente Groningen. (1999b). *B&W Besluit FC Groningen stadion (22-06-1997)*. [copy archive record, 11 June 2013].
- Gemeente Groningen. (2000). *Milieu Effect Rapport – Euroborg stadion in het Europapark*. Found April 2013, on: <http://www.commissiemer.nl/advisering/afgerondeadviezen/1024>.
- Gemeente Groningen. (2001). *Financieringsaanvraag Euroborg Exploitatiemaatschappij BV*. [copy archive record, 11 June 2013].
- Gemeente Groningen. (2009). *Groningen, stad op scherp – Structuurvisie 2008-2020*. Found July 2016, on: <http://www.crow.nl/documents/kpvv-beleidsdocumenten/groningen-stad-op-scherp-structuurvisie-2008-2020.aspx>.
- Gemeente Groningen. (2013). *Cultuurstad Groningen: Tegen de stroom in. Cultuurnota gemeente Groningen 2013-2016*. Found July 2016, on: <https://gemeente.groningen.nl/sites/default/files/cultuurnota-2013-2016.pdf>.
- Gemeente Groningen. (2016). *Bewonersworkshop Groenvisie Oostzijde Europark – 26-01-2016 [presentation]*. Groningen: Gemeente Groningen.

- Gemeente Groningen. (2016b). Rapportage sleutelprojecten. Found July 2016, on: <https://gemeente.groningen.nl/sites/default/files/8b.-vgr-2016-i-bijlage-br-raad-sleutelrapportage.pdf>.
- Gemeente Groningen. (2016c). Cultuurstad Groningen – City of talent. Kadernota cultuur gemeente Groningen 2017-2020. Found July 2016, on: <https://gemeente.groningen.nl/sites/default/files/kadernota-cultuur-2017-2020.pdf>.
- Griffiths, R. (1995). Cultural strategies and new modes of urban intervention. *Cities*, 12(4), 253-265.
- Harger, K., Humphreys, B. & Ross, A. (2015). Do new sports facilities attract new businesses? *West Virginia University – Department of Economics Working Paper Series*, 15-32, 1-14.
- Huang, H. & Humphreys, B. (2012). Do new sports facilities revitalize urban neighborhoods? Evidence from residential mortgage applications. *University of Alberta – Department of economics – Working paper 2012-05*, 1-38.
- Huang, H. & Humphreys, B. (2014). New sports facilities and residential housing markets. *Journal of Regional Science*, 54(4), 629-663.
- Humphreys, B. & Nowak, A. (2015). Professional sports facilities, teams and property values: Evidence from Seattle's Key Arena. *West Virginia University – Department of Economics Working Paper Series*, 15-06, 1-29.
- Jakob, D. (2012). The eventification of place: Urban development and experience consumption in Berlin and New York City. *European Urban and Regional Studies*, 20(4), 447-459.
- Jones, C. (2001). A level playing field? Sports stadium infrastructure and urban development in the United Kingdom. *Environment and Planning A*, 33, 845-861.
- Jones, C. (2002). The Stadium and economic development: Cardiff and the Millennium Stadium. *European Planning Studies*, 10(7), 819-829.
- Jones, C. (2002b). Public cost for private gain? Recent and proposed 'national' stadium developments in the UK, and commonalities with North America. *Area*, 2002, 34(2), 160-170.
- Kenniscentrum PPS. (2006). Publiek-Private Samenwerking bij gebiedsontwikkeling: wanneer wel en wanneer niet? Den Haag: Ministerie van Financiën en Kenniscentrum PPS.
- Klijn, E-H. & Teisman, G. (2002). Institutional and strategic barriers to Public-Private Partnership: an analysis of Dutch cases. Found 21 March 2015, on: <http://www.cati.org.pl/download/PPP/SWIAT/WPROWADZONE/PPP%20DUTCH%202002.pdf>.
- Klijn, E-H. & Twist, M. van. (2007). PPS in Nederland: retoriek of bloeiende praktijk? Found 21 March 2015, on: [repub.eur.nl/pub/11546/BSK-CDMN-2007-009.pdf](http://repub.eur.nl/pub/11546/BSK-CDMN-2007-009.pdf).

- Kloosterman, R. (2014). Cultural amenities: Large and small, mainstream and niche – A conceptual framework for cultural planning in an age of austerity. *European Planning Studies*, 22(12), 2510-2525.
- Kool, R. (2013). *Voor de club, voor de stad? Voetbalstadions in Nederland en hun rol in stedelijke ontwikkeling*. Nijmegen: Radboud Universiteit.
- Krabben, E. van der. (2011). Gebiedsontwikkeling in zorgelijke tijden. Kan de Nederlandse ruimtelijke ordening zich nog wel bedruipen? Nijmegen: Radboud Universiteit.
- Krabben, E. van der & Jacobs, H. (2013). Public land development as a strategic tool for redevelopment: Reflections on the Dutch experience. *Land Use Policy*, 30, 774-783.
- Krabben, E. van der, Lenferink, S., Martens, K., Portier, J. & Stoep, H. van der (2013). Onderzoek innovaties bij integrale gebiedsontwikkeling en knooppuntontwikkeling. Nijmegen: Radboud Universiteit Nijmegen, Faculteit der managementwetenschappen.
- Landry, C. (2000). *The creative city*. London: Earthscan.
- Landry, C. (2006). *The art of city making*. London: Earthscan.
- Lee, P. (2002). The economic and social justification for publicly financed stadia: The case of Vancouver's BC Place Stadium. *European Planning Studies*, 10(7), 861-873.
- Lent, D. van & Kammer, C. (2014). Meer theaters, minder bezoek. Found April 2015, on: <https://www.nrc.nl/nieuws/2014/05/15/meer-theaters-minder-bezoek-1379490-a544232>.
- Logan, J. R., Bridges Whaley, R., & Crowder, K. (1997). The character and consequences of the growth regimes: An assessment of 20 years of research. *Urban Affairs Review*, 32(5), 603-630.
- Major Stadia Taskforce (Perth). (2007). The stadium and the city – Volume 1. Making the case for a world class stadium in Perth. Found 16 February 2013, on: <http://www.dsr.wa.gov.au/1943>.
- Marketing Groningen. (2016). Marketing Groningen [web page]. Retrieved July 2016, on: <https://www.marketing groningen.nl/>.
- Marlet, G. (2009). *De aantrekkelijke stad*. Nijmegen: VOC.
- Mason, D. (2012). *Sports facilities and urban development: An introduction*. City, Culture and Society, 2012, 3: 165-167.
- Mercer, C. (2006). *Cultural planning for urban development and creative cities*. Vinddatum 20 maart 2013, op: [http://www.culturalplanning-oresund.net/PDF\\_activities/maj06/Shanghai\\_cultural\\_planning\\_paper.pdf](http://www.culturalplanning-oresund.net/PDF_activities/maj06/Shanghai_cultural_planning_paper.pdf)
- Miles, M. (2007). *Cities and cultures*. Oxon: Routledge.

- Miles, M., Hall, T. & Borden, I. (Eds.). (2004). *The city cultures reader*. London: Routledge.
- Ministerie van Onderwijs, Cultuur en Wetenschap. (2014). *Cultuur in beeld 2014*. Den Haag: Ministerie van Onderwijs, Cultuur en Wetenschap.
- Mulder, F. (2007). *Let me entertain you. De transformatie van het Nederlandse stadion*. Found 7 February 2013, on: <http://www.belvedere.nu/nieuwsbrief/nieuwsbrief4/download/scriptie.pdf>.
- Pacione, M. (2009). *Urban geography – A global perspective*. Abingdon: Routledge.
- PBL. (2014). *Bekostiging van publieke voorzieningen bij organische gebiedsontwikkeling*. Den Haag: Planbureau voor de Leefomgeving.
- PBL. (2014b). *Kiezen én delen - Strategieën voor een betere afstemming tussen verstedelijking en infrastructuur*. Den Haag: Planbureau voor de Leefomgeving.
- PBL & Urhahn Urban Design. (2012). *Vormgeven aan de spontane stad. Belemmeringen en kansen voor organische stedelijke herontwikkeling*. Den Haag: Planbureau voor de Leefomgeving.
- Pike, A., Rodríguez-Pose, A. & Tomaney, J. (2006). *Local and regional development*. Abingdon: Routledge.
- Poelman, F. (2016, 17 February). *De Velden in één klap volgebouwd*. *Dagblad van het Noorden*, p. 22.
- Propheter, G. (2012). *Are basketball arenas catalysts of economic development?* *Journal of Urban Affairs*, 34(4), 441-459.
- Richards, G. & Palmer, R. (2010). *Eventful cities: Cultural management and urban revitalization*. Oxford: Elsevier.
- RLI. (2014a). *De toekomst van de stad – De kracht van nieuwe verbindingen*. Den Haag: Raad voor de Leefomgeving en Infrastructuur.
- RLI. (2014b). *Kwaliteit zonder groei - Over de toekomst van de leefomgeving*. Den Haag: Raad voor de Leefomgeving en Infrastructuur.
- Roberts, P. (2000). *The evolution, definition and purpose of urban regeneration*. In: *Urban regeneration – A handbook*. (Eds. Roberts, P. & Sykes, H.). Wiltshire: Cromwell Press Limited.
- Robertson, K. (1995). *Downtown redevelopment strategies in the United States: An end-of-the-century assessment*. *Journal of the American Planning Association*, 61(4), 429-437.
- Santo, C. (2005). *The economic impact of sports stadiums: Recasting the analysis in context*. *Journal of Urban Affairs*, 27(2), 177–191.

- Saunders, M., Lewis, P., Thornhill, A., Booij, M. & Verckens, J.P. (2013). *Methoden en technieken van onderzoek*. Amsterdam: Pearson Benelux.
- Siegfried, J. & Zimbalist, A. (2000). The economics of sports facilities and their communities. *Journal of Economic Perspectives*, 14(3), 95-114.
- Stone, C. (1989). *Regime politics. Governing Atlanta 1946-1988*. Kansas: University Press of Kansas.
- Stouten, P. (2010). *Changing contexts in urban regeneration: 30 years of modernisation in Rotterdam*. Amsterdam: Techne Press.
- Swyngedouw, E., Moulaert, F. & Rodriguez, A. (2002). Neoliberal urbanization in Europe: Large-scale urban development projects and the New Urban Policy. *Antipode*, 34(3), 547–582.
- Thornley, A. (2002). Urban regeneration and sports stadia. *European Planning Studies*, 10(7), 813-818.
- Tiel, J. van. (n.d.). *Locatie Locatie Locatie – Kantorenpark Euroborg*. Groningen: Projectontwikkelcombinatie Europa Park c.v.
- Tu, C. (2005). How does a new sports stadium affect housing values? The case of FedEx Field. *Land Economics*, 81(3), 379–395.
- TU Delft, Deloitte & Akro Consult. (2011). *Samenwerking tussen publiek en privaat in een andere realiteit. Nieuwe modellen in theorie en praktijk*. Delft: Praktijkleerstoel Gebiedsontwikkeling TU Delft.
- Venema, E. (Producer), Schoenmaker, J. (Producer & Director). (2015). *FOX Sports DOC: Langs de rand van de afgrond* [Documentary]. Retrieved from <http://www.foxsports.nl/video/fox-sports-doc-langs-rand-van-afgrond/>.
- Verschuren, P. & Doorewaard, H. (2007). *Het ontwerpen van een onderzoek*. Den Haag: Boom Lemma uitgevers.
- VNPF. (2010). *In-sight – Poppodia 2009*. Amsterdam: VNPF.
- VNPF. (2011). *Poppodia in cijfers 2010*. Amsterdam: VNPF.
- VNPF. (2014). *Poppodia in cijfers 2013*. Amsterdam: VNPF.
- Voetbal International. (2013). *Voetbal International Seizoengids 2013-2014*. Gouda: Voetbal International BV.
- Voetbal International. (2014). *Voetbal International Seizoengids 2014-2015*. Gouda: Voetbal International BV.
- Voetbal International. (2015). *Voetbal International Seizoengids 2015-2016*. Gouda: Voetbal International BV.

Voetbal International. (2016). *Voetbal International Seizoengids 2016-2017*. Gouda: Voetbal International BV.

Young, G. (2008). *Reshaping planning with culture*. Aldershot: Ashgate Publishing Limited.

Zeeuw, F. de (2011). Gebiedsontwikkeling in Nederland: diepe val dwingt tot reflectie. *Rooilijn*, 44(6), 404-411.

#### Data quantitative analysis:

CBS. (1995-2015). Kerncijfers wijken en buurten [1995-2015]. Retrieved from: <https://www.cbs.nl/nl-nl/maatwerk/2003/52/kerncijfers-wijken-en-buurten-1995-2003> [1995-2003]; <https://www.cbs.nl/nl-nl/dossier/nederland-regionaal/wijk-en-buurtstatistieken/kerncijfers-wijken-en-buurten-2004-2016> [2004-2015].

Leefbaarometer. (2015). Leefbaarometer – Leefbaarheidsscores [1998-2012]. Data offline at time of writing – see separate data file.

#### Personal communication – Interviews:

- Harry Bouma (13 July 2016) – Noorderpoort College; Business platform Europapark.
- Ruurd de Boer (21 June 2016 – via e-mail) – Resident adjacent neighbourhood De Linie.
- Jelle Dijkstra (11 June 2013) – Groningen municipality: area manager Europapark.
- Ria Doppenberg (15 June 2016) – Resident apartment tower next to stadium; resident platform Stoker & Brander.
- Andrina Grootjans (16 June 2016) – Resident adjacent neighbourhood Oosterpoort; active in neighbourhood organisation Oosterpoort.
- Ellen van der Kley (16 June 2016) – Former estate agent Euroborg Offices.
- Jaap Kruijenga (12 July 2016) – Former facility manager FC Groningen.
- Willem Smink (23 June 2016) – Groningen municipality: former alderman Spatial/City Planning (1992-2006).
- Ben Veenbrink (10 June 2016) – Stadium director Euroborg NV; stadium consultant.
- Jan Voorrips (24 June 2016) – Project manager from developer Ballast Nedam.
- Marieke Zomer (29 June 2016) – Housing corporation Nijestee: Area coordinator adjacent neighbourhoods.

## Appendices

### Appendix 1: Calculation of impact radius

Calculation impact radius								
Study	Stadium	Factor population	Factor surface area	Factor capacity	Radius to population	Radius to surface area	Radius to capacity	Radius - Average
Ahlfeldt & Maennig (2010b)	Veldrom	15,3869	7,5865	0,5355	194,97	395,44	5.602,57	2.064,32
Ahlfeldt & Maennig (2010b)	Max-Schmeling-Arena	15,3869	7,5865	0,4656	194,97	395,44	6.442,95	2.344,45
Tu (2005)	FedEx Field	3,6996	10,6329	4,0269	1.087,53	378,39	999,12	821,68
Ahlfeldt & Maennig (2009)	Veldrom	0,6391	0,0936	0,5355	1.564,58	10.688,80	1.867,52	4.706,97
Ahlfeldt & Maennig (2009)	Max-Schmeling-Arena	0,6391	0,0936	0,4656	1.564,58	10.688,80	2.147,65	4.800,35
Ahlfeldt & Maennig (2012)	Allianz Arena	5,7018	2,6401	3,0731	768,18	1.659,00	1.425,26	1.284,14
Ahlfeldt & Kavetsos (2014)	New Wembley	35,6209	13,5631	4,1906	112,29	294,92	954,51	453,91
Ahlfeldt & Kavetsos (2014)	Emirates Stadium	35,6209	13,5631	2,8103	84,22	221,19	1.067,51	457,64
Feng & Humphreys (2008)	Nationwide Arena	3,2203	4,6821	0,9002	499,75	343,72	1.787,74	877,07
Feng & Humphreys (2008)	Crew Stadium	3,2203	4,6821	1,1641	499,75	343,72	1.382,52	742,00
Humphreys & Nowak (2015)	Key Arena	2,7549	3,1423	0,7715	584,17	512,15	2.085,96	1.060,76
Feng & Humphreys (2012)	Various	20,2977	161,7673	-	317,15	39,79	-	178,47
Harger, Humphreys & Ross (2015)	Various	4,9640	6,3377	1,9968	972,60	761,80	2.417,84	1.384,08
Huang & Humphreys (2014)	Various	18,6528	158,3602	-	258,84	30,49	-	144,66
		11,84	28,20	1,74	621,68	1.910,98	2.348,43	1.522,89

1574,96

1.627,03

Appendix 2 – Output tables descriptive statistics & t-tests

[see separate output document: ‘Quantitative analysis - Output document - Descriptives & Model I’]

## Appendix 3: Presentation tables Model I

### *Area development impact*

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	2729,401	16,868***	,000
Stedelijkheidsklasse_Gemeente	-176,844	-18,970***	,000
Omgevingsadressendichtheid	1,832	172,890***	,000
Bevolking_014_p	105,818	48,638***	,000
Bevolking_1524_p	60,949	27,562***	,000
Bevolking_2544_p	-,294	-,166	,868
Bevolking_4564_p	5,453	2,792***	,005
Allochtonen_NietWesters_p	22,870	20,815***	,000
Woningvoorraad	,261	23,297***	,000
Woningwaarde	-,005	-44,983***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	-250,262	-26,885***	,000
Inkomen_Inwoner_Samengevoegd	,056	28,488***	,000
Hogelinkomens_p	-39,954	-24,451***	,000
Lagelinkomens_p	-47,856	-23,600***	,000
Nietactieven_p	2,481	1,563	,118
Stadionbuurt_Dummy_1500m	-581,608	-13,470***	,000
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	-845,394	-10,077***	,000
Stadionbuurt_Dummy_1000m	-584,908	-10,275***	,000
Stadionbuurt_Dummy_2000m	-638,275	-17,454***	,000
Stadionbuurt_Dummy_2500m	-613,335	-19,097***	,000
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-672,392	-3,394***	,001
Stadionbuurt_Ring_500.1000m_pop	-291,084	-2,912***	,004
Stadionbuurt_Ring_1000.1500m_pop	-510,494	-6,599***	,000
Stadionbuurt_Ring_1500.2000m_pop	-341,688	-5,315***	,000
Stadionbuurt_Ring_2000.2500m_pop	-799,207	-18,978***	,000
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-121,615	-1,542	,123
Buffer2500mxAfstand	-,240	-6,825***	,000
Stadionbuurt_Dummy_2500m	-349,574	-7,190***	,000
Buffer2500mxAfstand2	-5,348E-5	-7,224***	,000
<b>Dependent variable: Bevolkingsdichtheid</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	6,060	153,696***	,000
Stedelijkheidsklasse_Gemeente	-,040	-17,577***	,000
Omgevingsadressendichtheid	-6,339E-5	-20,293***	,000
Bevolkingsdichtheid	7,053E-5	72,491***	,000
Bevolking_014_p	,025	47,235***	,000
Bevolking_1524_p	-,022	-40,601***	,000
Bevolking_2544_p	-,020	-46,876***	,000
Bevolking_4564_p	-,009	-17,966***	,000
Allochtonen_NietWesters_p	,002	8,471***	,000
Woningwaarde	-2,175E-6	-80,510***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	,527	309,438***	,000
Inkomen_Inwoner_Samengevoegd	-2,572E-6	-5,430***	,000
Hogelinkomens_p	-,011	-26,589***	,000
Lagelinkomens_p	-,019	-38,666***	,000
Nietactieven_p	,017	43,720***	,000
Stadionbuurt_Dummy_1500m	,045	4,320***	,000
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	,087	4,254***	,000
Stadionbuurt_Dummy_1000m	,048	3,470***	,001

Stadionbuurt_Dummy_2000m	,029	3,239***	,001
Stadionbuurt_Dummy_2500m	,011	1,399	,162
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-,132	-2,728***	,006
Stadionbuurt_Ring_500.1000m_pop	,020	,828	,408
Stadionbuurt_Ring_1000.1500m_pop	-,032	-1,669*	,095
Stadionbuurt_Ring_1500.2000m_pop	,009	,564	,573
Stadionbuurt_Ring_2000.2500m_pop	,028	2,673***	,008
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	,004	,198	,843
Buffer2500mxAfstand	3,499E-6	,409	,683
Stadionbuurt_Dummy_2500m	,014	1,188	,235
Buffer2500mxAfstand2	-6,306E-10	-,349	,727
<b>Dependent variable: Ln_Woningvoorraad</b> ***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level. Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise). For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	390,978	7,751***	,000
Stedelijkheidsklasse_Gemeente	-237,623	-86,452***	,000
Bevolkingsdichtheid	,177	172,890***	,000
Bevolking_014_p	-64,740	-101,319***	,000
Bevolking_1524_p	-5,452	-7,879***	,000
Bevolking_2544_p	29,611	55,093***	,000
Bevolking_4564_p	-9,578	-15,792***	,000
Allochtonen_NietWesters_p	12,351	36,381***	,000
Woningvoorraad	,090	25,913***	,000
Woningwaarde	,000	6,750***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	53,498	18,412***	,000
Inkomen_Inwoner_Samengevoegd	,004	6,876***	,000
Hogelinkomens_p	22,168	44,062***	,000
Lagelinkomens_p	15,028	23,818***	,000
Nietactieven_p	3,520	7,130***	,000
Stadionbuurt_Dummy_1500m	15,909	1,182	,237
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	-37,059	-1,419	,156
Stadionbuurt_Dummy_1000m	-24,269	-1,370	,171
Stadionbuurt_Dummy_2000m	19,962	1,748*	,080
Stadionbuurt_Dummy_2500m	25,780	2,568**	,010
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	390,735	6,331***	,000
Stadionbuurt_Ring_500.1000m_pop	-78,374	-2,516**	,012
Stadionbuurt_Ring_1000.1500m_pop	79,984	3,317***	,001
Stadionbuurt_Ring_1500.2000m_pop	49,068	2,449**	,014
Stadionbuurt_Ring_2000.2500m_pop	3,795	,288	,773
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	107,959	4,392***	,000
Buffer2500mxAfstand	-,040	-3,662***	,000
Stadionbuurt_Dummy_2500m	69,853	4,608***	,000
Buffer2500mxAfstand2	-8,955E-6	-3,879***	,000
<b>Dependent variable: Omgevingsadressendichtheid</b> ***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level. Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise). For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	158,912	50,511***	,000

Stedelijkheidsklasse_Gemeente	-6,128	-30,727***	,000
Omgevingsadressendichtheid	-,003	-11,386***	,000
Bevolkingsdichtheid	,004	46,045***	,000
Bevolking_014_p	1,064	11,820***	,000
Bevolking_1524_p	-,512	-11,184***	,000
Bevolking_2544_p	-,535	-14,349***	,000
Bevolking_4564_p	-,205	-4,430***	,000
Huishoudensgrootte	-18,933	-15,280***	,000
Allochtonen_NietWesters_p	-,181	-7,821***	,000
Woningvoorraad	-,004	-15,870***	,000
Woningwaarde	-6,224E-5	-32,057***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	5,384	17,457***	,000
Industrie_p	-,682	-23,014***	,000
Com.Dienstverlening_p	-,226	-7,574***	,000
Stadionbuurt_Dummy_1500m	1,942	2,237**	,025
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	4,773	2,873***	,004
Stadionbuurt_Dummy_1000m	4,803	4,250***	,000
Stadionbuurt_Dummy_2000m	2,449	3,317***	,001
Stadionbuurt_Dummy_2500m	1,847	2,824***	,005
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	9,063	2,281**	,023
Stadionbuurt_Ring_500.1000m_pop	4,248	1,970**	,049
Stadionbuurt_Ring_1000.1500m_pop	2,948	1,845*	,065
Stadionbuurt_Ring_1500.2000m_pop	1,817	1,405	,160
Stadionbuurt_Ring_2000.2500m_pop	,981	1,168	,243
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	8,743	5,360***	,000
Buffer2500mxAfstand	-,003	-4,615***	,000
Stadionbuurt_Dummy_2500m	5,978	5,897***	,000
Buffer2500mxAfstand2	-8,251E-7	-5,330***	,000
<b>Dependent variable: Stedelijk_Bg_Totaal_p</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	-42,154	-13,035***	,000
Stedelijkheidsklasse_Gemeente	2,144	11,554***	,000
Omgevingsadressendichtheid	,000	-1,108	,268
Bevolkingsdichtheid	,001	17,929***	,000
Bevolking_014_p	,178	4,376***	,000
Bevolking_1524_p	,142	3,345***	,001
Bevolking_2544_p	,076	2,146**	,032
Bevolking_4564_p	,528	13,810***	,000
Allochtonen_NietWesters_p	-,054	-2,031**	,042
Woningvoorraad	-,001	-6,829***	,000
Woningwaarde	-5,049E-5	-23,973***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	1,876	11,091***	,000
Inkomen_Inwoner_Samengevoegd	,001	23,295***	,000
Hogelinkomens_p	,171	5,788***	,000
Lagelinkomens_p	-,026	-,708	,479
Nietactieven_p	-,041	-1,387	,165
Leefbaarometer_Score_Voorzieningenniveau	,012	1,719*	,086
Leefbaarometer_Score_Woningvoorraad	-,136	-14,789***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,180	12,214***	,000
Leefbaarometer_Score_SocialeSamenhang	-,053	-5,268***	,000
Leefbaarometer_Score_Veiligheid	-,089	-9,046***	,000
Stadionbuurt_Dummy_1500m	-3,120	-4,356***	,000
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	-5,608	-4,039***	,000
Stadionbuurt_Dummy_1000m	-3,452	-3,671***	,000
Stadionbuurt_Dummy_2000m	-3,262	-5,355***	,000
Stadionbuurt_Dummy_2500m	-3,150	-5,868***	,000
<i>Model Ib – Distance rings</i>			

Stadionbuurt_Ring_0.500m_pop	,512	,158	,874
Stadionbuurt_Ring_500.1000m_pop	-4,299	-2,595***	,009
Stadionbuurt_Ring_1000.1500m_pop	-5,030	-3,931***	,000
Stadionbuurt_Ring_1500.2000m_pop	-5,909	-5,576***	,000
Stadionbuurt_Ring_2000.2500m_pop	-1,493	-2,135**	,033
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-5,244	-4,013***	,000
Buffer2500mxAfstand	,001	1,757*	,079
Stadionbuurt_Dummy_2500m	-3,905	-4,837***	,000
Buffer2500mxAfstand2	1,530E-7	1,252	,211
<b>Dependent variable: Leefbaarometer_Score_PubliekeRuimte</b> ***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level. Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise). For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	19,725	6,072***	,000
Stedelijkheidsklasse_Gemeente	-.810	-4,346***	,000
Omgevingsadressendichtheid	,009	36,375***	,000
Bevolkingsdichtheid	,001	7,723***	,000
Bevolking_014_p	-.736	-18,234***	,000
Bevolking_1524_p	-.577	-13,613***	,000
Bevolking_2544_p	-.227	-6,369***	,000
Bevolking_4564_p	-.694	-18,181***	,000
Allochtonen_NietWesters_p	-.215	-8,120***	,000
Woningvoorraad	-.004	-17,761***	,000
Woningwaarde	-1,714E-5	-8,030***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	3,036	18,008***	,000
Inkomen_Inwoner_Samengevoegd	-4,020E-5	-1,117	,264
Hogelinkomens_p	,175	5,913***	,000
Lagelinkomens_p	-.076	-2,040**	,041
Nietactieven_p	,302	10,334***	,000
Leefbaarometer_Score_PubliekeRuimte	,012	1,719*	,086
Leefbaarometer_Score_Woningvoorraad	-.093	-10,142***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,040	2,695***	,007
Leefbaarometer_Score_SocialeSamenhang	-.002	-,163	,870
Leefbaarometer_Score_Veiligheid	-.035	-3,522***	,000
Stadionbuurt_Dummy_1500m	,761	1,061	,289
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	3,208	2,307**	,021
Stadionbuurt_Dummy_1000m	1,318	1,400	,162
Stadionbuurt_Dummy_2000m	,254	,416	,678
Stadionbuurt_Dummy_2500m	-1,071	-1,990**	,047
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	7,062	2,179**	,029
Stadionbuurt_Ring_500.1000m_pop	1,473	,888	,375
Stadionbuurt_Ring_1000.1500m_pop	,548	,427	,669
Stadionbuurt_Ring_1500.2000m_pop	2,376	2,238**	,025
Stadionbuurt_Ring_2000.2500m_pop	-3,612	-5,163***	,000
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	5,135	3,926***	,000
Buffer2500mxAfstand	-.003	-5,204***	,000
Stadionbuurt_Dummy_2500m	1,706	2,110**	,035
Buffer2500mxAfstand2	-5,627E-7	-4,599***	,000
<b>Dependent variable: Leefbaarometer_Voorzieningenniveau</b> ***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level. Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise). For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.

<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	-116,222	-50,642***	,000
Stedelijkheidsklasse_Gemeente	4,987	36,922***	,000
Omgevingsadressendichtheid	,001	6,641***	,000
Bevolkingsdichtheid	-,001	-22,951***	,000
Bevolking_014_p	,638	21,196***	,000
Bevolking_1524_p	,604	19,122***	,000
Bevolking_2544_p	1,101	43,128***	,000
Bevolking_4564_p	,968	34,576***	,000
Allochtonen_NietWesters_p	-,122	-6,157***	,000
Woningvoorraad	-,002	-14,661***	,000
Woningwaarde	5,554E-5	35,791***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	1,392	10,988***	,000
Inkomen_Inwoner_Samengevoegd	,000	-8,975***	,000
Hogelinkomens_p	,159	7,159***	,000
Lagelinkomens_p	,520	18,697***	,000
Nietactieven_p	-,244	-11,172***	,000
Leefbaarometer_Score_PubliekeRuimte	-,076	-14,789***	,000
Leefbaarometer_Score_Voorzieningenniveau	-,052	-10,142***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,321	29,519***	,000
Leefbaarometer_Score_SocialeSamenhang	,127	16,987***	,000
Leefbaarometer_Score_Veiligheid	,147	20,089***	,000
Stadionbuurt_Dummy_1500m	1,465	2,731***	,006
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	2,875	2,765***	,006
Stadionbuurt_Dummy_1000m	1,319	1,872*	,061
Stadionbuurt_Dummy_2000m	,602	1,318	,187
Stadionbuurt_Dummy_2500m	1,025	2,548**	,011
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	5,891	2,430**	,015
Stadionbuurt_Ring_500.1000m_pop	,899	,724	,469
Stadionbuurt_Ring_1000.1500m_pop	-1,105	-1,152	,249
Stadionbuurt_Ring_1500.2000m_pop	1,791	2,254**	,024
Stadionbuurt_Ring_2000.2500m_pop	1,113	2,126**	,034
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	,167	,171	,864
Buffer2500mxAfstand	,000	,961	,337
Stadionbuurt_Dummy_2500m	,359	,593	,553
Buffer2500mxAfstand2	1,351E-7	1,475	,140
<b>Dependent variable: Leefbaarometer_Woningvoorraad</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

## Economic impact

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	2,523	36,677***	,000
Stedelijkheidsklasse_Gemeente	,050	12,565***	,000
Omgevingsadressendichtheid	,000	18,412***	,000
Bevolkingsdichtheid	-4,599E-5	-26,885***	,000
Bevolking_014_p	-,033	-35,173***	,000
Bevolking_1524_p	,027	28,230***	,000
Bevolking_2544_p	,014	17,849***	,000
Bevolking_4564_p	-,021	-25,073***	,000
Allochtonen_NietWesters_p	-,006	-13,454***	,000
Woningvoorraad	,001	222,142***	,000
Woningwaarde	-3,383E-7	-7,105***	,000
Inkomen_Inwoner_Samengevoegd	7,089E-5	88,961***	,000
Hogelinkomens_p	,006	8,054***	,000
Lagelinkomens_p	,006	6,789***	,000
Nietactieven_p	-,015	-22,656***	,000
Stadionbuurt_Dummy_1500m	-,068	-3,652***	,000
<i>Model Ia – Distance buffers</i>			

Stadionbuurt_Dummy_500m	-,176	-4,884***	,000
Stadionbuurt_Dummy_1000m	-,095	-3,880***	,000
Stadionbuurt_Dummy_2000m	-,034	-2,185**	,029
Stadionbuurt_Dummy_2500m	,006	,418	,676
<b>Model Ib – Distance rings</b>			
Stadionbuurt_Ring_0.500m_pop	-,131	-1,543	,123
Stadionbuurt_Ring_500.1000m_pop	-,003	-,078	,938
Stadionbuurt_Ring_1000.1500m_pop	-,064	-1,938*	,053
Stadionbuurt_Ring_1500.2000m_pop	,002	,081	,935
Stadionbuurt_Ring_2000.2500m_pop	,033	1,824*	,068
<b>Model Ic – Distance interaction variables</b>			
Stadionbuurt_Dummy_2500m	-,205	-6,068***	,000
Buffer2500mxAfstand	,000	6,835***	,000
Stadionbuurt_Dummy_2500m	-,097	-4,632***	,000
Buffer2500mxAfstand2	2,082E-8	6,550***	,000
<b>Dependent variable: Bedrijfsvestigingen_Samengevoegd_Klassen</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<b>Model Ia – 1500m buffer (base model)</b>			
(Constant)	5,737	86,397***	,000
Stedelijkheidsklasse_Gemeente	,016	4,508***	,000
Omgevingsadressendichtheid	-9,269E-5	-18,336***	,000
Bevolkingsdichtheid	,000	127,672***	,000
Bevolking_014_p	,027	18,715***	,000
Bevolking_1524_p	-,005	-5,498***	,000
Bevolking_2544_p	-,010	-14,581***	,000
Bevolking_4564_p	,001	1,470	,142
Huishoudensgrootte	-,581	-28,253***	,000
Allochtonen_NietWesters_p	-,009	-21,008***	,000
Woningvoorraad	,000	-48,259***	,000
Woningwaarde	-2,434E-6	-53,838***	,000
Inkomen_Inwoner_Samengevoegd	-1,002E-5	-12,965***	,000
Hogelinkomens_p	-,013	-19,238***	,000
Lagelinkomens_p	-,021	-26,256***	,000
Nietactieven_p	-,001	-1,489	,137
Bedrijfsvestigingen_Samengevoegd_Klassen	,330	90,043***	,000
Stadionbuurt_Dummy_1500m	,029	1,778*	,075
<b>Model Ia – Distance buffers</b>			
Stadionbuurt_Dummy_500m	,080	2,518**	,012
Stadionbuurt_Dummy_1000m	,122	5,620***	,000
Stadionbuurt_Dummy_2000m	,003	,233	,816
Stadionbuurt_Dummy_2500m	-,010	-,788	,431
<b>Model Ib – Distance rings</b>			
Stadionbuurt_Ring_0.500m_pop	,236	3,164***	,002
Stadionbuurt_Ring_500.1000m_pop	-,004	-,094	,925
Stadionbuurt_Ring_1000.1500m_pop	,071	2,396**	,017
Stadionbuurt_Ring_1500.2000m_pop	,045	1,814*	,070
Stadionbuurt_Ring_2000.2500m_pop	-,065	-4,003***	,000
<b>Model Ic – Distance interaction variables</b>			
Stadionbuurt_Dummy_2500m	,238	7,917***	,000
Buffer2500mxAfstand	,000	-9,038***	,000
Stadionbuurt_Dummy_2500m	,138	7,421***	,000
Buffer2500mxAfstand2	-3,002E-8	-10,629***	,000
<b>Dependent variable: Ln_Bedrijfsmotorvoertuigen_km2</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
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	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	-256035,336	-44,397***	,000
Stedelijkheidsklasse_Gemeente	1249,078	3,699***	,000
Omgevingsadressendichtheid	3,143	6,750***	,000
Bevolkingsdichtheid	-6,417	-44,983***	,000
Bevolking_014_p	3377,591	42,805***	,000
Bevolking_1524_p	1804,527	22,548***	,000
Bevolking_2544_p	-1075,057	-16,865***	,000
Bevolking_4564_p	751,943	10,670***	,000
Allochtonen_NietWesters_p	313,158	7,868***	,000
Woningvoorraad	-5,404	-13,300***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	-2401,834	-7,105***	,000
Inkomen_Inwoner_Samengevoegd	8,304	131,749***	,000
Hogelinkomens_p	6412,202	120,020***	,000
Lagelinkomens_p	4431,763	62,081***	,000
Nietactieven_p	-617,276	-10,779***	,000
Stadionbuurt_Dummy_1500m	-9120,729	-5,841***	,000
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	-8074,319	-2,664***	,008
Stadionbuurt_Dummy_1000m	-7413,647	-3,605***	,000
Stadionbuurt_Dummy_2000m	-9576,407	-7,230***	,000
Stadionbuurt_Dummy_2500m	-9535,628	-8,191***	,000
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-5679,067	-,792	,428
Stadionbuurt_Ring_500.1000m_pop	-10419,915	-2,881***	,004
Stadionbuurt_Ring_1000.1500m_pop	-9717,667	-3,471***	,001
Stadionbuurt_Ring_1500.2000m_pop	-8796,845	-3,782***	,000
Stadionbuurt_Ring_2000.2500m_pop	-9796,595	-6,414***	,000
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-14328,812	-5,023***	,000
Buffer2500mxAfstand	2,337	1,840*	,066
Stadionbuurt_Dummy_2500m	-13522,397	-7,689***	,000
Buffer2500mxAfstand2	,001	3,024***	,002
<b>Dependent variable: Woningwaarde</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	24389,887	77,455***	,000
Stedelijkheidsklasse_Gemeente	-213,219	-11,228***	,000
Omgevingsadressendichtheid	,180	6,876***	,000
Bevolkingsdichtheid	,231	28,488***	,000
Bevolking_014_p	-159,895	-35,842***	,000
Bevolking_1524_p	-69,883	-15,478***	,000
Bevolking_2544_p	-172,465	-48,864***	,000
Bevolking_4564_p	46,317	11,677***	,000
Allochtonen_NietWesters_p	24,270	10,836***	,000
Woningvoorraad	-,967	-42,857***	,000
Woningwaarde	,026	131,749***	,000
Hogelinkomens_p	-94,283	-28,426***	,000
Lagelinkomens_p	-282,068	-70,805***	,000
Nietactieven_p	27,390	8,493***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	1594,914	88,961***	,000
Stadionbuurt_Dummy_1500m	1055,178	12,015***	,000
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	951,020	5,571***	,000
Stadionbuurt_Dummy_1000m	1041,910	9,001***	,000
Stadionbuurt_Dummy_2000m	1110,754	14,924***	,000
Stadionbuurt_Dummy_2500m	1034,321	15,814***	,000
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	1110,980	2,755***	,006
Stadionbuurt_Ring_500.1000m_pop	1428,114	7,022***	,000
Stadionbuurt_Ring_1000.1500m_pop	1225,454	7,784***	,000
Stadionbuurt_Ring_1500.2000m_pop	1081,163	8,265***	,000

Stadionbuurt_Ring_2000.2500m_pop	897,534	10,451***	,000
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	1777,577	11,086***	,000
Buffer2500mxAfstand	-,363	-5,077***	,000
Stadionbuurt_Dummy_2500m	1436,913	14,543***	,000
Buffer2500mxAfstand2	-8,189E-5	-5,435***	,000
<b>Dependent variable: <i>Inkomen_Inwoner_Samengevoegd</i></b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	4,329	265,347***	,000
Stedelijkheidsklasse_Gemeente	-,008	-7,042***	,000
Omgevingsadressendichtheid	6,007E-5	40,989***	,000
Bevolkingsdichtheid	-1,068E-5	-23,173***	,000
Bevolking_014_p	,006	24,157***	,000
Bevolking_1524_p	,010	39,217***	,000
Bevolking_2544_p	-,008	-40,702***	,000
Bevolking_4564_p	,004	17,685***	,000
Allochtonen_NietWesters_p	-,007	-54,244***	,000
Woningvoorraad	-1,014E-5	-7,809***	,000
Woningwaarde	1,127E-6	97,597***	,000
Inkomen_Inwoner_Samengevoegd	-8,518E-6	-37,641***	,000
Lagelinkomens_p	-,037	-203,071***	,000
Nietactieven_p	-,007	-36,958***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	,022	20,760***	,000
Stadionbuurt_Dummy_1500m	-,015	-3,096***	,002
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	-,058	-6,000***	,000
Stadionbuurt_Dummy_1000m	-,026	-4,024***	,000
Stadionbuurt_Dummy_2000m	-,010	-2,381**	,017
Stadionbuurt_Dummy_2500m	-,009	-2,438**	,015
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-,134	-5,848***	,000
Stadionbuurt_Ring_500.1000m_pop	-,069	-5,958***	,000
Stadionbuurt_Ring_1000.1500m_pop	-,004	-,464	,643
Stadionbuurt_Ring_1500.2000m_pop	-,011	-1,477	,140
Stadionbuurt_Ring_2000.2500m_pop	,005	,984	,325
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-,068	-7,484***	,000
Buffer2500mxAfstand	2,884E-5	7,108***	,000
Stadionbuurt_Dummy_2500m	-,035	-6,229***	,000
Buffer2500mxAfstand2	5,270E-9	6,157***	,000
<b>Dependent variable: <i>Ln_Hogelinkomens_p</i></b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	4,022	656,178***	,000
Stedelijkheidsklasse_Gemeente	,021	46,333***	,000
Omgevingsadressendichtheid	1,683E-5	26,337***	,000
Bevolkingsdichtheid	-3,892E-6	-19,567***	,000
Bevolking_014_p	,001	5,106***	,000
Bevolking_1524_p	,006	50,828***	,000
Bevolking_2544_p	-,007	-86,887***	,000
Bevolking_4564_p	-,003	-28,454***	,000
Allochtonen_NietWesters_p	-,001	-15,152***	,000
Woningvoorraad	-4,172E-6	-7,444***	,000

Woningwaarde	3,344E-7	62,298***	,000
Inkomen_Inwoner_Samengevoegd	-7,742E-6	-81,906***	,000
HogelInkomens_p	-,014	-227,050***	,000
Nietactieven_p	,006	76,271***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	,006	13,048***	,000
Stadionbuurt_Dummy_1500m	,006	2,573**	,010
<b>Model Ia – Distance buffers</b>			
Stadionbuurt_Dummy_500m	,003	,835	,403
Stadionbuurt_Dummy_1000m	,007	2,341**	,019
Stadionbuurt_Dummy_2000m	,003	1,526	,127
Stadionbuurt_Dummy_2500m	,001	,741	,458
<b>Model Ib – Distance rings</b>			
Stadionbuurt_Ring_0.500m_pop	-,006	-,606	,544
Stadionbuurt_Ring_500.1000m_pop	,009	1,739*	,082
Stadionbuurt_Ring_1000.1500m_pop	,003	,849	,396
Stadionbuurt_Ring_1500.2000m_pop	,009	2,661***	,008
Stadionbuurt_Ring_2000.2500m_pop	-,003	-1,546	,122
<b>Model Ic – Distance interaction variables</b>			
Stadionbuurt_Dummy_2500m	-,001	-,185	,853
Buffer2500mxAfstand	9,354E-7	,534	,593
Stadionbuurt_Dummy_2500m	-,002	-,705	,481
Buffer2500mxAfstand2	5,891E-10	1,595	,111
<b>Dependent variable: Ln_LagelInkomens_p</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

## Socio-cultural impact

Variables	Model I – Non year specific		
	B	t	Sig.
<b>Model Ia – 1500m buffer (base model)</b>			
(Constant)	5,450	105,579***	,000
Stedelijkheidsklasse_Gemeente	-,009	-3,068***	,002
Omgevingsadressendichtheid	-2,095E-5	-5,391***	,000
Bevolkingsdichtheid	3,419E-6	2,926***	,003
Bevolking_014_p	-,003	-5,237***	,000
Bevolking_1524_p	-,001	-1,296	,195
Bevolking_2544_p	,001	1,713*	,087
Bevolking_4564_p	-,002	-3,377***	,001
Allochtonen_NietWesters_p	-,009	-21,880***	,000
Woningvoorraad	-8,723E-6	-2,648***	,008
Woningwaarde	2,978E-7	8,773***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	,003	1,081	,280
Inkomen_Inwoner_Samengevoegd	1,293E-6	2,262**	,024
HogelInkomens_p	,000	-,234	,815
LagelInkomens_p	-,003	-4,633***	,000
Nietactieven_p	,000	,772	,440
Leefbaarometer_Score_PubliekeRuimte	,003	23,928***	,000
Leefbaarometer_Score_Voorzieningenniveau	,002	20,730***	,000
Leefbaarometer_Score_Woningvoorraad	,008	53,077***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,015	65,617***	,000
Leefbaarometer_Score_SocialeSamenhang	,004	25,865***	,000
Leefbaarometer_Score_Veiligheid	,010	60,735***	,000
Stadionbuurt_Dummy_1500m	-,066	-5,836***	,000
<b>Model Ia – Distance buffers</b>			
Stadionbuurt_Dummy_500m	-,050	-2,267**	,023
Stadionbuurt_Dummy_1000m	-,052	-3,466***	,001
Stadionbuurt_Dummy_2000m	-,067	-6,952***	,000
Stadionbuurt_Dummy_2500m	-,057	-6,659***	,000
<b>Model Ib – Distance rings</b>			
Stadionbuurt_Ring_0.500m_pop	-,238	-4,627***	,000
Stadionbuurt_Ring_500.1000m_pop	-,054	-2,047**	,041
Stadionbuurt_Ring_1000.1500m_pop	-,040	-1,977**	,048
Stadionbuurt_Ring_1500.2000m_pop	-,072	-4,246***	,000

Stadionbuurt_Ring_2000.2500m_pop	-,049	-4,382***	,000
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-,071	-3,421***	,001
Buffer2500mxAfstand	6,923E-6	,751	,453
Stadionbuurt_Dummy_2500m	-,058	-4,544***	,000
Buffer2500mxAfstand2	2,986E-10	,154	,878
<b>Dependent variable: Leefbaarometer_Score_Klassen</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	10,805	7,149***	,000
Stedelijkheidsklasse_Gemeente	-1,824	-21,250***	,000
Omgevingsadressendichtheid	,000	3,841***	,000
Bevolkingsdichtheid	,001	22,743***	,000
Bevolking_014_p	,111	5,862***	,000
Bevolking_1524_p	,273	13,831***	,000
Bevolking_2544_p	-,437	-26,786***	,000
Bevolking_4564_p	-,082	-4,588***	,000
Allochtonen_NietWesters_p	-,993	-97,130***	,000
Woningvoorraad	,000	-4,101***	,000
Woningwaarde	1,007E-5	10,147***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	1,153	14,662***	,000
Inkomen_Inwoner_Samengevoegd	,000	24,253***	,000
Hogelinkomens_p	,483	35,995***	,000
Lagelinkomens_p	-,129	-7,417***	,000
Nietactieven_p	-,210	-15,497***	,000
Leefbaarometer_Score_PubliekeRuimte	,039	12,214***	,000
Leefbaarometer_Score_Voorzieningenniveau	,009	2,695***	,007
Leefbaarometer_Score_Woningvoorraad	,124	29,519***	,000
Leefbaarometer_Score_SocialeSamenhang	,028	6,004***	,000
Leefbaarometer_Score_Veiligheid	,158	35,295***	,000
Stadionbuurt_Dummy_1500m	-,074	-,221	,825
<i>Model Ia – Distance buffers</i>			
Stadionbuurt_Dummy_500m	,705	1,089	,276
Stadionbuurt_Dummy_1000m	-,227	-,519	,604
Stadionbuurt_Dummy_2000m	-,002	-,008	,994
Stadionbuurt_Dummy_2500m	-,596	-2,380**	,017
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-,614	-,407	,684
Stadionbuurt_Ring_500.1000m_pop	,700	,906	,365
Stadionbuurt_Ring_1000.1500m_pop	-1,137	-1,905*	,057
Stadionbuurt_Ring_1500.2000m_pop	-,482	-,975	,330
Stadionbuurt_Ring_2000.2500m_pop	-,698	-2,141**	,032
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-,251	-,412	,680
Buffer2500mxAfstand	,000	-,620	,535
Stadionbuurt_Dummy_2500m	-,533	-1,415	,157
Buffer2500mxAfstand2	-1,279E-8	-,224	,822
<b>Dependent variable: Leefbaarometer_Bevokingssamenstelling</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<i>Model Ia – 1500m buffer (base model)</i>			
(Constant)	79,606	36,813***	,000
Stedelijkheidsklasse_Gemeente	,245	1,916*	,055
Omgevingsadressendichtheid	,001	7,111***	,000
Bevolkingsdichtheid	-,001	-17,370***	,000

Bevolking_014_p	-.541	-19,530***	,000
Bevolking_1524_p	-1,425	-51,816***	,000
Bevolking_2544_p	-1,032	-44,113***	,000
Bevolking_4564_p	-1,157	-45,963***	,000
Allochtonen_NietWesters_p	,074	4,076***	,000
Woningvoorraad	,001	4,953***	,000
Woningwaarde	3,500E-5	24,187***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	-1,888	-16,294***	,000
Inkomen_Inwoner_Samengevoegd	,000	-6,566***	,000
Hogelinkomens_p	,109	5,342***	,000
Lagelinkomens_p	,258	10,050***	,000
Nietactieven_p	-.074	-3,685***	,000
Leefbaarometer_Score_PubliekeRuimte	-.025	-5,268***	,000
Leefbaarometer_Score_Voorzieningenniveau	-.001	-,163	,870
Leefbaarometer_Score_Woningvoorraad	,107	16,987***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,061	6,004***	,000
Leefbaarometer_Score_Veiligheid	-.019	-2,746***	,006
Stadionbuurt_Dummy_1500m	,015	,031	,975
<b>Model Ia – Distance buffers</b>			
Stadionbuurt_Dummy_500m	-.013	-.013	,989
Stadionbuurt_Dummy_1000m	-.855	-1,323	,186
Stadionbuurt_Dummy_2000m	,451	1,077	,281
Stadionbuurt_Dummy_2500m	,519	1,406	,160
<b>Model Ib – Distance rings</b>			
Stadionbuurt_Ring_0.500m_pop	,001	,000	1,000
Stadionbuurt_Ring_500.1000m_pop	-1,706	-1,498	,134
Stadionbuurt_Ring_1000.1500m_pop	,373	,424	,671
Stadionbuurt_Ring_1500.2000m_pop	,606	,831	,406
Stadionbuurt_Ring_2000.2500m_pop	,890	1,853*	,064
<b>Model Ic – Distance interaction variables</b>			
Stadionbuurt_Dummy_2500m	-2,101	-2,339**	,019
Buffer2500mxAfstand	,001	3,199***	,001
Stadionbuurt_Dummy_2500m	-.940	-1,693*	,090
Buffer2500mxAfstand2	2,957E-7	3,520***	,000
<b>Dependent variable: Leefbaarometer_SocialeSamenhang</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all run separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Variables	Model I – Non year specific		
	B	t	Sig.
<b>Model Ia – 1500m buffer (base model)</b>			
(Constant)	40,049	17,777***	,000
Stedelijkheidsklasse_Gemeente	6,399	52,284***	,000
Omgevingsadressendichtheid	-.004	-22,212***	,000
Bevolkingsdichtheid	-2,498E-5	-,486	,627
Bevolking_014_p	,286	10,092***	,000
Bevolking_1524_p	-1,053	-36,525***	,000
Bevolking_2544_p	-.566	-23,021***	,000
Bevolking_4564_p	-.786	-29,880***	,000
Allochtonen_NietWesters_p	-.101	-5,465***	,000
Woningvoorraad	,001	3,886***	,000
Woningwaarde	-1,337E-5	-8,974***	,000
Bedrijfsvestigingen_Samengevoegd_Klassen	-.681	-5,750***	,000
Inkomen_Inwoner_Samengevoegd	,000	5,488***	,000
Hogelinkomens_p	-.091	-4,400***	,000
Lagelinkomens_p	,122	4,662***	,000
Nietactieven_p	-.117	-5,717***	,000
Leefbaarometer_Score_PubliekeRuimte	-.044	-9,046***	,000
Leefbaarometer_Score_Voorzieningenniveau	-.017	-3,522***	,000
Leefbaarometer_Score_Woningvoorraad	,128	20,089***	,000
Leefbaarometer_Score_Bevolkingssamenstelling	,355	35,295***	,000
Leefbaarometer_Score_SocialeSamenhang	-.019	-2,746***	,006
Stadionbuurt_Dummy_1500m	-1,814	-3,623***	,000
<b>Model Ia – Distance buffers</b>			
Stadionbuurt_Dummy_500m	-3,700	-3,812***	,000
Stadionbuurt_Dummy_1000m	-2,070	-3,148***	,002
Stadionbuurt_Dummy_2000m	-1,662	-3,900***	,000

Stadionbuurt_Dummy_2500m	-1,177	-3,134***	,002
<i>Model Ib – Distance rings</i>			
Stadionbuurt_Ring_0.500m_pop	-6,423	-2,838***	,005
Stadionbuurt_Ring_500.1000m_pop	-2,572	-2,220**	,026
Stadionbuurt_Ring_1000.1500m_pop	,318	,355	,723
Stadionbuurt_Ring_1500.2000m_pop	-3,276	-4,420***	,000
Stadionbuurt_Ring_2000.2500m_pop	-,304	-,622	,534
<i>Model Ic – Distance interaction variables</i>			
Stadionbuurt_Dummy_2500m	-3,726	-4,078***	,000
Buffer2500mxAfstand	,001	3,060***	,002
Stadionbuurt_Dummy_2500m	-2,527	-4,476***	,000
Buffer2500mxAfstand2	2,736E-7	3,201***	,001
<b>Dependent variable: Leefbaarometer_Veiligheid</b>			
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.			
Notes: to save space, the other predictors are only presented for the base model (1500m buffer). The other models are in fact all <b>run</b> separately, but for convenience the relevant stadium variables are presented here together in this table. The coefficients for the other predictors throughout the different models can slightly differ, but not significantly (noted if otherwise).			
For all the full models with all independent variables included, see <a href="#">appendix</a> .			

Appendix 4: Output tables & specifications Model I

*[see separate output document: 'Quantitative analysis - Output document - Descriptives & Model I']*

## Appendix 5: Output tables & specifications Model II

*[see separate output documents: 'Quantitative analysis - Output document - Descriptives & Model I', and 'Quantitative analysis - Output document - Model II-2 & II-3']*

## Appendix 6: Model II analyses other indicators excluded from text

### **Area development**

#### *Population density*

Besides the address density, but related to it, a somewhat more indirect indicator for area development is population density. Looking into the Model II coefficients for the distance rings and buffers, it becomes clear that the stadium areas in general have lower population densities compared to the other 'buurten', which is similar to the outcomes of Model I. What also comes forward, is that closer to the stadia the post-development observations generally have lower population densities than the pre-development observations (larger negative coefficients), while this is the other way around taking a wider range from the stadia. The buffers show such a picture up until 1500 metres, after which it is reversed for the two largest buffers. For the distance rings, only the 1000-1500 and 2000-2500 metre rings show such higher densities for post-development, while the other rings score worse, compared to pre development. What this indicates, is that in areas close to the eventual stadium location population density tends to be lower in places when a stadium is already in place, compared to before the development; while somewhat more remote this seems the other way around. However the uneven distribution between the pre and post development groups may also influence this; and a viable explanation for this pattern cannot be given based on these data alone – and should be inspected more closely with the model variations.

The distance interaction variables confirm a distance effect, but one that in the first instance seems somewhat contradictory to the outcomes found for the buffers and rings. Negative parameters for both pre and post development indicate that, overall, when moving away from the stadium locations, population density seems to decrease; and as the squared variants indicate in a non-linear fashion. So, while when comparing pre and post impact areas there seems to be a decline closer to the stadium and an increase further away, population densities for stadium areas in general seem to decrease when moving further away from the stadia. That means, population density would be higher close to the stadium locations, and lower farther away in the impact zone – both pre and post development. This pattern is not reflected in the distance buffers, as described, and only partially in the distance rings. A possible explanation for this could be in line with that for address densities, and as described in Model I; as stadium are rather often located on the outskirts of cities that could mean that outwardly farther away from the stadium and thus city, densities generally tend to decrease. (...) Significant coefficients for both pre- and post-development suggest that this is not so much a stadium impact, as it is related to characteristics of these locations in general. The smaller coefficient for the post-development variable, could indicate that this distance-decaying pattern has in fact become smaller after a stadium development, which could then imply that possibly the larger areas around the stadia have generally been further developed – i.e. after the stadium development, population density decreases at a lower rate outwardly directed. To really relate this to the stadia, based on these data, however seems a little far-fetched. Overall, the model variations should be able to provide a somewhat more balanced and true outcome comparing pre and post development in this respect, and with that perhaps the role of the stadiums. However, while the post development parameters relative those for pre development seem to increase with distance, the difference in population density for those groups separately relative to the non-stadium areas increases when moving further away from the stadium.

The two model variations could thus shed some more light on the possible impact of stadia on population densities, being an indicator for area development. Overall however, the two alternate models do not show many remarkable differences compared to the base Model II. One difference is that the coefficients especially for the '2000 stadiums' model are overall somewhat smaller than for the base Model II, as well as the short-term model. So looking only at the recent stadia, this reveals a smaller difference in population density from non-stadium areas, compared to the base Model II. That could indicate that the recent stadium areas are either situated in more densely populated areas, or that around those stadia population density has somewhat increased. Looking at the differences between pre- and post-development, the latter might perhaps be the case as well. Apart from the smallest, the impact buffers show that the stadium areas have a larger population density after the development than before, both for the recent stadia and a 5-year impact period. A comparable outcome can be found in

some of the distance rings, albeit somewhat less clear. So, although still clearly underperforming compared to (similar) non-stadium areas, this suggests that with the recent developments of stadia a certain effect on population density in the surrounding areas can be seen – and one that can already be observed in the first years after development. Whether this can actually be ascribed to the stadium developments, or just the development of the area in general, cannot be concluded per se, and may of course differ per case.

The distance interaction variables for the two variations are very similar to the base Model II. Negative coefficients indicate population density decreases when moving farther away from the stadium, for both also in a slightly non-linear pattern. As concluded before, this probably has something to do with stadium locations within the city. The fact that both the pre and the post development variables are significant here, suggests that this is indeed not predominantly a stadium impact, but more so related to the location in general. Interestingly, for the 2000 stadiums this pattern decreases from pre to post development, while on the short term it seemingly increases; that might indicate a certain effect of the stadia, but on top of that, could be an indication that in the short term developments potentially increasing population densities are more concentrated around the stadiums (stronger relative decline moving further away), while taking the whole impact period of (recent) stadia this effect is somewhat more levelled off post stadium development, possibly indicating population density-increasing developments in a somewhat wider area. Nevertheless, this might also be a bit far-fetched, and is more a thought experiment than that it really is a sound reflection of the complex truth/reality.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-481,741	-1,571	,116	-475,578	-1,549	,121	-518,941	-1,723*	,085
Buffer 500m – Post	-874,510	-	,000	-561,857	-2,635***	,008	-658,173	-2,609***	,009
		10,034***							
Buffer 1000m – Pre	-426,656	-2,162**	,031	-405,894	-2,056**	,040	-501,067	-2,586**	,010
Buffer 1000m – Post	-598,718	-	,000	-107,726	-,698	,485	-332,812	-2,004**	,045
		10,103***							
Buffer 1500m – Pre	-564,530	-4,174***	,000	-528,645	-3,905***	,000	-637,555	-4,796***	,000
Buffer 1500m – Post	-583,394	-	,000	-423,728	-3,993***	,000	-533,087	-4,660***	,000
		12,904***							
Buffer 2000m – Pre	-681,371	-6,181***	,000	-621,591	-5,631***	,000	-735,659	-6,783***	,000
Buffer 2000m – Post	-633,599	-	,000	-517,289	-5,983***	,000	-624,996	-6,714***	,000
		16,556***							
Buffer 2500m – Pre	-762,831	-8,048***	,000	-692,871	-7,303***	,000	-805,818	-8,640***	,000
Buffer 2500m – Post	-596,982	-	,000	-573,991	-7,787***	,000	-697,536	-8,743***	,000
		17,785***							
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-1308,863	-1,354	,176	-1268,711	-1,310	,190	-1309,538	-1,379	,168
Ring 0-500m – Post	-644,434	-3,184***	,001	-1461,880	-1,848*	,065	-1396,806	-1,644	,100
Ring 500-1000m – Pre	-442,917	-1,211	,226	-381,897	-1,042	,297	-442,912	-1,232	,218
Ring 500-1000m – Post	-278,468	-2,683***	,007	-105,633	-,400	,689	-200,863	-,692	,489
Ring 1000-1500m – Pre	-715,309	-3,174***	,002	-646,321	-2,862***	,004	-772,582	-3,487***	,000
Ring 1000-1500m – Post	-483,927	-5,897***	,000	-310,507	-1,637	,102	-499,854	-2,448**	,014
Ring 1500-2000m – Pre	-189,300	-,995	,320	-116,187	-,610	,542	-233,948	-1,251	,211
Ring 1500-2000m – Post	-360,170	-5,296***	,000	-323,091	-2,230**	,026	-278,079	-1,705*	,088
Ring 2000-2500m – Pre	-1080,616	-8,208***	,000	-1011,297	-7,668***	,000	-1125,747	-8,693***	,000
Ring 2000-2500m – Post	-769,732	-	,000	-821,826	-8,126***	,000	-990,704	-9,174***	,000
		17,469***							
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-126,879	-,493	,622	-50,290	-,195	,845	-173,155	-,684	,494
Buffer 2500m – Post	-120,032	-1,454	,146	-3,433	-,017	,987	-37,501	-,170	,865
Buffer*Distance – Pre	-,309	-2,644***	,008	-,314	-2,677***	,007	-,309	-2,688***	,007
Buffer*Distance – Post	-,232	-6,319***	,000	-,277	-3,002***	,003	-,318	-3,212***	,001
Buffer 2500m – Pre	-472,261	-3,165***	,002	-398,243	-2,664***	,008	-522,161	-3,557***	,000
Buffer 2500m – Post	-335,967	-6,594***	,000	-317,343	-2,660***	,008	-410,893	-3,218***	,001
Buffer*Distance2 – Pre	-5,925E-5	-2,485**	,013	-6,081E-5	-2,544**	,011	-5,853E-5	-2,497**	,013
Buffer*Distance2 – Post	-5,289E-5	-6,796***	,000	-5,290E-5	-2,731***	,006	-5,796E-5	-2,871***	,004
<b>Dependent variable: Bevolkingsdichtheid</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

### Leefbaarometer – Housing stock

The ‘Leefbaarometer’ scores on housing stock are of course linked to the previous housing stock variable, but which besides the hard number of houses also includes aspects such as types and quality of housing. What is evident looking into the outcomes for Model II, is that while the pre-development stadium areas are not substantially different from other areas, the post-development stadium areas overall score significantly higher on this indicator. This can especially be observed looking into the impact buffers; only the inner and outer distance rings do correspond to this. For the 1500-2000 ring it is even the other way around with a positive difference for the pre-development areas. The fact that there seems to be no clear pattern associated with distance to stadium is highlighted by the interaction variables, which are all non-significant. On the one hand an explanation for this might be that, as we have seen and will see later on, stadiums are generally located in relatively urban areas. This also corresponds to the outcomes found for the absolute housing stock variable before. On the other hand, the presumption that stadia are often also found in somewhat deprived or underperforming neighbourhoods does not hold in this respect, as these scores do also include various housing characteristics. Nevertheless, we can conclude that stadium areas (after stadium development) in general perform similarly to and sometimes even better than other ‘buurten’, and often also better than such areas pre-stadium development.

The first model variation on this, including only the recent stadia, however emphasises that this is probably not something that can be ascribed to the actual stadium developments; with a single exception all coefficients produced by the model for the buffers and distance rings turn out non-significant. That means looking only into recent stadium projects – and thereby ensuring a somewhat more balanced composition of the pre and post development groups – the surrounding areas do not show substantial differences compared to other, non-stadium areas, both before and after development. Therefore we can probably conclude that stadium developments have not resulted in an increase in scores on the housing stock in the surrounding areas. The distance interaction variables surprisingly are (weakly) significant here, however looking into the outcomes for the buffers and rings this should not be given too much weight.

The short-term impact model variation produces some other interesting outcomes; namely, for some of the buffers and distance rings a difference contrary to the base Model II can be observed: here the post-development stadium areas do score significantly lower on housing stock compared to both ‘pre-development’ and the non-stadium areas. From these outcomes we might conclude that on the short term not always a possible stadium effect can be observed, but when there is an effect it might in fact be a negative one. So looking at an impact period of five years stadium developments might have an adverse effect on housing stock scores, taking some definitions of impact areas between 500 and 2000 metres. The distance interaction variables seem to confirm this; positively significant coefficients indicate the scores increase when moving further away from the stadium. The parameters further suggest the stadia might have an influence on this; for the standard interaction variables both pre- and post-development are significant, although the former only weakly and smaller in magnitude, while for the squared variant only the post-development variable turns out significant. The only viable explanation would be the influence of the construction phase and aftermath, and football-related nuisance issues, if it were not for the fact that this variable is mainly concerned with internal housing characteristics.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	-2,117	-,644	,520	-2,147	-,653	,514	-2,388	-,733	,464
Buffer 500m – Post	3,423	3,127***	,002	1,924	,704	,481	-,671	-,201	,841
Buffer 1000m – Pre	-1,093	-,502	,615	-1,155	-,531	,595	-1,723	-,799	,424
Buffer 1000m – Post	1,590	2,145**	,032	-1,511	-,761	,447	-5,261	-2,495**	,013
Buffer 1500m – Pre	-1,046	-,676	,499	-1,191	-,770	,442	-1,798	-1,170	,242
Buffer 1500m – Post	1,779	3,141***	,002	-,779	-,577	,564	-2,099	-1,485	,138
Buffer 2000m – Pre	,721	,565	,572	,649	,509	,611	-,014	-,011	,991
Buffer 2000m – Post	,587	1,220	,223	-,052	-,047	,962	-2,269	-2,006**	,045
Buffer 2500m – Pre	,997	,905	,366	,840	,763	,445	,193	,176	,860
Buffer 2500m – Post	1,029	2,434**	,015	,391	,419	,675	-1,148	-1,179	,238

<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-13,040	-1,257	,209	-13,153	-1,267	,205	-13,696	-1,331	,183
Ring 0-500m – Post	6,993	2,804***	,005	-6,178	-,595	,552	-9,480	-,652	,514
Ring 500-1000m – Pre	-2,399	-,589	,556	-2,536	-,622	,534	-3,074	-,761	,447
Ring 500-1000m – Post	1,238	,951	,342	-4,850	-1,439	,150	-8,816	-2,421**	,016
Ring 1000-1500m – Pre	-2,574	-1,018	,309	-2,712	-1,073	,283	-3,368	-1,343	,179
Ring 1000-1500m – Post	-,856	-,830	,407	-1,623	-,661	,509	-6,802	-2,593**	,010
Ring 1500-2000m – Pre	4,924	2,215**	,027	4,770	2,146**	,032	4,193	1,901*	,057
Ring 1500-2000m – Post	1,361	1,609	,108	2,440	1,342	,180	1,082	,539	,590
Ring 2000-2500m – Pre	1,212	,787	,431	1,055	,685	,493	,354	,232	,817
Ring 2000-2500m – Post	1,107	2,013**	,044	,777	,612	,541	,278	,217	,828
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-3,775	-1,286	,198	-3,948	-1,345	,179	-4,576	-1,573	,116
Buffer 2500m – Post	,633	,612	,541	-4,229	-1,613	,107	-11,042	-3,950***	,000
Buffer*Distance – Pre	,002	1,754*	,080	,002	1,759*	,079	,002	1,766*	,077
Buffer*Distance – Post	,000	,418	,676	,002	1,886*	,059	,005	3,775***	,000
Buffer 2500m – Pre	-1,006	-,588	,557	-1,177	-,687	,492	-1,849	-1,088	,277
Buffer 2500m – Post	,531	,830	,406	-2,060	-1,348	,178	-6,053	-3,811***	,000
Buffer*Distance2 – Pre	4,217E-7	1,524	,128	4,245E-7	1,534	,125	4,286E-7	1,563	,118
Buffer*Distance2 – Post	1,001E-7	1,032	,302	5,085E-7	2,023**	,043	9,805E-7	3,906***	,000
<b>Dependent variable: Leefbaarometer_Score_Woningvoorraad</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

## Economic impact

### *Income (percentages of high and low incomes)*

The percentages of high and low incomes may not be the most important economic indicators, but they could give an indication of the general development status of the ‘buurten’. The percentage of high incomes in Model II does not show a very unanimous picture. In general, we could say that the areas closest to the stadium seem to be underperforming after development relative to before, while taking some more distance from or around the stadium, the stadium areas seem to be performing relatively well compared to those areas before development. This general pattern between pre and post development can broadly also be observed from the distance rings. A possible explanation for this could be that stadiums are generally located in city parts that are in development, taking a larger scope, but that the areas more directly surrounding the stadia are still underperforming, being a deprived neighbourhood around an older stadium, peripheral neighbourhood close to an out of town stadium, or perhaps still a lack of development around a new stadium. The latter part also corresponds with the outcomes for property values, however the lower property values further away from the stadium are then not so much reflected here. The question here is to what extent this can actually be related to the stadium development; firstly, the post-development group consists of all stadia, including the older ones, while the pre-development observations only for those developed after 1995. This uneven distribution is taken care of in the model variations later on. Furthermore, it can probably not reasonably be expected that areas situated more than 1,5 kilometres away are visibly affected by a stadium in terms of income distribution.

Related is then of course the percentage of low incomes. Except for the smallest buffer, the general picture that emerges from the buffers is that the stadium areas pre development have a significantly lower percentage of low incomes, while for the post development stadium areas this percentage is relatively higher than those in other ‘buurten’. Similar outcomes can be seen for the individual distance rings. These coefficients show that stadium areas after development in fact perform worse in terms of low incomes than stadium areas before; based on this the stadium areas thus seem to become more deprived after a stadium development rather than to develop into a ‘thriving’ urban neighbourhood – thinking in extremes. However, we should again note that this includes all stadia; and thus an uneven distribution between pre and post. So for example stadia that are situated in underperforming neighbourhoods that were already in place before 1995, only have observations for the post development group, and not for pre development. Therefore, it is not a one-on-one comparison of the same areas pre and post stadium development. A more decisive answer on the actual impact question might therefore be given by the model variations.

The distance interaction variables for high incomes both show positive and significant coefficients for post-development, indicating that the percentage of high incomes increases moving further away from the stadium, while the squared variable indicates a slightly non-linear pattern. This further underpins the outcomes described above, that post-development stadium areas farther away from the stadium perform better than those close to the stadium location. The fact that the interaction variables are non-significant for the pre-development observations, suggest a certain impact of the stadia here. As for low incomes, all interaction variables turn out not significant, meaning a distance effect for low income percentage is not to be expected.

To see whether this turns out different when changing the ‘post’ period, we can again look into the model variations. Overall, these however show results similar to those of the base Model II. For high incomes, no notably different outcomes are produced here. Looking at the distance buffers, we only see that this shift from under- to better performing now takes place from 2000 metres for the ‘2000s’ stadiums, while for the short term impact model this happens already at 1000 metres. The same pattern can also be observed from the distance rings, further underlining this. An explanation for this however cannot easily be given based on these data alone; nevertheless, a conclusion is that recent stadia do in any case not seem able to create a well performing urban area, expressed in terms of high incomes, compared to these areas before the development, but also relative to stadium areas in general (base Model II).

For low incomes outcomes are also rather similar, however with the exception that – especially in the ‘2000’ model – some coefficients for the post-development distance buffers and rings are also negative and significant; so, although the post-development stadium areas are still underperforming on this aspect compared to the pre-development stadium areas, they do have a lower percentage of low incomes than other, non-stadium ‘buurten’. Also here a viable explanation cannot easily be given, however it does indicate that when looking into only recent stadia, the difference between pre and post development decreases, with the post-development stadium areas still performing relatively well compared to similar non-stadium areas (in terms of percentage of low incomes). This does not imply the stadia actually have a clear positive impact; the stadium areas were already performing well before the stadium developments, and in fact even better. (...)

Finally looking at the distance interaction variables, these turn out non-significant for both Model II variations, and for both high and low income percentages. For high incomes this is different from the base Model II, while for low incomes this outcome is the same. It nevertheless means that for both the recent stadium areas and a short term impact, distance to the stadium is not a factor of importance in explaining the level of high or low incomes. (...)

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	,063	1,789*	,074	,064	1,802*	,072	,060	1,713*	,087
Buffer 500m – Post	-,068	-6,743***	,000	-,061	-2,498**	,012	-,031	-1,059	,290
Buffer 1000m – Pre	-,015	-,652	,515	-,014	-,619	,536	-,010	-,453	,650
Buffer 1000m – Post	-,027	-4,014***	,000	-,048	-2,690***	,007	-,018	-,957	,339
Buffer 1500m – Pre	-,030	-1,920*	,055	-,029	-1,883*	,060	-,024	-1,524	,127
Buffer 1500m – Post	-,014	-2,666***	,008	-,031	-2,552**	,011	,001	,048	,961
Buffer 2000m – Pre	-,038	-2,966***	,003	-,038	-2,946***	,003	-,031	-2,425**	,015
Buffer 2000m – Post	-,007	-1,598	,110	-,025	-2,504**	,012	-,002	-,216	,829
Buffer 2500m – Pre	-,037	-3,383***	,001	-,037	-3,371***	,001	-,030	-2,777***	,005
Buffer 2500m – Post	-,006	-1,548	,122	-,026	-3,018***	,003	,002	,205	,837
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-,274	-2,451**	,014	-,274	-2,451**	,014	-,277	-2,502**	,012
Ring 0-500m – Post	-,128	-5,469***	,000	-,044	-,480	,631	-,026	-,258	,796
Ring 500-1000m – Pre	,027	,647	,518	,028	,653	,514	,028	,678	,498
Ring 500-1000m – Post	-,076	-6,366***	,000	-,072	-2,359**	,018	-,060	-1,790*	,073
Ring 1000-1500m – Pre	-,046	-1,759*	,079	-,046	-1,749*	,080	-,040	-1,539	,124
Ring 1000-1500m – Post	,001	,122	,903	-,049	-2,219**	,026	-,029	-1,214	,225
Ring 1500-2000m – Pre	-,035	-1,602	,109	-,035	-1,581	,114	-,027	-1,261	,207
Ring 1500-2000m – Post	-,008	-1,016	,310	-,032	-1,891*	,059	,009	,495	,621
Ring 2000-2500m – Pre	-,039	-2,584**	,010	-,039	-2,559**	,010	-,031	-2,067**	,039
Ring 2000-2500m – Post	,009	1,834*	,067	-,009	-,806	,420	,016	1,285	,199
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-,039	-1,328	,184	-,039	-1,300	,194	-,033	-1,109	,268

Buffer 2500m – Post	-.071	-7,426***	,000	-.052	-2,228**	,026	-.037	-1,426	,154
Buffer*Distance – Pre	9,769E-7	,072	,942	8,454E-7	,063	,950	1,203E-6	,090	,928
Buffer*Distance – Post	3,164E-5	7,441***	,000	1,299E-5	1,219	,223	1,855E-5	1,610	,108
Buffer 2500m – Pre	-.039	-2,248**	,025	-.038	-2,205**	,027	-.031	-1,794*	,073
Buffer 2500m – Post	-.035	-5,861***	,000	-.032	-2,342**	,019	-.009	-.576	,565
Buffer*Distance2 – Pre	2,743E-10	,100	,921	2,301E-10	,083	,933	9,790E-11	,036	,971
Buffer*Distance2 – Post	5,795E-9	6,440***	,000	1,356E-9	,607	,544	2,119E-9	,902	,367

**Dependent variable: Ln\_Hogelinkomens\_p**

\*\*\*: significant at the 1% level; \*\*: significant at the 5% level; \*: significant at the 10% level.

Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.

In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model Ila – Distance buffers</i>									
Buffer 500m – Pre	-.003	-.201	,841	-.003	-.210	,833	-.003	-.204	,838
Buffer 500m – Post	,004	,925	,355	-.031	-2,920***	,004	-.024	-1,837*	,066
Buffer 1000m – Pre	-.038	-3,884***	,000	-.039	-3,933***	,000	-.038	-3,884***	,000
Buffer 1000m – Post	,011	3,572***	,000	-.013	-1,656*	,098	,011	3,572***	,000
Buffer 1500m – Pre	-.042	-6,189***	,000	-.043	-6,334***	,000	-.043	-6,376***	,000
Buffer 1500m – Post	,010	4,646***	,000	-.012	-2,278**	,023	-.005	-.920	,358
Buffer 2000m – Pre	-.043	-7,903***	,000	-.045	-8,119***	,000	-.045	-8,128***	,000
Buffer 2000m – Post	,008	4,078***	,000	-.011	-2,571**	,010	-.007	-1,426	,154
Buffer 2500m – Pre	-.042	-8,846***	,000	-.043	-9,123***	,000	-.043	-9,185***	,000
Buffer 2500m – Post	,006	3,506***	,000	-.013	-3,583***	,000	-.011	-2,683***	,007
<i>Model Iib – Distance rings</i>									
Ring 0-500m – Pre	-.090	-1,865*	,062	-.090	-1,877*	,060	-.091	-1,877*	,060
Ring 0-500m – Post	-.002	-.225	,822	-.027	-.679	,497	-.005	-.120	,905
Ring 500-1000m – Pre	-.037	-2,056**	,040	-.038	-2,110**	,035	-.037	-2,019**	,044
Ring 500-1000m – Post	,012	2,403**	,016	-.012	-.930	,352	-.010	-.709	,478
Ring 1000-1500m – Pre	-.047	-4,218***	,000	-.049	-4,335***	,000	-.050	-4,420***	,000
Ring 1000-1500m – Post	,010	2,405**	,016	-.017	-1,837*	,066	-.011	-1,021	,307
Ring 1500-2000m – Pre	-.036	-3,807***	,000	-.037	-3,944***	,000	-.037	-3,929***	,000
Ring 1500-2000m – Post	,014	4,167***	,000	-.007	-1,005	,315	-.003	-.416	,678
Ring 2000-2500m – Pre	-.042	-6,432***	,000	-.043	-6,632***	,000	-.044	-6,734***	,000
Ring 2000-2500m – Post	,001	,377	,706	-.015	-2,924***	,003	-.014	-2,611***	,009
<i>Model Iic – Distance interaction variables</i>									
Buffer 2500m – Pre	-.047	-3,634***	,000	-.048	-3,739***	,000	-.047	-3,665***	,000
Buffer 2500m – Post	,004	,996	,319	-.013	-1,276	,202	-.008	-.679	,497
Buffer*Distance – Pre	2,353E-6	,404	,686	2,404E-6	,413	,680	1,753E-6	,301	,764
Buffer*Distance – Post	8,680E-7	,473	,636	-1,013E-7	-.022	,982	-1,580E-6	-.314	,753
Buffer 2500m – Pre	-.043	-5,718***	,000	-.044	-5,898***	,000	-.044	-5,850***	,000
Buffer 2500m – Post	,003	1,097	,273	-.013	-2,177**	,029	-.010	-1,526	,127
Buffer*Distance2 – Pre	1,485E-10	,125	,901	1,689E-10	,142	,887	2,248E-11	,019	,985
Buffer*Distance2 – Post	6,281E-10	1,619	,106	-4,604E-11	-.048	,962	-1,988E-10	-.194	,846

**Dependent variable: Ln\_Lagelinkomens\_p**

\*\*\*: significant at the 1% level; \*\*: significant at the 5% level; \*: significant at the 10% level.

Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.

In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.

## Socio-cultural impact

### Leefbaarometer – Demographic structure

The first specific socio-cultural ‘Leefbaarometer’ indicator is on population structure, which is mainly a measurement for the socio-economic status/position of the inhabitants of an area. First looking into the base Model II, a rather clear picture emerges. Almost all distance buffers and rings here get significantly negative coefficients for ‘pre-development’, while all the post-development variables turn out non-significant. That means that the stadium areas before development are relatively underperforming on this aspect, while the stadium areas with the stadium do not substantially differ from the non-stadium areas. This might be an indication that the stadium developments have brought about, or at least coincided with these areas developing from underperforming areas to areas with a socio-economic status of inhabitants similar to the non-stadium areas. However, this of course again includes the uneven distribution of post-development areas in the base Model II. Furthermore, it

remains the question to what extent socio-economic status of inhabitants can actually be ascribed to a stadium development. Therefore, this might be a little too bluntly put to be drawn as a real conclusion, and the model variations should be investigated as well.

The outcomes for the model variations in fact turn out almost identical to those in the base Model II. That makes these results at least somewhat more robust, and perhaps somewhat stronger or at least plausible conclusions might be drawn from this. For example, it turns out that also when looking solely at stadia developed in the 2000s (so with a more balanced composition of the pre- and post-development groups), the demographic ‘Leefbaarometer’ scores have significantly improved in these stadium areas comparing before and after the developments. This might be an indication that, along with or perhaps as a result of, the stadium developments these areas have become less deprived, better performing areas, as illustrated by the Leefbaarometer score regarding the socio-economic position of inhabitants. Similarly this is the case when using only a five year impact period; so also when looking at the short-term impact after a stadium development the demographic scores seem to have been improved after the stadium development, compared to before. Whether or not this can actually be ascribed to the stadium developments of course remains somewhat doubtful/debatable, but in any case it seems an indication that around and since the newly developed stadia a certain general development of the surrounding areas has taken place, which is a.o. then reflected in the socio-economic position of inhabitants.

Variables	Model II – Pre-Post			Model II-2 – Stadiums 2000			Model II-2 – 5 year		
	B	t	Sig.	B	t	Sig.	B	t	Sig.
<i>Model IIa – Distance buffers</i>									
Buffer 500m – Pre	,886	,433	,665	,876	,428	,668	,726	,359	,720
Buffer 500m – Post	,685	1,005	,315	-,843	-,496	,620	-1,484	-,715	,475
Buffer 1000m – Pre	-2,757	-2,037**	,042	-2,752	-2,034**	,042	-2,684	-2,005**	,045
Buffer 1000m – Post	,058	,125	,900	1,474	1,192	,233	-,575	-,439	,660
Buffer 1500m – Pre	-2,519	-2,616***	,009	-2,521	-2,619***	,009	-2,337	-2,451**	,014
Buffer 1500m – Post	,232	,659	,510	1,151	1,370	,171	-,080	-,092	,927
Buffer 2000m – Pre	-2,654	-3,346***	,001	-2,681	-3,382***	,001	-2,500	-3,179***	,001
Buffer 2000m – Post	,335	1,120	,263	,660	,973	,330	-,869	-1,238	,216
Buffer 2500m – Pre	-2,507	-3,659***	,000	-2,422	-3,541***	,000	-2,251	-3,313***	,001
Buffer 2500m – Post	-,354	-1,348	,178	,942	1,625	,104	-,705	-1,168	,243
<i>Model IIb – Distance rings</i>									
Ring 0-500m – Pre	-13,114	-2,031**	,042	-13,084	-2,027**	,043	-13,843	-2,169**	,030
Ring 0-500m – Post	,115	,074	,941	-10,847	-1,680*	,093	-13,145	-1,457	,145
Ring 500-1000m – Pre	1,409	,556	,578	1,476	,582	,560	1,394	,556	,578
Ring 500-1000m – Post	,645	,796	,426	3,272	1,561	,119	3,306	1,463	,144
Ring 1000-1500m – Pre	-4,478	-2,847***	,004	-4,397	-2,796***	,005	-4,302	-2,765***	,006
Ring 1000-1500m – Post	-,595	-,928	,354	1,864	1,220	,222	-1,370	-,842	,400
Ring 1500-2000m – Pre	-,248	-,179	,858	-,163	-,118	,906	,017	,013	,990
Ring 1500-2000m – Post	-,508	-,965	,335	,183	,162	,872	-,869	-,697	,486
Ring 2000-2500m – Pre	-3,179	-3,317***	,001	-3,092	-3,230***	,001	-2,848	-3,001***	,003
Ring 2000-2500m – Post	-,407	-1,189	,235	,915	1,158	,247	-,878	-1,105	,269
<i>Model IIc – Distance interaction variables</i>									
Buffer 2500m – Pre	-3,148	-1,724*	,085	-3,064	-1,678*	,093	-3,099	-1,716*	,086
Buffer 2500m – Post	,126	,195	,845	1,704	1,045	,296	-,387	-,223	,824
Buffer*Distance – Pre	,000	,380	,704	,000	,379	,704	,000	,507	,612
Buffer*Distance – Post	,000	-,817	,414	,000	-,500	,617	,000	-,196	,845
Buffer 2500m – Pre	-3,003	-2,819***	,005	-2,913	-2,736***	,006	-2,808	-2,661***	,008
Buffer 2500m – Post	-,208	-,523	,601	1,618	1,702*	,089	-,416	-,422	,673
Buffer*Distance2 – Pre	1,050E-7	,610	,542	1,038E-7	,603	,546	1,176E-7	,691	,490
Buffer*Distance2 – Post	-2,976E-8	-,493	,622	-1,403E-7	-,897	,370	-5,801E-8	-,372	,710
<b>Dependent variable: Leefbaarometer Score Bevolkingssamenstelling</b>									
***: significant at the 1% level; **: significant at the 5% level; *: significant at the 10% level.									
Notes: To save space, only the variables indicating the impact of stadia (areas) are presented. For the full models with all independent variables, see appendix.									
In fact all models presented are run separately, for each of the three main models for each pre-post combination (only the rings are run in one model together, since they are non-overlapping). Results are presented here together for a more comprehensive overview.									

## Appendix 7: Interview guides

### **Interviews – Vragen (Harry Bouma)**

#### *Noorderpoort / Platform Euroborg*

##### **Algemeen/Intro:**

- Voorstellen; Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? Opname? Etc.

##### **Proces & (pre-)ontwikkeling:**

- Wat is precies uw functie binnen Noorderpoort, én Platform Euroborg?
- (In hoeverre, en hoe) bent u betrokken geweest bij het ontwikkelingsproces v.d. Euroborg?
- Welke bedrijven zitten allemaal in het Platform EB, en wat is precies de functie ervan?
- Wat waren uw doelen/verwachtingen bij de ontwikkeling v.h. stadion?
- En wat waren (vooraf) de belangrijkste doelstellingen bij de ontwikkeling, in het algemeen:
  - Vanuit de club?
  - Vanuit de gemeente? En specifieker, m.b.t. ‘stedelijke ontwikkeling’?

##### **Gebieds- en economische ontwikkeling:**

- Wat is de rol geweest van het stadion bij de vestiging van Noorderpoort op deze locatie?
  - Specifiek vanwege het stadion, of was het er anders ook gekomen?
  - En wat waren de redenen hiervoor?
  - In hoeverre is er bijv. een koppeling tussen Noorderpoort en het stadion? En is dit in uw ogen voldoende gebeurd?
- En wat betreft de andere functies rondom het stadion, de bedrijven in het Platform EB; welke rol heeft het stadion gespeeld voor de vestiging van deze functies?
- En in hoeverre heeft het stadion nog gezorgd voor het ‘aantrekken’ of de ontwikkeling van andere bedrijvigheid en andere stedelijke functies in het gebied?  
[→ Overige bedrijfsvestigingen, kantoren, Mediacentrale; voorzieningen direct in complex; scholen, overheidssdienst, andere voorzieningen; woningen; etc.?
  - Wat voor invloed heeft het daarmee gehad op het voorz.niveau in de buurt?
  - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het Europapark hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg.* Hoe had het EP er volgens u nu uitgezien, als de EB er niet was gekomen?
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ontwikkeling van het EP? Of anders, of juist niet?
  - In hoeverre hebben functies zich specifiek vanwege de EB gevestigd? [Of bijv. ontwikkeling en ligging v.h. gebied in het algemeen?]
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Wat is volgens u de invloed geweest van het stadion op de kwaliteit van de openbare ruimte in het gebied [positief/negatief; en hoe]? (→ “Creëren van openbare ruimte”)
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: hoe ver reikt dit volgens u? Alleen directe omgeving, hele EP, omliggende buurten, (...)? En evt. de rol van afstand?
- En qua tijd? Vooral een kortetermijneffect, en nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevolgd’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - Alleen invloed van de crisis, of is wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
  - Is dit iets dat Noorderpoort uiteindelijk is tegengevallen [waar “ op gerekend had]?
  - En is dit iets dat u merkt bij bedrijven in Platform EB, en andere functies/bedrijven?
  - Kijkend naar hoe het gebied er nu uitziet, en zich (o.a. n.a.v. het stadion) heeft ontwikkeld; zou Noorderpoort zich dan nog steeds hier gevestigd hebben? En de andere functies/bedrijven? [juist/wel/niet, meer/minder?]

- En hoe zit dat bijv. voor bewoners in en rondom het EP, denkt u?
- Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- *[Architect: 30 jaar, (...)]* (Hoe) denkt u dat het gebied nog wel verder zal ontwikkelen?
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het EP; voor andere functies, en voor (potentiële) bewoners? *[positief/negatief; direct/indirect]*
- Heeft er op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als 'succesvol' worden beschouwd? *(In 2013 i.i.g. nog niet.)*

### Economische effecten:

- Heeft het stadion een bepaalde aantrekkende werking voor 'niet vaste' bedrijvigheid (flex-kantoren, b2b activiteiten, verhuurbare ruimtes, etc.)?
- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? *[Positief/negatief?]*
  - En wat is de rol van afstand tot stadion hierbij?

### Sociaal-culturele impact en functie:

- Allereerst, hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen? En t.o.v. het oude Oosterparkstadion?
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadion bijv. als een soort ontmoetingsplaats voor buurtbewoners, en andere mensen; doet het bijv. dienst als soort buurthuis of -centrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten of -bijeenkomsten?
  - Kortom; is het stadionegebouw in uw ogen dan ook wel een soort buurtvoorziening, of is het puur een voorziening voor de voetbaltoeschouwers?
  - Is het stadion naar uw mening voldoende geïntegreerd in/met de buurt, en de bewoners; of zou deze verbinding met de buurt volgens u nog beter kunnen, en hoe?
  - Heeft de Euroborg volgens u *[wel/ook]* een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van gebied en stad, als symbool of iconisch gebouw?*
  - *Element van 'city marketing'; 'uithangbord' voor EP en Groningen?*
  - Zorgt het bijv. ook voor (positieve) bekendheid met het oog op bedrijfsvestigingen?
- Wat is de rol van ontwerp/architectuur van het stadion hierbij volgens u?
- Heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - *Bijv. overlast, zoals grote verkeersdrukte en supportersstromen op wedstrijddagen?*
  - *Bep. invloed op mate van, of althans gevoelens van, (on)veiligheid in de buurt?*
  - Bestond er op basis hiervan vooraf veel weerstand tegen de komst van het stadion in omliggende buurten (NIMBY)? Of werd er o.h.a. wel positief tegenaan gekeken?
  - En is dit beeld door bewoners/bedrijven inmiddels bijgesteld/veranderd?
  - En is er volgens u een verschil merkbaar tussen bewoners van het EP (die er dus voor de ontwikkeling nog niet woonden) en bewoners van andere buurten (verder weg)?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
- Is het stadion volgens u eerder een trekker van mensen naar het gebied, bezoekers maar ook bewoners, of eerder een negatief element [of geen van beide]?
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En zitten er verschillen tussen de buurt(en), en de stad als geheel?
- En qua tijd? Vooral korte termijneffecten, en nu afgezwakt, of ook blijvende effecten?

- Wat is volgens u de reden dat deze sociaal-culturele impact er wel/beperkt/niet is?
  - [ → Gemeente: sociale impact niet zo zeer een doel vooraf; maar wel enigszins gerealiseerd toen het er eenmaal stond; Bewoners: beperkt, (te) weinig integratie in/met buurt; ]
  - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er volgens u (vooraf/naderhand) meer aandacht moeten zijn voor deze sociale impact, en sociale functie/rol ervan voor de buurt?

### Overige:

#### Overige & algemene vragen m.b.t. Euroborg:

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, volgens u van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- En wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moet volgens u in deze afweging ook de impact voor de stad een belangrijke rol spelen, of moeten praktische zaken (bereikbaarheid, overlast) toch centraal staan?
- [De gemeente en provincie hebben ook in financieel opzicht deels bijgedragen aan de hele ontwikkeling (lening dan wel gift/subsidie) ]
  - In hoeverre/waarmee is dat volgens u gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua 'stedelijke ontwikkeling'?
- [Naar wat ik heb begrepen zijn er wel enkele harde voorwaarden gesteld, m.b.t. de bijkomende voorzieningen.] Hoe is hier in het proces mee omgegaan; in hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten?
  - Was dit puur gericht op de exploitatie van het stadion en de ontwikkeling ('kostendragers'), vanuit ontwikkelcombinatie; of heeft de gemeente hierbij ook een rol gespeeld, met het oog op 'stedelijke ontwikkeling'?
  - Had de gemeente naar uw mening misschien juist meer of minder uitgebreide eisen moeten stellen, m.b.t. 'stedelijke ontwikkeling' (bij verkoop van grond, onderhandeling met marktpartijen, vergunningverlening), of niet?
    - [Natuurlijk met als risico dat de ontw. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]
- [Als we bijv. kijken naar Alkmaar en Den Haag; Daar zijn gedurende het proces voorwaarden voor bijkomende ontwikkelingen losgelaten ("club staat op één"); maar daar is dan ook wel een beperktere ontwikkeling te zien.]
  - Waarom denkt u dat dit in Groningen wel geslaagd is, maar in deze steden niet?
  - Is dit, in het algemeen, ook iets dat volgens u belangrijk/noodzakelijk is voor het realiseren van een 'bredere' impact van een stadion?
  - En is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo'n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan 'de markt'?
    - [Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een 'bredere' impact, een zekere extra functie/betekenis voor de stad gerealiseerd worden, en daarmee ook de betrokkenheid (faciliterend, locatie en vergunningen, dan wel actievare rol) van gemeente/provincie verder 'rechtvaardigen'.]
- Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua uiteindelijke impact/rol voor de stad?
  - Qua locatiekeuze?
- [Algemeen: Praktijk van gebiedsontwikkeling en RO is nogal aan het veranderen; kleinschaliger, minder groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;]
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?

- Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
- In hoeverre denkt u dat een stadion in staat zou zijn, en nog is, een bepaalde impact te realiseren op de omgeving en stad? [En welke factoren en/of voorwaarden zijn daarbij volgens u vooral van belang/noodzakelijk?]
  - En wat zijn de belangrijkste struikelblokken? En waarin ziet u evt. juist nog kansen voor toekomstige ontwikkelingen?
  - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen, impact voor de stad, combinatie met andere functies; Of juist iets dat zulke projecten nog mogelijk (en/of te rechtvaardigen) maakt?
  - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige ontwikkelingen op afgelegen locaties buiten de bestaande stad (vooral met het oog op bereikbaarheid, veiligheid en overlast)?
- Concluderend: Is het stadionproject (EB & EP) in uw ogen succesvol:
  - O.b.v. uw eigen doelstellingen/verwachtingen?
  - En wat betreft 'stedelijke ontwikkeling'? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]

Persoonlijke opvattingen algemeen [Optioneel]:

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?  
 → Enerzijds worden stadions slechts vrij beperkt gebruikt (voor de hoofdactiviteit althans), en worden ze ook nogal eens geassocieerd met overlast en andere problemen, maar aan de andere kant trekken ze wel meer mensen aan, en hebben ze een grootsere uitstraling dan veel andere voorzieningen.

## Interviews – Vragen (Buurtbewoners)

### Algemeen/Intro:

- Voorstellen
- Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? Opname?
- Etc.

### Proces & (pre-)ontwikkeling:

- Waar precies woont u? Sinds wanneer woont u hier?
- Woonde u hiervoor ook al in Groningen? En ook in de buurt van het huidige EP en de EB?
  - [Zo ja:] In hoeverre werd u destijds betrokken, en bent u betrokken geweest, bij de ontwikkeling van het stadion?
  - [Zo ja:] hoe keek u aan tegen de ontwikkeling van het stadion op het EP? Wat waren uw verwachtingen hierbij? [Positief, negatief, neutraal?]
  - [Zo ja/nee:] Wat waren voor u de redenen hierheen te verhuizen?
  - Welke rol speelde de aanwezigheid van het stadion hierbij voor u? Positief, een aantrekkelijk element voor de buurt; of evt. als pot. negatief element? Of neutraal?
  - Wat waren volgens u de belangrijkste doelen bij de ontwikkeling, in het algemeen: Belang van de club, of ook m.b.t. ‘stedelijke ontwikkeling’?

### Gebiedsontwikkeling:

- In hoeverre heeft het stadion volgens u gezorgd voor het ‘aantrekken’ of de ontwikkeling van andere stedelijke functies naar het gebied?  
[→ *Bedrijfsvestigingen, kantoren; andere voorzieningen; woningen; etc.?*]
  - Wat voor invloed heeft het stadion volgens u daarmee (dus) gehad op het voorzieningenniveau in de buurt/wijk?
  - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het EP hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- Wat is volgens u de invloed van het stadion op de kwaliteit van de openbare ruimte in het gebied (positief/negatief; en hoe)?
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het gebied/Europapark:
  - Voor (potentiële) bewoners?
  - Voor bedrijven en voorzieningen?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg. Hoe had het EP er volgens u nu uitgezien, als de Euroborg er niet was gekomen?*
  - En had dit de buurt aantrekkelijker, of minder aantrekkelijk, gemaakt voor u?
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, volgens u daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ ontwikkeling van het EP? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: hoe ver reikt dit volgens u? Alleen directe omgeving, hele EP, omliggende buurten, (...)? En evt. de rol van afstand?
- En qua tijd? Vooral een kortetermijneffect, en nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- In hoeverre was deze bredere ontwikkeling van het gebied – en daarbij de komst van bijkomende ontwikkelingen en voorzieningen – voor uw van belang, of zelfs een voorwaarde, bij uw keuze voor het EP? [En voor andere bewoners?]
  - Was het voor u problematisch geweest als er alleen het stadion was neergezet, zonder veel bijkomende ontwikkelingen? [En voor andere bewoners?]
  - Speelt ontwerp/architectuur hierbij nog een rol? [Aandacht voor hele stadiongebied; multifunctioneel complex; geen ‘opzichtig’ voetbalstadion (positief/negatief?); etc.]
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevolgd’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?

- Alleen invloed van de crisis, of is denkt u de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
- Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Is dit iets waar u op had gerekend toen u hier kwam wonen? Of anders gezegd, iets dat u is tegengevallen? [En voor andere bewoners?]
- Nu u weet hoe het gebied er nu uit ziet, en welke impact het stadion heeft (gehad); zou u nu [weer/juist] besluiten hier te gaan wonen?
- Ondanks deze evt. vertragingen t.o.v. de initiële plannen; zou u de hele ontwikkeling van het EP tot nu toe als succesvol beschouwen?
- Heeft op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als 'succesvol' worden beschouwd? (*In 2013 i.i.g. nog niet.*)

### Economische effecten:

- Heeft het stadion gezorgd voor het aantrekken van extra bedrijvigheid naar het gebied?
  - M.a.w., hebben volgens u specifiek vanwege de Euroborg bedrijven zich in het gebied gevestigd; of bijv. vanwege de locatie, of de ontwikkeling van het gebied en de voorzieningen daarmee in het algemeen?
    - *O.a. direct omliggende voorzieningen (bioscoop, horeca, Jumbo, etc.), de kantoren, Mediacentrale en bedrijfjes daarin, en later ook bijv. ROC.*
- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? [Positief/negatief?]
- [*Zo ja:*] In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er ook/niet geweest zonder het stadion?
  - Wat zijn volgens u de belangrijkste redenen dat het stadion deze impact [wel/niet] heeft (gehad)?
- Wat is volgens u de schaal van deze economische effecten? Alleen de directe omgeving, hele EP, omliggende buurten, hele stad?
- En schaal qua tijd? Korte termijneffecten, en nu minder zichtbaar/indirect, of ook langdurige/blijvende effecten?

### Sociaal-culturele impact en functie:

- Allereerst, hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen?
  - En is deze functie toegenomen t.o.v. het oude Oosterparkstadion?
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadionegebouw bijv. ook als een soort ontmoetingsplaats voor buurtbewoners, en andere mensen?
  - Doet het stadion bijv. ook dienst als een soort buurthuis of buurtcentrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten of –bijeenkomsten? In praktisch opzicht als locatie, of bijv. ook als 'iconisch' element?
  - Kortom; is het stadionegebouw in uw ogen dan ook wel een soort buurtvoorziening, of is het toch met name een voorziening voor de voetbaltoeschouwers?
  - Is het stadion naar uw mening voldoende geïntegreerd in/met de buurt; of zou deze verbinding met de buurt volgens u nog wel beter kunnen?
  - Heeft de Euroborg volgens u wel/ook een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van gebied en stad, als symbool of iconisch gebouw?*
  - *Element van 'city marketing'; 'uithangbord' voor EP en Groningen?*
- Wat is de rol van ontwerp/architectuur van het stadion hierbij volgens u?
- Heeft het stadion volgens u ook bepaalde negatieve effecten op de omgeving/buurt?
  - Bijv. overlast, zoals verkeersdrukke en supportersstromen op wedstrijddagen?
  - Bep. invloed op de mate van, of althans gevoelens van, (on)veiligheid in de buurt?
  - Zijn er eventueel nog andere negatieve effecten van het stadion?
  - Bestond er op basis hiervan vooraf veel weerstand tegen de komst van het stadion in de omliggende buurten (→ NIMBY)? Of werd er over het algemeen wel positief tegenaan gekeken?

- En is dit beeld door de buurtbewoners inmiddels bijgesteld/veranderd?
- En is er volgens u een verschil merkbaar tussen bewoners van het EP (die er dus voor de ontwikkeling nog niet woonden) en bewoners van andere buurten (verder weg)?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven of beoordelen?
- Is het stadion volgens u eerder een trekker van potentiële bewoners naar het gebied, of eerder een negatief element (of geen van beide)?
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Beter gezegd, hoe was de situatie geweest zonder het nieuwe stadion?
  - Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze sociale impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En zitten er verschillen tussen de buurt(en), en de stad als geheel?
- En qua tijd? Vooral korte termijneffecten kort na ontwikkeling, en is dit nu afgezwakt, of zijn er ook langdurige/blijvende effecten?
- Wat is volgens u de reden dat deze sociaal-culturele impact er wel/bepert/niet is?
 

*[ → Volgens de gemeente was de sociale impact niet zo zeer een doel vooraf; maar is dit wel enigszins gerealiseerd toen het er eenmaal stond.]*

  - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er volgens u bijv. – vooraf en/of naderhand – meer aandacht moeten zijn voor deze sociale impact van het stadion, en de sociale functie/rol ervan voor de buurt?

### **Overige:**

#### Overige & algemene vragen m.b.t. Euroborg:

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, volgens u van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- En wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moeten in de afweging deze ‘stedelijke ontwikkeling’ aspecten naar uw mening ook een (belangrijke) rol spelen, of zijn praktische zaken als bereikbaarheid en overlast toch het belangrijkste?
- *[De gemeente en provincie hebben ook in financieel opzicht deels bijgedragen aan de ontwikkeling (lening dan wel gift/subsidie) ]*
  - (In hoeverre) is dit volgens u wel terecht/gerechtigd? Was in dat geval het ondersteunen en behouden van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua ‘stedelijke ontwikkeling’?
- *[Naar wat ik heb begrepen heeft de gemeente wel enkele harde voorwaarden gesteld, m.b.t. bijkomende voorzieningen. Dit was in eerste instantie gericht op de exploitatie van de ontwikkeling, maar zorgde ook wel voor i.i.g. een aantal bijkomende voorzieningen.]*
  - Had de gemeente naar uw mening misschien nog uitgebreidere eisen moeten stellen, m.b.t. ‘stedelijke ontwikkeling’ – bijv. bij verkoop van de grond of vergunningverlening –, of is dit naar uw idee wel voldoende gebeurd?
 

*[Natuurlijk met als risico dat de ontv. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]*
  - Is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo’n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan ‘de markt’?
 

*[Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een ‘breder’ impact, een zekere extra functie/betekenis voor de stad gerealiseerd worden, en daarmee ook de betrokkenheid (faciliterend, locatie en vergunningen, dan wel actievere rol) van gemeente/provincie verder ‘rechtvaardigen’.]*

*[Zie bijv. Alkmaar, Den Haag, etc.: voorwaarden losgelaten gedurende proces, maar beperkte extra impact voor de stad.]*
- Is het stadionproject in uw ogen succesvol:
  - O.b.v. uw eigen verwachtingen?
  - En wat betreft ‘stedelijke ontwikkeling’? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]

- Stel dat het idee/proces voor een nieuw stadion in Groningen nu op zou komen; Zou dit denkt u in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt van de grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontwikkeling?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua overige doelstellingen en eisen?
  - Qua uiteindelijke impact?

**Persoonlijke opvattingen algemeen [Optioneel]:**

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?  
[ → Enerzijds worden stadions maar vrij beperkt gebruikt (voor de hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen aan, en hebben een grootsere uitstraling dan veel andere voorzieningen.]
- Hoe groot, en wat, denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn – op de 3 algemene dimensies?
  - En wat is over het algemeen de schaal van deze impact?
  - En is er een verschil tussen dichtbij en verder af van het stadion?
  - En de tijdschaal van deze impact?
- In het algemeen, welke factoren en voorwaarden zijn volgens u nog van belang, of noodzakelijk, bij het realiseren van een zekere impact van een stadion?
- *De praktijk van gebiedsontwikkeling en R.O. is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;*
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
    - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
    - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten mogelijk, en te rechtvaardigen, maakt?
    - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid, overlast)?

## Interviews – Vragen (Jelle Dijkstra)

*Projectleider Europapark januari 2006 – medio 2011*

*11 juni 2013 – Gemeente Groningen*

### 1) Inleiding

- begroeting, voorstellen, tijdsduur, onderwerp, doel en gebruik, opnemen?
- functie en betrokkenheid stadion, etc.
- opbouw interview

### 2) Korte ontwikkelingsgeschiedenis

> *Zoals ik eerder ook al aangaf aan de telefoon kijk ik niet zo zeer naar de hele ontwikkeling en het proces daarvan. Toch heb ik daarover nog even een paar kleine vragen.*

- Wanneer is de hele ontwikkeling ongeveer begonnen? De eerste verkennende (locatie-) onderzoeken die ik ben tegengekomen waren in 1997, is toen ook het hele initiatief begonnen?

- Van wie kwam in eerste instantie het initiatief een nieuw stadion te realiseren? Van FC Groningen, of vanuit de gemeente? En hoe is dit in zijn werk gegaan – Is de club naar de gemeente gekomen, of in samenspraak ontstaan?

- In hoeverre hebben beleidsstukken van tevoren een rol gespeeld; dus specifiek met de doelen en beoogde impact van het stadion, etc. (naast bestemmingsplan)?

- Tot slot dan, heeft er ooit een soort evaluatie plaatsgevonden, of staat zoiets wellicht nog gepland?

### 3) Beleid – Doelen en beoogde effecten

> *Vervolgens heb ik nog even een aantal vragen meer over het beleid en de beoogde doelen en impact vooraf (ondanks dat ik daar niet primair naar kijk, en u ook pas in een later stadium echt betrokken bent geraakt). Ik bedoel hiermee dus niet de echt totstandgekomen effecten, maar alleen wat vooraf beoogd en/of verwacht werd.*

- Wat was in eerste instantie de houding van de gemeente t.o.v. het initiatief een nieuw stadion te realiseren? Direct enthousiast, bereid mee te werken, of terughoudender?

- Dus m.a.w., was de gemeente meteen bereid mee te denken en werken, of moest de gemeente eerst echt overtuigd worden van het belang/nut ervan?

- Uiteindelijk is sowieso betrokkenheid en goedkeuring van de gemeente noodzakelijk, als bevoegd gezag. In hoeverre is de gemeente verder betrokken geweest bij de ontwikkeling van het stadion? Alleen in de benodigde juridische procedures, of ook nog verdere betrokkenheid?

- Welke doelen heeft de gemeente zich gesteld, bij het faciliteren/ondersteunen/realiseren van een nieuw FC Groningen-stadion?

- In hoeverre heeft de gemeente volgens u het initiatief voor een nieuw stadion aangegrepen of gezien als mogelijkheid of kans tot stedelijke ontwikkeling (positieve impuls voor de stad)?

- En zo ja, op welke gebieden is dan gekeken naar de mogelijke impact op de stad? Ik zal een aantal categorieën voorleggen, die ik in mijn onderzoek versta onder stedelijke ontwikkeling:

*[het gaat hierbij om beoogde effecten; nóg niet wat daadwerkelijk totstandgekomen is]*

- *Economisch: stadion als motor van ec. stedelijke ontwikkeling; bijdrage aan ec. groei; spin-off effecten; toename ec. activiteiten; ontwikkeling extra voorzieningen, voorzieningenniveau; stijging vastgoedwaarden; etc.*

- Bijv. meer in het algemeen, in hoeverre is het stadion van tevoren gezien als mogelijke ‘bron’ voor stedelijke economische ontwikkeling?

- En in hoeverre zijn van tevoren/bij de ontwikkeling bepaalde economische spin-off effecten verwacht/beoogd?

- *Fysiek: bijv. bredere gebiedsontwikkeling; ontwikkeling stadsdeel; ‘katalysator’ voor fysieke herstructurering/ontwikkeling groter gebied; (her)gebruik ruimten en gebouwen; investeringen stedelijke omgeving; design; infrastructuur; voorzieningen; nieuwe bouwprojecten; sportdistrict; etc.*

- In hoeverre werd met de realisatie van het stadion de bredere ontwikkeling van een groter gebied beoogd (Europapark)?

→ Werd de ontwikkeling/realisatie van de Euroborg gezien als een onderdeel van een bredere gebiedsontwikkeling, of werd een bredere gebiedsontwikkeling onderdeel van de ontwikkeling/realisatie van de Euroborg?

- Bij de locatiekeuze voor Europapark werd bijv. ‘besloten het FC Groningen stadion mee te nemen in de ontwikkeling van het Europapark’. Stond het stadion hierin centraal, of was het ‘slechts’ een onderdeel van de gebiedsontwikkeling?

- Dus was als het ware gepland een bepaald, dit gebied fysiek te ontwikkelen of herstructureren, met of door het stadion? En/of eventueel om er een soort 'sportdistrict' van te maken?

- En zo ja, in hoeverre heeft dit nog een rol gespeeld bij de locatiekeuze voor het Europapark?

- *Sociaal en cultureel: bijv. eredivisievoetbal, 'brood en spelen'; amusement-/cultuurvoorziening, groot maat. belang; stadion als 'icoon', symbool van de stad; voorzieningenniveau bewoners; kwaliteit van leven; gevoelens van trots en tevredenheid; etc.*

- In hoeverre heeft de mogelijke maatschappelijke functie van het stadion vooraf en bij de overwegingen van de gemeente een rol gespeeld?

- Is het stadion van tevoren ook gezien als een soort stedelijke en/of lokale voorziening?

- Is het stadion daarbij tenslotte ook gezien als mogelijk een icoon of symbool voor de stad?

#### **4) Evaluatie – Totstandgekomen effecten/impact**

*[Afhankelijk van eerdere antwoorden m.b.t. stedelijke ontwikkeling]*

*> In mijn onderzoek kijk ik vooral naar de impact die het stadion teweeg brengt/heeft gebracht op de stad. Deze stedelijke ontwikkeling vat ik vrij breed op, zoals gezegd met de categorieën economische, fysieke, sociale en culturele effecten. Deze 'evaluatie' is dus eigenlijk het centrale onderdeel van mijn onderzoek.*

*> Ik zal per categorie weer een aantal zaken aan u voorleggen.*

##### **- Economische effecten**

*> Economische impact van een stadion op stedelijke ontwikkeling; draagt bij aan ec. ontwikkeling/groei, spin-off effecten, toename ec. activiteit, etc;*

*> Een belangrijk onderdeel van de economische effecten is de realisatie van andere, bijkomende (economische) voorzieningen/functions (dit hangt ook wel samen met de fysieke effecten/ontwikkeling van het gebied). Hier werd in beleid van tevoren ook specifiek op gefocust.*

- In hoeverre zijn er in en om het stadion dergelijke bijkomende voorzieningen/functions gerealiseerd?

- En wat voor voorzieningen/functions dan?

- Welke (geplande) voorzieningen zijn nog niet gerealiseerd? En waarom niet?

- En denkt u dat dit er in de ( nabije) toekomst nog van gaat komen?

- In hoeverre beschouwt u dan ook de ontwikkeling van bijkomende functies en voorzieningen als succesvol?

*> In Alkmaar en Den Haag waren in eerste instantie ook extra voorzieningen in en om het stadion gepland; daar is, vanwege de moeizame besluitvorming en/of interesse, echter op een gegeven moment besloten allereerst maar gewoon alleen het stadion te realiseren; de voorzieningen etc. zouden dan (eventueel) daarna wel volgen, als een soort fase 2. Echter ook tot nu toe is dit er nog maar moeizaam en mondjesmaat van gekomen, en zijn weinig bijkomende voorzieningen daar al totstandgekomen.*

- Hoe is dit in Groningen in zijn werk gegaan? Is daar wel gekozen voor een hardere koppeling tussen ontwikkeling stadion en de overige voorzieningen?

- Of bestond er voldoende overeenstemming tussen betrokken partijen, en ook voldoende interesse vanuit bijv. bedrijfsleven?

- Was dit ook een voorwaarde vanuit de gemeente? En in hoeverre heeft dit goed uitpakend?

- Waarom denkt u dat in Groningen een dergelijke bredere ontwikkeling (in de zin van bijkomende functies) wel (gedeeltelijk) van de grond heeft kunnen komen? En bijv. niet echt in de situaties van Den Haag en Alkmaar, waar dit in eerste instantie ook beoogd was? Deze zijn in dezelfde periode gerealiseerd, en zeker Den Haag heeft qua achterland niet minder potentie dan Groningen.

- Of zou het kunnen dat in Groningen het stadion meer echt onderdeel is geweest van een grotere/bredere ontwikkelingsstrategie?

- In hoeverre denkt u dat het stadion heeft gezorgd voor het aantrekken van bedrijven, en/of bezoekers in het Europapark, omliggende gebied en evt. de stad? Of dat het daar nog de potentie toe heeft?

- Heeft het stadion gezorgd voor een stijging van woning-/vastgoedwaarden in het omliggende gebied?

- Tot slot, in hoeverre heeft het stadion volgens u gezorgd voor een toename van de werkgelegenheid in de stad (dus niet alleen verschuiving van)?

##### **- Fysieke effecten**

> *Bredere ontwikkeling van een groter gebiedsontwikkeling, katalysator van herstructurering of ontwikkeling van het gebied; evt. ontstaan andere fysieke ontwikkelingen, etc.*

- We hebben het eerder ook al even besproken, maar was de ontwikkeling van de Euroborg uiteindelijk vooral onderdeel van een bredere gebiedsontwikkeling, of werd een bredere gebiedsontwikkeling onderdeel van de ontwikkeling van de Euroborg?

- In hoeverre denkt u dat met of door het stadion ook daadwerkelijk sprake is geweest van een zekere (fysieke) bredere/grotere (gebieds-)ontwikkeling?

- Dus in hoeverre is de gebiedsontwikkeling van het Europapark volgens u succesvol?

- En in hoeverre denkt u dat dit te wijten is aan de komst van het stadion? En in hoeverre is de (mate van) realisatie van bijkomende voorzieningen/functies daarop van invloed? En/of andersom, in hoeverre is de mate waarin het stadion onderdeel is van een bredere ontwikkelingsstrategie ook van invloed op het succes van bijv. bijkomende voorzieningen? (zoals eerder ook al even besproken)

- In hoeverre was dit ook belangrijk voor de gemeente, dat het stadion bij zou dragen aan de ontwikkeling van het gebied?

- En/of denkt u evt. dat van een bredere (fysieke) gebiedsontwikkeling in de toekomst wellicht nog (meer) sprake van zal zijn (bijv. door realisatie van meer bijkomende voorzieningen)?

- En zo ja, wanneer denkt u dat dit ongeveer zal gebeuren?

- En hoe belangrijk zou dit voor de gemeente zijn, dat het gebied (verder) in bredere zin wordt ontwikkeld/ingevuld/afgemaakt?

- Verder, wel enigszins samenhangend, heeft de komst van het stadion nog geleid tot het van de grond komen van andere (bouw)projecten in de omgeving?

> *Een fysiek effect kan ook zijn dat de oude (binnenstedelijke) locatie hergebruikt kan worden. Dit was bijvoorbeeld in Alkmaar een belangrijk fysiek effect van het stadion. In Groningen werd in bijv. het MER hier ook wel over gesproken.*

- In hoeverre is dit in Groningen dan ook een belangrijk fysiek effect van het stadion geweest? Dus (fysieke) stedelijke ontwikkeling niet op de nieuwe locatie, maar door een nieuwe invulling op de vrijgekomen oude locatie (Oosterpark)?

- (In hoeverre) heeft het stadion bijgedragen aan de verbetering van de infrastructuur in het gebied of de stad? Bijv. wegen, parkeren, OV (NS station, transferiumfunctie, overige)?

- Is er met en bij het stadion verder nog rekening gehouden met de kwaliteit, het ontwerp en de uitstraling van het (stedelijke) gebied?

- Tot slot, denkt u dat door het stadion (en evt. andere bijkomende functies) enigszins een soort 'sportdistrict' of wellicht 'entertainmentdistrict' is ontstaan? Of dat dit in potentie nog kan ontstaan?

### **Sociale en culturele effecten**

> *Naast economische en fysieke effecten kijk ik ook naar de meer sociale en culturele impact van het stadion op de stad.*

- In welke mate vervuld de Euroborg binnen de stad Groningen, stadsdeel of zelfs regio volgens u ook een belangrijke maatschappelijke functie?

- En wat is in die hoedanigheid dan ook het belang van het stadion voor de stad?

- In hoeverre heeft dit meegespeeld bij het uiteindelijk faciliteren van het nieuwe stadion?

> Zoals bijv. in Den Haag werd gezegd, is een stadion in principe niet rendabel, maar daar is het stadion toch gefaciliteerd vanwege het grote maatschappelijke belang (wellicht verschil: daar heeft gemeente grotendeels financiering verzorgd).

- Heeft het stadion invloed op de toestroom van bezoekers/toeristen naar het gebied, of meer indirect naar de binnenstad; en/of de stad in het algemeen?

- Ik weet niet precies wat de houding was van de inwoners en bedrijven in het omliggende gebied, maar wat was in eerste instantie hun houding t.o.v. de komst van het stadion? En hoe kijken zij nu over het algemeen aan tegen het stadion?

- *[afhankelijk van eerdere antwoorden over voorzieningen]* Afhankelijk van de gerealiseerde voorzieningen, maar is het stadion volgens u ook een soort lokale/ 'wijkvoorziening'? Of kan/moet het dat nog worden?

- In hoeverre is het stadion volgens u een soort icoon, symbool voor de stad Groningen? En heeft het zo een belangrijke plaats in de cultuur van de stad?

- Meer concluderend; denkt u dat het stadion op enige manier bijdraagt aan de kwaliteit van leven?

- En zorgt het stadion volgens u ook voor gevoelens van trots en tevredenheid onder bewoners van de stad?

##### **5) Voorwaarden/factoren in af-/overwegingen gemeente**

> *Naast de effecten en impact van het stadion op de stad, kijk ik in mijn onderzoek tenslotte ook nog naar de voorwaarden en factoren die van invloed zijn op de mate waarin het voor de gemeente uiteindelijk rendabel (genoeg) is om het stadion te realiseren, althans actief of passief te faciliteren. Dus eigenlijk in de af- en overwegingen van de gemeente m.b.t. het stadion.*

- Ten eerste de financiering van het hele project; hoe zag de financiering van het hele project er uiteindelijk uit? Gemeente, club, externe partijen? Verschil in stadion, openbare ruimten en bijkomende voorzieningen?

- Welke randvoorwaarden werden er door de gemeente aan de financiering gesteld?

- Denkt u dat de financiering, en daarmee realisatie van het stadion ook op dit moment rond zou kunnen komen? Dus als op dit moment dringend behoefte zou zijn naar een nieuw stadion? (financieel minder gunstige tijden, geen bijdrage van gemeente, ...)

- En denkt u dat in de nabije toekomst dan überhaupt wel zaken als voetbalstadions gerealiseerd kunnen worden? En zo ja, hoe dan?

- De bijkomende voorzieningen en functies, in hoeverre werden deze als randvoorwaarde gesteld voor de ontwikkeling van het stadion?

- Waren deze ook belangrijk als kostendrager voor het project?

- Indien nog maar gedeeltelijk gerealiseerd; vormde dit in eerste instantie dan nog een probleem voor de gemeente?

- Redelijk snel kwam men uit bij de keuze voor het Europapark; kwam deze locatiekeuze in eerste instantie vanuit de gemeente, of kwam de club hiermee?

- In de locatiekeuzeonderzoeken staat dit ook wel beschreven, maar wat waren volgens u de belangrijkste redenen voor de keuze voor het Europapark?

- En wat was uiteindelijk de doorslaggevende factor hierbij?

- In hoeverre is de locatie van invloed op de mate waarin het stadion heeft gezorgd voor bepaalde economische, fysieke, sociale en culturele effecten?

> *Van tevoren, bijv. in de startnotitie, werd beschreven dat het Europapark een vrij afgesloten, geïsoleerd gebied was, niet in verbinding/relatie met de (binnen)stad; ondanks de ligging vrij dicht bij het centrum is het gebied vanwege barrières als wegen/spoorlijnen, maar ook functionele en ruimtelijke verschillen binnen het terrein en omliggend gebied.*

- Heeft dit volgens u een bepaalde (bijv. beperkende) werking gehad op de impact die het stadion teweeg heeft kunnen brengen op de stad?

- En heeft dit dan ook een rol gespeeld in de locatieafweging, of is het stadion juist (gedeeltelijk) daarom op deze locatie gerealiseerd?

- In hoeverre is dan ook rekening gehouden met het inpassen van het stadion in het omliggende gebied, en in de stad in het algemeen? Qua ontwerp van het gebied, of bijv. door bijkomende maatregelen?

- En hoeverre is het ontwerp van het gebied, zowel praktisch als meer esthetisch, hierop van invloed geweest?

- In welke mate is in het ontwerp van het stadion en het hele gebied rekening gehouden met ruimte voor zaken als bereikbaarheid; parkeren; bijkomende voorzieningen; etc.? En in hoeverre werden deze ontwerpzaken door de gemeente als (rand)voorwaarden gesteld?

- Daarnaast dan nog, in hoeverre is er bij de ontwikkeling van het stadion rekening gehouden met duurzaamheid? En dan niet alleen – zoals de laatste jaren heel populair – in milieupzicht, maar ook of het stadion(gebied) ook op lange termijn succesvol zal zijn? Dus dat er extra voorzieningen komen én blijven, onderhoud, zorgen dat het gebied mooi en aantrekkelijk wordt én blijft en niet in verval zal raken, etc.?

- Naast de al besproken zaken als financiering, locatie, ontwerp, (veiligheid,) etc., welke voorwaarden zijn er nog meer door de gemeente gesteld aan de ontwikkeling van het stadion, of welke factoren zijn verder nog van invloed geweest op de af- en overwegingen van de gemeente?

##### **6) Overige vragen**

- In het beleid van tevoren werd als ik het goed heb wel rekening gehouden met mogelijke uitbreiding van het stadion. Onlangs zijn volgens mij ook enkele rijen onderaan toegevoegd. Denkt u dat een grotere uitbreiding er in de (nabije)

toekomst nog van gaat komen? Of denkt u dat dit financieel, sportief, stedenbouwkundig, en qua belangstelling niet haalbaar is?

- Concluderend; in het algemeen, welke rol heeft de Euroborg volgens u gespeeld, of speelt het volgens u in stedelijke ontwikkeling van Groningen?

- En tenslotte, wat denkt u persoonlijk wat überhaupt de rol van een voetbalstadion in stedelijke ontwikkeling zou kunnen zijn? Of vooral beperkt tot ondersteunen club, en de gemeente faciliteert en zorgt voor benodigde ondersteuning en voorzieningen?

#### **7) Afsluiting**

Afsluiting, aanvullingen u?, aanvullingen zelf?, bezwaar gebruik naam?, nasturen uitgewerkt interview?, evt. ook uiteindelijk onderzoek?, bedanken, evt. vragen later nasturen?, bedanken, groeten, etc.

## Interviews – Vragen (Ellen van der Kley – Makelaar) Hofbeek Makelaars (Euroborg Offices – verhuur en advies)

### Algemeen/Intro:

- Voorstellen
- Introductie onderzoek
- Opzet interview (Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige)
- Hoe lang? Opname?

### Proces & (pre-)ontwikkeling:

- Hoe en wanneer bent u betrokken geraakt bij het proces (en tot wanneer)?
  - En wat is precies uw rol geweest, in en na het ontwikkelingsproces?
- Wat waren volgens u de belangrijkste doelen bij de ontwikkeling, in het algemeen:
  - Vanuit de club?
  - Vanuit de gemeente?
  - En specifieker, m.b.t. ‘stedelijke ontwikkeling’ (op de 3 dimensies)?

### Economische effecten:

*[Hangt deels samen met gebiedsontwikkeling; maar gaat hier vooral om het economische aspect.]*

- Allereerst de Euroborg Offices:
  - Van waar kwam het plan voor de E.O.? Club, ontwikkelcombinatie, gemeente? En wat was primair het doel hierbij? Exploitatie stadionontwikkeling, of club? Of (ook) realiseren van bijkomende ontwikkelingen/voorzieningen in het gebied?
  - Is de uiteindelijke ontwikkeling verlopen zoals gepland, of zijn er nog aanpassingen gedaan aan het concept gedurende het proces?
  - Hoe verliep de invulling van de kantoren; veel interesse, waren deze (snel) goed gevuld, of viel dit tegen?
  - Wat voor typen bedrijven hebben zich over de jaren gevestigd in de E.O.?
  - Voor de bedrijven die zich hebben gevestigd: welke rol speelde de locatie in het stadion hierbij? Fungeerde het stadion als ‘trekker’ voor de bedrijven?  
*[Of was ‘t bijv. meer indirect, qua locatie/bereikbaarheid en overige voorzieningen?]*
  - Anders gezegd, heeft u gemerkt u dat het stadion een bepaalde aantrekkingskracht heeft voor bedrijven (bijv. bezien t.o.v. vergelijkbare kantoren elders)? En was dit in het begin anders dan nu?
  - Hadden deze bedrijven zich denkt u ook in EP gevestigd zonder het stadion?
  - Hoe staat het er momenteel voor met de E.O.? *[interesse, bezetting(-sgraad), etc.]*
- En hoe zit dit met de overige voorzieningen die ook in het gebouw zelf gehuisvest zijn? *[Jumbo, horeca, bioscoop, etc.]*
- Heeft het stadion volgens u nog gezorgd voor het aantrekken van andere bedrijvigheid naar het gebied?
  - M.a.w., hebben specifiek vanwege de Euroborg bedrijven zich in het gebied gevestigd; of bijv. vanwege de locatie of de ontwikkeling van het gebied en de voorzieningen daarmee in het algemeen?  
*[→ O.a. Mediacentrale en bedrijfjes daarin, andere kantoren, etc.]*
  - En/of eventueel ‘niet vaste’ bedrijvigheid (flex-kantoren, b2b-activiteiten, etc.)?
- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? *[Positief/negatief?]*
  - En wat is de invloed van afstand hierbij? Dichtbij vs. verderaf, toe- of afnemend?
- In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er *[ook/niet]* geweest zonder het stadion?
  - Kortom, is het stadion een ‘trekker’ van economische activiteit voor het gebied, of niet zo zeer? *[Of eerder een negatief element?]*
  - Wat zijn volgens u de belangrijkste redenen dat het stadion deze impact *[wel/niet]* heeft (gehad)?
- Wat is volgens u de schaal van deze economische effecten van de Euroborg? Hoe ver reikt dit, alleen directe omgeving, EP, omliggende buurten, of zelfs de hele stad?
  - En dichtbij vs. verderaf? *[Afnemend, eerst toenemend dan afnemend, etc.?]*
- En de schaal qua tijd? Vooral korte termijn-effect, en nu minder zichtbaar en hooguit indirect, of ook langdurige/blijvende impact zichtbaar?

### Gebiedsontwikkeling:

*[Hangt deels samen met econ. Effecten; maar gaat hier vooral om (fysieke) ontwikkeling v.h. gebied.]*

- In hoeverre heeft het stadion gezorgd voor het ‘aantrekken’ of de ontwikkeling van andere stedelijke functies in het gebied?
  - [ → Naast bedrijfsvestigingen en kantoren, bijv. ook woningen, de scholen, overheidsdiensten en andere voorzieningen, etc.?]
    - Wat voor invloed heeft het stadion volgens u daarmee (dus) gehad op het voorzieningenniveau in de buurt/wijk?
    - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
    - En is het Europapark hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
    - Wat is volgens u de invloed geweest van het stadion op de kwaliteit van de openbare ruimte in het gebied (positief/negatief; en hoe)?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg. Hoe had het EP er volgens u nu uitgezien, als de Euroborg er niet was gekomen?*
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ontwikkeling van EP? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: wat is volgens u de schaal daarvan? Alleen directe omgeving, hele EP, omliggende buurten, (...)?
  - En i.v.m. afstand tot EB? [Bijv. dichtbij direct, verder weg indirect?]
- En de schaal qua tijd? Vooral korte termijneffect, en nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevolgd’; o.a. met nog veel meer kantoren, maar ook verschillende andere functies. Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - Alleen invloed van de crisis, of is wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
  - Is dit ook terug te zien bij de E.O.? En/of was er een verschil hiertussen?
  - Is dit u erg tegengevallen? En voor andere partijen (bijv. bedrijven), denkt u?
  - Zoals het gebied er nu uit ziet, en de impact die het stadion heeft (gehad); denkt u dat bedrijven zich nog steeds (of juist) hier zouden vestigen? [wel/niet; meer/minder?]
  - Wat had evt. kunnen zorgen voor een grotere impact op dit gebied? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het EP; voor bedrijven, maar ook voor (potentiële) bewoners?
- Heeft er op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als ‘succesvol’ worden beschouwd? (In 2013 i.i.g. nog niet.)

### Sociaal-culturele impact en functie:

- Hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen?
  - En is deze functie toegenomen t.o.v. het oude Oosterparkstadion?
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadion bijv. ook als een soort ontmoetingsplaats voor buurtbewoners, en andere mensen? Doet het bijv. ook dienst als een soort buurthuis/-centrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten/–bijeenkomsten? In praktisch opzicht als locatie, of bijv. ook als ‘iconisch’ element?
  - Kortom; is het stadionegebouw in uw ogen dan ook een soort buurtvoorziening, of is het toch met name een voorziening voor de voetbaltoeschouwers?
  - Heeft de Euroborg volgens u wel/ook een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van EP en stad, als symbool of iconisch gebouw?*
  - *Element van ‘city marketing’; ‘uithangbord’ voor EP en Groningen?*
  - Zorgt het ook voor positieve aandacht en bekendheid, bijv. ook voor de E.O.?
- Heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - Waren er veel ‘NIMBY’ geluiden vooraf? En nu?

- Bijv. overlast, zoals verkeersdrukte en supportersstromen op wedstrijddagen?
  - Invloed op de mate van, of althans gevoelens van, (on)veiligheid in de buurt?
  - Eventueel nog andere negatieve effecten van het stadion?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
  - Is het stadion volgens u eerder een trekker van mensen naar EP, zowel bezoekers als potentiële bewoners, of eerder een negatief element (of geen van beide)?
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Hoe was de situatie geweest zonder het nieuwe stadion?
    - Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
  - Wat is volgens u de schaal van deze impact van de Euroborg? Alleen merkbaar in het EP, of ook de omliggende buurten, of zelfs de hele stad/regio?
    - En zitten hier nog verschillen tussen (buurt vs. hele stad)?
  - En de schaal qua tijd? Vooral korte termijneffecten, of ook langdurige/blijvende effecten?
  - Wat is volgens u de reden dat deze sociaal-culturele impact er wel/beperkt/niet is?
 

*[ → Volgens de gemeente was de sociale impact niet zo zeer een doel vooraf; maar is dit wel enigszins gerealiseerd toen het er eenmaal stond.]*

    - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
    - Had er bijv. (vooraf) meer aandacht moeten zijn voor deze sociale functie van het stadion?

### **Overige:**

#### **Overige & algemene vragen m.b.t. Euroborg:**

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- Wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moet in deze afweging ook de impact voor de stad een (belangrijke) rol spelen, of zijn praktische zaken als bereikbaarheid en overlast toch het belangrijkste?
- *[Als ik het goed begrepen heb hebben de gemeente en provincie ook in financieel opzicht deels bijgedragen aan de hele ontwikkeling (lening dan wel gift/subsidie) ]*
  - (In hoeverre) is dat volgens u terecht/gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua 'stedelijke ontwikkeling'?
- *[Naar wat ik heb begrepen heeft de gemeente wel enkele harde voorwaarden gesteld, m.b.t. bijkomende voorzieningen.]*

In hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten?

  - Was dit puur gericht op de exploitatie van het stadion en de ontwikkeling ('kostendragers'), vanuit ontwikkelcombinatie; of heeft de gemeente hierbij ook een rol gespeeld, met het oog op 'stedelijke ontwikkeling'?
  - Had de gemeente naar uw mening misschien nog uitgebreidere eisen moeten stellen, m.b.t. 'stedelijke ontwikkeling' – bijv. bij verkoop van de grond of vergunningverlening –, of zijn er voldoende harde voorwaarden gesteld?
 

*[Natuurlijk met als risico dat de ontv. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]*
- *[Als we bijv. kijken naar Alkmaar en Den Haag; Daar zijn gedurende het proces voorwaarden voor bijkomende ontwikkelingen losgelaten ("club staat op één"); maar daar is dan ook wel een beperktere ontwikkeling te zien.]*
  - Waarom denkt u dat dit in Groningen wel geslaagd is, maar in deze steden niet?
  - Is dit in het algemeen iets dat volgens u belangrijk, of noodzakelijk is voor het realiseren van een 'bredere' impact van een stadion?
  - En is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo'n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan 'de markt'?
 

*[Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een 'bredere' impact, een zekere extra functie/betekenis voor de stad gerealiseerd worden, en daarmee ook de betrokkenheid (faciliterend, locatie en vergunningen, dan wel actievere rol) van gemeente/provincie verder 'rechtvaardigen'.]*

- En wat is volgens u in het algemeen überhaupt een reden, of rechtvaardiging, voor medewerking en betrokkenheid van de gemeente (van faciliterend tot bijdragen in fin. zin)? Behouden v.d. club, bijkomende stedelijke ontwikkeling, (in fin. opzicht) in principe nooit?
- Is het stadionproject in uw ogen succesvol:
  - O.b.v. uw eigen verwachtingen?
  - En wat betreft 'stedelijke ontwikkeling'? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]
- Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua overige doelstellingen en eisen?
  - Qua uiteindelijke impact?

**Persoonlijke opvattingen algemeen:**

- Denkt u dat een stadion vergelijkbaar is qua impact met andere (grote) culturele of amusementsvoorzieningen? Of groter/kleiner/anders?  
[→ Enerzijds worden stadions maar vrij beperkt gebruikt (voor de hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen, en hebben vaak een grootsere uitstraling dan veel andere voorzieningen.]
- Wat en hoe groot denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn (op de 3 dimensies)?
  - En wat is over het algemeen de schaal daarvan? Directe omgeving; buurt/wijk; straal van ... meter; hele stad, of regio?
  - En is er een verschil tussen dichtbij en verder af van het stadion?
  - En de tijdschaal hiervan? Korte termijneffecten, of ook langdurige/blijvende?
- In het algemeen, welke factoren en voorwaarden zijn volgens u van belang, of noodzakelijk, voor het realiseren van een bep. impact van een stadion?
- *De praktijk van gebiedsontwikkeling en R.O. is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;*  
→ Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
  - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
  - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
  - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten mogelijk, en te rechtvaardigen, maakt?
  - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid, overlast)?

## Interviews – Vragen (Jaap Kruizenga)

### Facility manager FC Groningen

#### Algemeen/Intro:

- Voorstellen; Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? Opname? Etc.

#### Proces & (pre-)ontwikkeling:

- Vanaf wanneer bent u vanuit FC Groningen betrokken geraakt bij het proces?
  - En wat is precies uw rol (geweest) in én na het proces?
- En wat waren (vooraf) de belangrijkste doelstellingen bij de ontwikkeling, in het algemeen:
  - Vanuit de club?
  - Vanuit de gemeente?
  - En wat voor plaats kregen/hadden doelen m.b.t. stedelijke ontwikkeling (/gebiedsontwikkeling EP) hierin? Belangrijk, prominente plaats, of meer bijkomend aspect? En hoe werd dit beoogd?
  - En hoe stond FC Groningen hier tegenover? En hoe stond de gemeente daar in, zijn deze aspecten intensief vastgehouden/nagestreefd?

#### Gebiedsontwikkeling:

- In hoeverre heeft het stadion gezorgd voor het ‘aantrekken’ of de ontwikkeling van bedrijvigheid naar het gebied? En andere stedelijke functies?  
[→ *Bedrijfsvestigingen, kantoren, Mediacentrale; voorzieningen direct in complex; scholen, overheidsdienst, andere voorzieningen; woningen; etc.?*]
  - Wat voor invloed heeft het zo volgens u gehad op het voorz.niveau voor de buurt?
  - Zou u zeggen dat het stadion heeft gezorgd voor/bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het Europapark hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg. Hoe had het EP er volgens u nu uitgezien, als de EB er niet was gekomen?*
- En omgedraaid; in hoeverre is de ontwikkeling die het EP heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/’katalysator’ effect gehad op de invulling/ ontwikkeling van het EP? Of anders, of juist niet?
  - In hoeverre hebben andere functies zich specifiek vanwege de EB gevestigd? [Of bijv. ontwikkeling en ligging v.h. gebied in het algemeen?]
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Wat is volgens u de invloed van het stadion op de kwaliteit van de openbare ruimte in het gebied (positief/negatief; en hoe)? [→ “creëren van een openbare ruimte”]
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het EP, voor bedrijven, maar ook voor (potentiële) bewoners?
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: hoe ver reikt dit volgens u? Alleen directe omgeving, hele EP, omliggende buurten, (...)? En evt. de rol van afstand?
- En qua tijd? Vooral een kortetermijneffect, en nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevuld’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - Alleen invloed van de crisis, of is wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
  - Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Is dit iets dat u als FC Groningen uiteindelijk is tegengevallen? – gedurende het proces met het oog op financiering; maar evt. ook naderhand qua ontwikkeling van het gebied rondom het stadion?
  - En merkt u hier iets van bij andere bedrijven (of bewoners) in het gebied?
  - [Architect: 30 jaar, (...)] (Hoe) denkt u dat het gebied nog wel verder zal ontwikkelen?
- Ondanks deze evt. vertragingen t.o.v. de initiële plannen; zou u de hele ontwikkeling van het EP tot nu toe als succesvol beschouwen?

- Heeft op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als 'succesvol' worden beschouwd? (*In 2013 i.i.g. nog niet.*)

### Economische effecten:

- [*Samenhangend met gebiedsontwikkeling:*] Heeft specifiek het stadion (positieve) invloed op het aantrekken van bedrijven? Bijv. in de kantoorruimtes; En/of 'niet vaste' bedrijvigheid (flex-kantoren, 'b2b' activiteiten, etc.)?
  - Of niet? Of bijv. meer locatie, voorzieningen, etc. v.h. gebied in het algemeen?
  - En zo ja: wat is denk u de tijdschaal hiervan? [...]
  - Wat had volgens u evt. kunnen zorgen voor een grotere ec. impact?
- Heeft het stadion volgens u extra (blijvende) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? [Positief/negatief?]  
 ○ En wat is de rol van afstand tot stadion hierbij?

### Sociaal-culturele impact en functie:

- Allereerst, hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen? [En t.o.v. het oude Oosterparkstadion?]
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het bijv. ook als ontmoetingsplaats voor buurtbewoners, en andere mensen? Doet het bijv. ook dienst als een soort buurthuis/-centrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten of -bijeenkomsten?
  - Kortom; is het stadiongebouw in uw ogen dan ook een soort buurtvoorziening, of puur een voorziening voor de voetbaltoeschouwers?
  - Is het stadion naar uw mening voldoende geïntegreerd in/met de buurt, en bewoners; of zou deze verbinding volgens u nog beter kunnen, en hoe?
  - Heeft de Euroborg volgens u wel/ook een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van gebied en stad, als symbool of iconisch gebouw?*
  - *Element van 'city marketing', een 'uithangbord' voor EP en Groningen?*
- Wat is de rol van ontwerp/architectuur van het stadion hierbij volgens u?
- Heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - *Bijv. overlast, zoals grote verkeersdrukte en supportersstromen op wedstrijddagen?*
  - *Bep. invloed op mate van, of althans gevoelens van, (on)veiligheid in de buurt?*
  - Bestond er op basis hiervan vooraf veel weerstand tegen de komst van het stadion in omliggende buurten (NIMBY)? Of werd er o.h.a. wel positief tegenaan gekeken?
  - En is dit beeld door de buurtbewoners inmiddels bijgesteld/veranderd?
  - En is er volgens u een verschil merkbaar tussen bewoners van het EP (die er dus voor de ontwikkeling nog niet woonden) en bewoners van andere buurten (verder weg)?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
- Is het stadion volgens u eerder een trekker van mensen naar het gebied, bezoekers maar ook bewoners, of eerder een negatief element [of geen van beide]?
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En zitten er verschillen tussen de buurt(en), en de stad als geheel?
- En qua tijd? Vooral korte termijneffecten, en nu afgezwakt, of ook blijvende effecten?
- Wat is volgens u de reden dat deze sociaal-culturele impact er wel/beperkt/niet is?  
 [*→ Gemeente: sociale impact niet zo zeer een doel vooraf; maar wel enigszins gerealiseerd toen het er eenmaal stond; Bewoners: beperkt, (te) weinig integratie in/met buurt;*]
  - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er volgens u (vooraf/naderhand) meer aandacht moeten zijn voor deze sociale impact, en sociale functie/rol ervan voor de buurt?

## Overige:

### Overige & algemene vragen m.b.t. Euroborg:

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, volgens u van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- En wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moet volgens u in deze afweging ook de impact voor de stad een belangrijke rol spelen, of moeten praktische zaken (bereikbaarheid, overlast) toch centraal staan?
- *[De gemeente en provincie hebben ook in financieel opzicht deels bijgedragen aan de hele ontwikkeling (lening dan wel gift/subsidie) ]*
  - Hoe zag de financiering v.h. project er nu uiteindelijk precies uit?
  - In hoeverre/waarmee is dat volgens u gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua 'stedelijke ontwikkeling'?
- *[Naar wat ik heb begrepen zijn er wel enkele harde voorwaarden gesteld, m.b.t. de bijkomende voorzieningen.]* Hoe is hier in het proces mee omgegaan; in hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten?
  - Was dit puur gericht op de exploitatie van het stadion en de ontwikkeling ('kostendragers'), vanuit ontwikkelcombinatie; of heeft de gemeente hierbij ook een rol gespeeld, met het oog op 'stedelijke ontwikkeling'?
  - Hoe stond u hier als FC Groningen in/tegenover? [...]
  - Had de gemeente naar uw mening misschien juist meer of minder uitgebreide eisen moeten stellen, m.b.t. 'stedelijke ontwikkeling' (bij verkoop van grond, onderhandeling met marktpartijen, vergunningverlening), of niet?  
*[Natuurlijk met als risico dat de ontw. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]*
- *[Als we bijv. kijken naar Alkmaar en Den Haag; Daar zijn gedurende het proces voorwaarden voor bijkomende ontwikkelingen losgelaten ("club staat op één"); maar daar is dan ook wel een beperktere ontwikkeling te zien.]*
  - Waarom denkt u dat dit in Groningen wel geslaagd is, maar in deze steden niet?
  - Is dit, in het algemeen, ook iets dat volgens u belangrijk/noodzakelijk is voor het realiseren van een 'bredere' impact van een stadion?
  - En is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo'n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan 'de markt'?  
*[Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een 'bredere' impact, een zekere extra functie/betekenis voor de stad gerealiseerd worden, en daarmee ook de betrokkenheid (faciliterend, locatie en vergunningen, dan wel actievere rol) van gemeente/provincie verder 'rechtvaardigen'.]*
- Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - *Qua beleid en betrokkenheid gemeente?*
  - *Qua bijkomende ontwikkelingen & interesse van marktpartijen?*
  - *Qua financiering?*
  - *Qua uiteindelijke impact/rol voor de stad?*
  - *Qua locatiekeuze?*
- *[Algemeen: Praktijk van gebiedsontwikkeling en RO is nogal aan het veranderen; kleinschaliger, minder groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc. etc.:]*
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
    - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
- In hoeverre denkt u dat een stadion in staat zou zijn, en nog is, een bepaalde impact te realiseren op de omgeving en stad? En welke factoren en/of voorwaarden zijn daarbij volgens u vooral van belang/noodzakelijk?
  - En wat zijn de belangrijkste struikelblokken? En waarin ziet u evt. juist nog kansen voor toekomstige ontwikkelingen?

- Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen, impact voor de stad, combinatie met andere functies; Of juist iets dat zulke projecten nog mogelijk (en/of te rechtvaardigen) maakt?
  - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige ontwikkelingen op afgelegen locaties buiten de bestaande stad (vooral met het oog op bereikbaarheid, veiligheid en overlast)?
- **Concluderend: Is het stadionproject (EB & EP) in uw ogen succesvol:**
- O.b.v. uw eigen doelstellingen/verwachtingen?
  - En wat betreft 'stedelijke ontwikkeling'? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]

Persoonlijke opvattingen algemeen [Optioneel]:

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?
- [→ Enerzijds worden stadions maar vrij beperkt gebruikt (hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen aan, en hebben een grootsere uitstraling dan veel andere voorzieningen.]*

## Interviews – Vragen (Willem Smink)

Wethouder Stadsontwikkeling 1992 – 2006 / Voorzitter RvC Euroborg NV

### Algemeen/Intro:

- Voorstellen
- Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? Opname?
- Etc.

### Proces & (pre-)ontwikkeling:

- Hoe en wanneer bent u betrokken geraakt bij het ontwikkelingsproces?
  - En wat is precies uw rol (geweest) in én na het proces?
- Wat waren uw doelen/verwachtingen bij de ontwikkeling?
- En wat waren (vooraf) de belangrijkste doelstellingen bij de ontwikkeling, in het algemeen:
  - Vanuit de club?
  - Vanuit de gemeente?
  - En specifieker, m.b.t. ‘stedelijke ontwikkeling’ (op de 3 dimensies)?

### Gebiedsontwikkeling:

- In hoeverre heeft het stadion gezorgd voor het ‘aantrekken’ of de ontwikkeling van andere stedelijke functies in het gebied?  
[→ *Bedrijfsvestigingen, kantoren; andere voorzieningen; woningen; etc.?*]
  - Wat voor invloed heeft het stadion volgens u daarmee (dus) gehad op het voorzieningenniveau in de buurt/wijk?
  - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het Europapark hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- Wat is volgens u de invloed geweest van het stadion op de kwaliteit van de openbare ruimte in het gebied (positief/negatief; en hoe)?
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het gebied/EP, voor bedrijven, en voor (potentiële) bewoners?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg.* Hoe had het EP er volgens u nu uitgezien, als de Euroborg er niet was gekomen?
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ontwikkeling van het EP? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: wat is daarvan volgens u de schaal, hoe ver reikt dat? Directe omgeving, hele EP, ook omliggende buurten, (...)?
  - En i.v.m. afstand tot EB? *Bijv. rondom direct, verder weg alleen indirect?*
- En de schaal qua tijd? Vooral korte termijn-effect, en nu minder zichtbaar en hooguit indirect; of nog steeds aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het EP voltooid zou zijn, ‘gevuuld’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - *Alleen invloed van de crisis, of is wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?*
  - Is dit u erg tegengevallen? En voor andere partijen, denkt u?
  - Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Heeft er op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als ‘succesvol’ worden beschouwd? (*In 2013 i.i.g. nog niet.*)

### Economische effecten:

[*Sommige economische effecten hangen wel samen met gebiedsontwikkeling; maar hier gaat het vooral om het economische aspect.*]

- Heeft het stadion gezorgd voor het aantrekken van extra bedrijvigheid naar het gebied?

- M.a.w. hebben specifiek vanwege de EB bedrijven zich in het gebied gevestigd; of bijv. vanwege de locatie, of de ontwikkeling van het gebied en de voorzieningen daarmee in het algemeen? [*→ O.a. direct omliggende voorzieningen; kantoren, Mediacentrale en bedrijven, etc.*]
- En/of eventueel 'niet vaste' bedrijvigheid (flex-kantoren, b2b, etc.)?
- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? [Positief/negatief?]
  - En wat is de invloed van afstand hierbij? [Dichtbij vs. verder af; toe-/afnemend?]
- In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er [ook/niet] geweest zonder het stadion?
  - Wat zijn volgens u de belangrijkste redenen dat het stadion deze impact [wel/niet] heeft (gehad)?
  - [Net zoals bij gebiedsontwikkeling, is de economische impact, al dan niet door de crisis, ook (nog) beperkter dan gepland.] Is dit vooral door de crisis, of zijn er wellicht nog andere oorzaken?
  - Wat had dan evt. kunnen zorgen voor een grotere economische impact? Welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Wat is volgens u de schaal van deze economische effecten? Hoe ver reikt dit, alleen directe omgeving, Europapark, omliggende buurten, of zelfs de hele stad?
  - En rol van afstand hier? [afnemend, toenemend en dan afnemend, etc.?
- En de schaal qua tijd? Vooral korte termijneffecten, nu minder zichtbaar en indirect, of nog steeds een langdurige/blijvende impact zichtbaar?

### **Sociaal-culturele impact en functie:**

- Allereerst, hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen?
  - En is deze functie toegenomen t.o.v. het oude Oosterparkstadion?
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadion bijv. ook als soort ontmoetingsplaats voor buurtbewoners, en andere mensen? Doet het bijv. ook dienst als soort buurthuis/-centrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten/–bijeenkomsten? [In praktisch opzicht als locatie, of bijv. ook als 'iconisch' element?]
  - Kortom; is het stadiongebouw in uw ogen dan ook een soort buurtvoorziening, of is het toch duidelijk met name een voorziening voor de voetbaltoeschouwers?
  - Heeft de Euroborg volgens u [wel/ook] een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van gebied en stad, als symbool of iconisch gebouw?*
  - *Element van 'city marketing' 'uithangbord' voor EP en Groningen?*
- Heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - Zijn er veel 'NIMBY' geluiden geweest in de beginfase?
  - Bijv. overlast, zoals verkeersdrukke en supportersstromen op wedstrijddagen?
  - Bep. invloed op de mate van, of althans gevoelens van, (on)veiligheid in de buurt?
  - Zijn er eventueel nog andere negatieve effecten van het stadion?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
- Is het stadion volgens u eerder een trekker van mensen naar het gebied, zowel bezoekers als potentiële bewoners, of eerder een negatief element (of geen van beide)?
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Beter gezegd, hoe was de situatie geweest zonder het nieuwe stadion?
  - Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En zitten er verschillen hiertussen? [Buurt vs. gehele stad?]
- En de schaal qua tijd? Vooral korte termijneffecten direct na ontwikkeling, en nu afgezwakt, of ook langdurige en blijvende effecten?

- Wat is volgens u de reden dat deze sociaal-culturele impact er [wel/beperkt/niet] is?  
[→ Volgens Jelle Dijkstra was de sociale impact niet zo zeer een doel vooraf; maar is dit wel enigszins gerealiseerd toen het er eenmaal stond.]
  - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er volgens u bijv. (vooraf) ook meer aandacht moeten zijn voor deze sociale functie van het stadion?

### **Overige:**

#### Overige & algemene vragen m.b.t. Euroborg:

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- Wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moeten in de afweging deze ‘stedelijke ontwikkeling’ aspecten naar uw mening ook een (belangrijke) rol spelen, of zijn praktische zaken als bereikbaarheid en overlast toch het belangrijkste?
- [Als ik het goed begrepen heb hebben de gemeente en provincie ook in financieel opzicht deels bijgedragen aan de hele ontwikkeling (lening dan wel gift/subsidie) ]
  - Hoe zag de financiering v.h. project er nu uiteindelijk precies uit?
  - (In hoeverre) is dat volgens u terecht/gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua ‘stedelijke ontwikkeling’?
- [Naar wat ik heb begrepen zijn er wel enkele harde voorwaarden gesteld, m.b.t. de bijkomende voorzieningen.] In hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten?
  - Was dit puur gericht op de exploitatie van het stadion en de ontwikkeling (‘kostendragers’), vanuit ontwikkelcombinatie; of heeft de gemeente hierbij ook een rol gespeeld, met het oog op ‘stedelijke ontwikkeling’?
  - Had de gemeente naar uw mening misschien nog uitgebreidere eisen moeten stellen, m.b.t. ‘stedelijke ontwikkeling’ – bijv. bij verkoop van de grond of vergunningverlening –, of zijn er voldoende harde voorwaarden gesteld?  
*[Natuurlijk met als risico dat de ontw. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]*
- [Als we bijv. kijken naar Alkmaar en Den Haag; Daar zijn gedurende het proces voorwaarden voor bijkomende ontwikkelingen losgelaten (“club staat op één”); maar daar is dan ook wel een beperktere ontwikkeling te zien.]
  - Waarom denkt u dat dit in Groningen wel geslaagd is, maar in deze steden niet?
  - Is dit in het algemeen iets dat volgens u belangrijk, of noodzakelijk is voor het realiseren van een ‘bredere’ impact van een stadion?
  - En is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo’n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan ‘de markt’?  
*[Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een ‘bredere’ impact, een zekere extra functie/betekenis voor de stad gerealiseerd worden, en daarmee ook de betrokkenheid (faciliterend, locatie en vergunningen, dan wel actievere rol) van gemeente/provincie verder ‘rechtvaardigen’.]*
- En wat is volgens u in het algemeen überhaupt een reden, of rechtvaardiging, voor medewerking en betrokkenheid van de gemeente (van faciliterend tot bijdragen in fin. zin)? Behouden v.d. club, bijkomende stedelijke ontwikkeling, (in fin. opzicht) in principe nooit?
- Is het stadionproject in uw ogen succesvol:
  - O.b.v. uw eigen doelstellingen/verwachtingen?
  - En wat betreft ‘stedelijke ontwikkeling’? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]
- Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua overige doelstellingen en eisen?
  - Qua uiteindelijke impact?

Persoonlijke opvattingen algemeen [Optioneel]:

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?  
*[→ Enerzijds worden stadions maar vrij beperkt gebruikt (hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen aan, en hebben een grootsere uitstraling dan veel andere voorzieningen.]*
- Hoe groot, en wat, denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn – op de 3 algemene dimensies?
  - En wat is over het algemeen de schaal van deze impact(s)? Directe omgeving; buurt/wijk; straal van ... meter; of de hele stad, of regio?
  - En de tijdschaal hiervan? Korte termijneffecten, of ook langdurigere/blijvende?
- In het algemeen, welke factoren en voorwaarden zijn volgens u nog van belang, of noodzakelijk, bij het realiseren van een bepaalde impact van een stadion?
- *[De praktijk van gebiedsontwikkeling en RO is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;]*
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
    - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
    - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten nog mogelijk, en te rechtvaardigen, maakt?
    - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid en overlast)?

## Interviews – Vragen (Ben Veenbrink)

Stadiondirecteur Euroborg NV (2005-heden) | The Stadium Consultancy

### Proces & (pre-)ontwikkeling [t/m hier: 5 min.]:

- Hoe en wanneer bent u betrokken geraakt bij het ontwikkelingsproces?
  - En wat is precies uw rol (geweest) in én na het proces [Euroborg NV/TSC]?
- En wat waren (vooraf) de belangrijkste doelstellingen bij de ontwikkeling, in het algemeen:
  - Vanuit de club?
  - Voor u/Euroborg NV?
  - Vanuit de gemeente?
  - En specifieker, m.b.t. ‘stedelijke ontwikkeling’ (op de 3 dimensies)?
- Zijn deze gedurende het proces vastgehouden, of ook nog veranderd?

### Gebiedsontwikkeling [+/- 10-15 min.]:

- In hoeverre heeft het stadion gezorgd voor het ‘aantrekken’ of de ontwikkeling van andere stedelijke functies in het gebied?
  - *Bedrijfsvestigingen; winkels en andere voorzieningen; woningen; etc.?*
    - Wat voor invloed heeft het stadion volgens u daarmee (dus) gehad op het voorzieningenniveau in de buurt?
    - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
    - En is het EP hierdoor meer een onderdeel geworden v.d. (‘bij de stad gaan horen’)?
- Wat is volgens u de invloed geweest van het stadion op de kwaliteit v.d. openbare ruimte in het gebied? [*positief/negatief; hoe?*]
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het gebied, voor bedrijven, en potentiële bewoners?

[“De ‘landmark’ van het Europapark heeft een dusdanige uitstraling en aantrekkingskracht op stad en omgeving (op bevolking en bedrijvigheid), dat gesteld kan worden dat een Europapark met een multifunctioneel stadion meer bijzonder en van waarde is dan een Europapark zonder een dergelijk stadion” (Eindverantwoording, 2007)]

- [*Jelle Dijkstra (gemeente): “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg, EB geïntegreerd in EP.*]  
Hoe had het Europapark er volgens u nu uitgezien, als de Euroborg er niet was gekomen?
- En omgedraaid; in hoeverre is de ontwikkeling die het EP heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de verdere invulling/ontwikkeling van EP? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze functie als ‘aanjager’ voor gebiedsontwikkeling: wat is volgens u de schaal daarvan, hoe ver reikt dat? Alleen directe omgeving, hele EP, ook omliggende buurten, (...)?
  - En is hier een soort patroon zichtbaar? [*Bijv. dichtbij direct, verder weg indirect?*]
- En de schaal qua tijd? Vooral een korte termijn-effect, en nu minder zichtbaar of indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevolgd’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - → *Alleen invloed van de crisis, of wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?*
  - Wat had er evt. voor kunnen zorgen dat deze impact er in grotere mate was geweest? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Heeft er op de oude locatie, het Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, ook ‘succesvol’? (*In 2013 i.i.g. nog niet.*)

### Economische effecten [+/- 10-15 min.]:

[*Sommige econ. effecten hangen wel samen met gebiedsontwikkeling; maar hier gaat het vooral om het econ. aspect.*]

- Heeft het stadion gezorgd voor het aantrekken van extra bedrijvigheid naar het gebied?
  - M.a.w. hebben specifiek vanwege de Euroborg bedrijven zich in het gebied gevestigd? Of bijv. vanwege de locatie, of de ontwikkeling van het gebied en de voorzieningen daarmee in het algemeen?

[→ O.a. direct omliggende voorzieningen (bioscoop, horeca, Jumbo, etc.), de kantoren, Mediacentrale en bedrijven daarin, en later ook bijv. ROC, SoZaWe.]

- En/of eventueel 'niet vaste' bedrijvigheid (flex-kantoren, b2b-activiteiten, etc.)?
- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? [Positief/negatief?]
  - En wat is de invloed van afstand hierbij? [Dichtbij vs. verder weg, toe- of afnemend?]
- [Zo ja:] In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er ook/niet geweest zonder het stadion?
  - Wat zijn volgens u de belangrijkste redenen dat het stadion deze impact [wel/niet] heeft (gehad)?
- [Zo nee:] Aanvankelijk werd bijv. ook gedacht aan een veelvoud aan kantoorruimte van wat er in werkelijkheid gerealiseerd is, en werden er ook nog meer economische functies beoogd. Wat is volgens u de reden dat dit beperkter is uitpakkt tot nu toe?
  - → Invloed v.d. economische crisis, of wellicht ook impact v.h. stadion wat overschat?
  - Wat had er volgens u evt. voor kunnen zorgen dat er een grotere econ. impact was geweest? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
- Wat is volgens u de schaal van deze economische effecten? Alleen de directe omgeving, het Europapark, de omliggende buurten, of zelfs de hele stad?
  - En wat is de rol van afstand hierbij (afnemend, toenemend dan afnemend, etc.)?
- En de schaal qua tijd? Vooral een korte termijneffect, en nu minder zichtbaar en hooguit indirect, of is er ook een langdurigere/blijvende impact zichtbaar?

#### **Sociaal-culturele impact en functie [+/- 10-15 min.]:**

- Hoe zou u het belang omschrijven van de Euroborg als amusementsvoorziening voor de stad/regio Groningen?
  - En is deze functie toegenomen t.o.v. het oude Oosterparkstadion?
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadion (en -gebied) als een soort ontmoetingsplaats voor buurtbewoners, en anderen? Doet het bijv. ook dienst als buurthuis/-centrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten/–bijeenkomsten? In praktisch opzicht als locatie, of bijv. ook als 'iconisch' element?
  - Kortom; is het stadiongebouw in uw ogen dan ook een soort buurtvoorziening, of is het toch met name een voorziening voor de voetbaltoeschouwers?
  - Heeft de Euroborg volgens u [wel/ook] een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel:
  - Positief element in de uitstraling van EP en stad, als symbool of iconisch gebouw?
  - Element van 'city marketing'; 'uithangbord' voor EP en Groningen?
- Ook eventuele negatieve aspecten; heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - Bijv. overlast, zoals verkeersdrukke en supportersstromen op wedstrijddagen?
  - Invloed op de mate van, of althans gevoelens van, (on)veiligheid?
  - Eventueel nog andere negatieve effecten?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
- Is het stadion volgens u eerder een trekker van mensen naar het gebied, zowel bezoekers als bewoners, of eerder een negatief element (of geen van beide)?
- In hoeverre zijn deze effecten toe te wijzen aan het **nieuwe stadion**? Hoe was de situatie geweest zonder het nieuwe stadion?
  - Of toch vooral ook gerelateerd aan FC Groningen?
- Wat is volgens u de schaal van deze impact van de Euroborg? Is dit alleen merkbaar in het Europapark, de omliggende buurten, of ook de hele stad/regio?
  - En zitten hier nog verschillen tussen (buurt vs. hele stad)?

- En de schaal qua tijd? Vooral korte termijneffecten kort na ontwikkeling, en nu afgezwakt, of ook langdurige/blijvende effecten?
- Wat is volgens u de reden dat deze sociaal-culturele impact er [wel/beperkt/niet] is?  
[→ Volgens de gemeente was de sociale impact niet zo zeer een doel vooraf; maar is dit wel enigszins gerealiseerd toen het er eenmaal stond.]
  - Wat had volgens u evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er bijv. (vooraf) meer aandacht moeten zijn voor deze sociale functie?

### **Overige [+/- 15-20 min.]:**

#### Overige & algemene vragen m.b.t. Euroborg:

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- *[Als ik het goed begrepen heb heeft de gemeente (en provincie?) ook in financieel opzicht deels bijgedragen aan de ontwikkeling;]*
  - Hoe zag de financiering v.h. project er uiteindelijk exact uit?
  - (In hoeverre) is dat volgens u terecht/gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua ‘stedelijke ontwikkeling’?
- *[Naar wat ik heb begrepen heeft de gemeente wel enkele harde voorwaarden gesteld, met name m.b.t. bijkomende voorzieningen.]*  
In hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten?
  - Was dit ook met het oog op ‘stedelijke ontwikkeling’, of toch met name gericht op de exploitatie van club en stadion?
  - Had de gemeente naar uw mening uitgebreidere eisen moeten stellen, ook m.b.t. ‘stedelijke ontwikkeling’, of zijn er voldoende harde voorwaarden gesteld?  
*[Met als risico dat de ontwikkeling langzamer of niet van de grond waren gekomen; onderhandelingen, vinden van geïnteresseerde partijen, en financiële middelen, etc.]*
- Is het stadionproject in uw ogen succesvol:
  - O.b.v. eigen doelstellingen/verwachtingen?
  - En wat betreft ‘stedelijke ontwikkeling’?
- Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontwikkeling nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua overige doelstellingen en eisen?
  - Qua uiteindelijke impact?

#### Persoonlijke opvattingen algemeen:

- Denkt u dat een stadion qua impact op een stad vergelijkbaar is met andere (grote) culturele of amusementsvoorzieningen? Of groter/kleiner/anders?  
*[→ Enerzijds worden stadions maar vrij beperkt gebruikt (voor de hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze vaak wel meer mensen, en hebben vaak een grotere uitstraling dan veel andere voorzieningen.]*
- Wat en hoe groot denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn [op de 3 dimensies]?
  - En wat is over het algemeen de schaal daarvan? Moeten we dan denken aan directe omgeving; de buurt/wijk; straal van ... meter; of de hele stad, of regio?
  - En is er een verschil tussen dichtbij en verderaf van het stadion?
  - En de schaal qua tijd? Toch vooral korte termijneffecten direct na ontwikkeling, of (ook) langdurigere/blijvende effecten?
- In het algemeen, welke factoren en voorwaarden zijn volgens u van belang, of noodzakelijk, voor het realiseren van een bepaalde impact van een stadion?

- En in hoeverre is het volgens u dan belangrijk dat daarbij ook bepaalde harde voorwaarden worden gesteld, door een gemeente (m.b.t. bijkomende ontwikkelingen)?
 

*[ → Met als risico dat de ontwikkeling moeizamer of niet v.d. grond komt; Veel voorwaarden bemoeilijkt en vertraagt het ontwikkelingsproces (onderhandelingen, vinden van geïnteresseerde partijen, etc.). Aan de andere kant kunnen bijkomende ontw. de exploitatie wel verlichten, én zorgt dit voor een zekere extra functie voor de stad, en daarmee 'rechtvaardiging' van de betrokkenheid van een gemeente (actief dan wel faciliterend).]*  
*[ → Zie bijv. Alkmaar, Den Haag, etc.: voorwaarden losgelaten gedurende proces ("club staat op één"); maar (dus) beperkte extra impact voor de stad.]*
- En (wanneer) is het volgens u überhaupt gerechtvaardigd als een gemeente in financiële zin bijdraagt? Behouden van de club, bijkomende stedelijke ontwikkeling, of in principe nooit?
- En wat is volgens u het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moeten in de afweging deze 'sted. ontw.' aspecten ook een belangrijke rol spelen, of zijn praktische zaken zoals bereikbaarheid en overlast toch het belangrijkste?
- *[De praktijk van gebiedsontwikkeling en RO is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;]*
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
    - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
    - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten nog mogelijk, en te rechtvaardigen, maakt?
    - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid en overlast)?
- En hoe verhoudt de Nederlandse situatie zich tot die in andere landen – grote 'voetballanden' zoals VK en Duitsland; dichtbij bijv. België; maar ook evt. andere landen?
  - Hoe gaat daar stadionontwikkeling in zijn werk, qua financiering, betrokken partijen, etc.? En met het oog op de toekomst, is daar sprake van een veranderende situatie?
  - Hoe wordt daar aangekeken tegen de impact van een stadion voor 'stedelijke ontw.'? In welke mate wordt dit beoogd bij projecten, en in hoeverre gerealiseerd?
  - En zijn er verschillen zichtbaar qua locatieafwegingen en –keuze?
  - Wat kunnen we in Nederland evt. leren of meenemen van de ideeën over, en praktijk van stadionontwikkeling op andere plekken?

## Interviews – Vragen (Jan Voorrips - Ontwikkelaar)

### Algemeen/Intro:

- Voorstellen / Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? Opname? Etc.

### Proces & (pre-)ontwikkeling:

- Hoe en wanneer bent u betrokken geraakt bij het ontwikkelingsproces, en tot wanneer?
  - En wat is precies uw rol geweest in het hele proces?  
[→ Evt. over doorvragen]
- En wat waren volgens u de belangrijkste doelen bij de ontwikkeling, in het algemeen:
  - Wat was volgens u het primaire doel: aanpakken overlast oude locatie, FCG ondersteunen, stedelijke ontwikkeling EP?
  - En specifiek m.b.t. ‘stedelijke ontwikkeling’ (3 dimensies)?
  - Wat waren voor u als ontwikkelaar de doelstellingen, of beter uw verwachtingen, bij de ontwikkeling, vooraf?

### Gebiedsontwikkeling:

- In hoeverre heeft het stadion gezorgd voor het ‘aantrekken’ of de ontwikkeling van bedrijvigheid naar/in het gebied? En andere stedelijke functies?  
[→ *Bedrijfsvestigingen & kantoren; Mediacentrale; scholen, andere voorzieningen en functies (bioscoop, horeca, Jumbo, scholen, etc.); woningen; etc.?*]
  - M.a.w. in hoeverre hebben deze zich specifiek gevestigd vanwege de EB? [Of meer locatie, en ontwikkeling gebied en voorzieningen in het algemeen?]
  - En evt. ‘niet vaste’ bedrijvigheid (flex-kantoren, b2b-activiteiten, etc.)?
  - Wat voor invloed heeft het stadion volgens u daarmee (dus) gehad op het voorzieningenniveau in de buurt/wijk?
  - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het Europapark hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- Wat is volgens u de invloed geweest van het stadion op de kwaliteit van de openbare ruimte in het gebied (positief/negatief; en hoe)? [→ *“openbare ruimte creëren”*]
- Wat is volgens u, over het algemeen, de invloed van de EB (geweest) op de aantrekkelijkheid van het gebied, voor bedrijven, maar ook (potentiële) bewoners?
- [*Jelle Dijkstra (gemeente): “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg.*]  
Hoe had het Europapark er volgens u nu uitgezien, als de Euroborg er niet was gekomen?
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ontwikkeling van het Europapark? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze ‘aanjager’ functie voor gebieds- en economische ontwikkeling: wat is daarvan volgens u de schaal, hoe ver reikt dit? Alleen directe omgeving, hele EP, omliggende buurten, stad, ...?
  - En is hier een soort patroon zichtbaar? [*Direct rondom vs. verder weg?*]
- En qua tijd? Vooral korte termijn-effect, nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevolgd’; veelvoud aan kantoren, maar ook andere functies; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - Alleen invloed van de crisis, of is wellicht de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
  - Is dit u erg tegengefallen? En andere partijen, denkt u?
  - Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - [*Architect: nieuwe wijk, die ws. wel 30 jaar nodig heeft om helemaal tot ontwikkeling te komen.*] Denkt u dat dit nog (verder) gaat gebeuren?

### Economische effecten:

- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? Positief of negatief?
  - En de invloed van afstand hierbij? [Dichtbij vs. verderaf, toe-/afnemend?]
- In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er ook/niet geweest zonder het stadion?

### **Sociaal-culturele impact en functie:** *[wellicht minder relevant; vooral na de ontwikkeling]*

- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadion bijv. ook als ontmoetingsplaats voor buurtbewoners, en andere mensen? Doet het bijv. ook dienst als een soort buurthuis of buurtcentrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten of –bijeenkomsten?
  - Kortom; is het stadiongebouw in uw ogen dan ook een soort buurtvoorziening, of is het toch met name een voorziening voor de voetbaltoeschouwers?
  - Is er bij de ontwikkeling voldoende rekening gehouden met de integratie en verbinding in/met de buurt? En specifiek met een woonfunctie (met name de woontorens)? [*→ opmerkingen/klachten buurtbewoners*]
  - Heeft de Euroborg volgens u wel/ook een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten toe**, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van EP en stad, als symbool of iconisch gebouw?*
  - *Element van 'city marketing', 'uithangbord' voor EP en Groningen?*
- Heeft het stadion ook bepaalde negatieve effecten op de omgeving/buurt?
  - Veel NIMBY geluiden vooraf? En is dit later bijgesteld?
  - Bijv. overlast, zoals grote verkeersdrukte en supportersstromen op wedstrijddagen?
  - Bep. invloed op de mate van, of gevoelens van, (on)veiligheid in de buurt?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven/beoordelen?
- Is het stadion volgens u eerder een trekker van mensen naar het gebied, bezoekers én potentiële bewoners, of eerder een negatief element? [*of geen van beide?*]
- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Beter gezegd, hoe was de situatie geweest zonder het nieuwe stadion?
  - Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En verschillen tussen omliggende buurt(en), en stad als geheel?
- En schaal qua tijd? Vooral korte termijneffecten, nu afgezwakt, of ook blijvende effecten?
- [*Volgens de gemeente was de soc. impact niet zo zeer een doel vooraf, maar is dit later wel enigszins gerealiseerd; volgens bewoners beperkt, te weinig integratie met buurt(bewoners)*]
  - Wat had volgens u kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn? Had er bijv. (vooraf) meer aandacht moeten zijn voor deze sociale functie van het stadion?

### **Overige:**

#### **Overige & algemene vragen m.b.t. Euroborg:**

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, van invloed of belang (geweest) bij de impact die het heeft (gehad) op de omgeving en stad?
- Wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moet in deze afweging ook de impact voor de stad een (belangrijke) rol spelen, of toch vooral praktische zaken als bereikbaarheid en overlast?
- [*Gemeente en provincie hebben ook in financieel opzicht deels bijgedragen aan de hele ontwikkeling (lening dan wel gift/subsidie)*]
  - (In hoeverre) is dat volgens u terecht/gerechtvaardigd? Was in dat geval het ondersteunen (en behouden) van FC Gr. (als eredivisieclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan

qua 'stedelijke ontwikkeling'?

[→ *bijkomende gebieds- en economische ontwikkeling, werkgelegenheid, etc.*]

- En uiteindelijk/terugkijkend: de vertraging, beperktere/langzamere ontwikkeling van EP, economische effecten, etc.; was dit voor de gemeente nog problematisch? Zijn ze hier op aangekeken, wat betreft rechtvaardiging? (ondanks positieve exploitatie)?
- [Naar wat ik heb begrepen zijn er wel enkele 'harde' voorwaarden gesteld, m.b.t. bijkomende voorzieningen. Sowieso is het wel een lastige operatie geweest, om alle partijen bij elkaar te krijgen en houden, en heeft het hele proces ook wel vertraagd;]
  - Was dit puur gericht op de exploitatie van het stadion en de ontwikkeling ('kostendragers'), vanuit ontwikkelcombinatie; of heeft de gemeente hierbij ook een rol gespeeld, met het oog op 'stedelijke ontwikkeling'?
  - In hoeverre zijn deze echt vastgehouden, of zijn deze ook deels veranderd of losgelaten? En om welke redenen?
  - En hoe stond u als ontwikkelaar hier in? Is hierover veel onderhandeling geweest?
  - Had de gemeente naar uw mening evt. uitgebreidere eisen moeten/kunnen stellen, m.b.t. 'stedelijke ontwikkeling' (bijv. bij grondverkoop, vergunningverlening); of zijn er voldoende voorwaarden gesteld/had dit ook niet gekund?  
[→ *Gezien de beoogde grote gebieds- en economische ontwikkeling, en financiële betrokkenheid gemeente?*]  
[→ *Natuurlijk met als risico dat de ontw. langzamer/niet v.d. grond komt; onderhandelingen, vinden van geïnteresseerde partijen, financiering, etc.*]
- [Aan de andere kant; bijv. kijken naar Alkmaar en DH; Daar zijn gedurende het proces bijkomende ontwikkelingen losgelaten ("club staat op één"); maar daar is dan ook wel beperktere ontwikkeling te zien.]
  - Waarom denkt u dat dit in Groningen wel geslaagd is, maar in deze steden niet?
  - Is dit in het algemeen iets dat volgens u belangrijk, of noodzakelijk is voor het realiseren van een 'bredere' impact van een stadion?
  - En is dit in uw ogen ook iets waar een gemeente een (actieve) rol in zou moeten spelen in zo'n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan 'de markt'?  
[*Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een 'bredere' impact, een zekere extra functie/ betekenis voor de stad gerealiseerd worden, en daarmee ook extra 'rechtvaardiging' van de ontwikkeling en betrokkenheid van de gemeente.*]
- [Fox docu: RTVN journalist en Hans Nijland: nu andere verhoudingen, ontwikkeling zou nu moeilijker zijn, niet meer zo lukken;]  
Stel dat het idee voor een nieuw stadion in Gr. nu op zou komen; Zou dit in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontw. nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua uiteindelijke impact?

#### Persoonlijke opvattingen algemeen:

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?  
[→ *Enerzijds worden stadions slechts beperkt gebruikt (voor de hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen aan, en hebben een grootsere uitstraling dan veel andere voorzieningen.*]
- Hoe groot, en wat, denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn – op de 3 algemene dimensies?
  - En wat is over het algemeen de schaal van deze impact(s)?
  - En verschil tussen dichtbij en verderaf van het stadion?
  - En qua tijd? Vooral korte termijneffecten, of (ook) blijvende effecten?
- In het algemeen, welke factoren en voorwaarden zijn volgens u nog van belang, of noodzakelijk, bij het realiseren van een bepaalde impact van een stadion?
- En (wanneer) is het volgens u überhaupt gerechtvaardigd als een gemeente in financiële zin bijdraagt aan zo'n ontwikkeling? Behouden van de club, bijkomende stedelijke ontwikkeling, of in principe nooit?
- [De praktijk van gebiedsontwikkeling en RO is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk

*grondbeleid, benutten bestaande stad, etc.;*

→ Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?

- Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
  
  - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
  - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten nog mogelijk, en te rechtvaardigen, maakt?
  - En wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid, overlast, etc.)?
- [En hoe verhoudt de Nederlandse situatie zich tot die in andere landen – grote ‘voetballanden’ zoals VK en Duitsland, dichtbij bijv. België, maar ook evt. andere landen?]
- Hoe gaat daar stadionontwikkeling in zijn werk, qua financiering, betrokken partijen, etc.? En met het oog op de toekomst, is daar sprake van een veranderende situatie?
  - Hoe wordt daar aangekeken tegen de mogelijke impact van een stadion voor ‘stedelijke ontwikkeling’? In welke mate wordt dit beoogd bij nieuwe projecten, en in hoeverre gerealiseerd?
  - En zijn er verschillen zichtbaar qua locatieafwegingen en –keuze?
  - Wat kunnen we in Nederland evt. leren of meenemen van de ideeën over en praktijk van stadionontwikkeling daar?

## Interviews – Vragen (Marieke Zomer)

### Wijkcoördinator Oosterpoort & De Linie (Nijestee – woningcorporatie)

#### Algemeen/Intro:

- Voorstellen / Introductie onderzoek
- Opzet interview [Algemeen/Intro | Proces & Pre-ontwikkeling | Economische effecten | Gebiedsontwikkeling | Sociaal-culturele impact | Overige]
- Hoe lang? | Opname? | Etc.

#### Proces & (pre-)ontwikkeling:

- Als ik het goed heb heeft Nijestee in het gebied dus woningen in De Frontier en De Oosterpoort? En om hoeveel woningen gaat het dan ongeveer?
- U bent wijkcoördinator van Oosterpoort, De Linie en Helpman (volgens de website); wat is precies uw rol/functie in het gebied?
- Sinds wanneer heeft Nijestee hier woningen?
- In hoeverre bent u betrokken geweest bij de ontwikkeling van de EB en het EP?
  - [Voor ontw.:] Hoe keek u aan tegen de ontwikkeling van het stadion op het EP? Wat waren uw verwachtingen hierbij? [Positief, negatief, neutraal?]
  - [Na ontw.:] Welke rol speelde de aanwezigheid van het stadion hierbij voor Nijestee? Positief, aantrekkelijk element voor de buurt; of evt. negatief element? Of neutraal?
  - Wat waren volgens u de belangrijkste doelen bij de ontwikkeling, in het algemeen: Belang van de club, of ook m.b.t. ‘stedelijke ontwikkeling’?

#### Gebiedsontwikkeling:

- In hoeverre heeft het stadion volgens u gezorgd voor het ‘aantrekken’ of de ontwikkeling van bedrijvigheid, en andere stedelijke functies naar het gebied?  
[→ Bedrijfsvestingen, kantoren, Mediacentrale; voorzieningen direct in complex; scholen, overheidsdienst, andere voorzieningen; woningen; etc.]
  - In hoeverre hebben deze zich specifiek vanwege de EB gevestigd? [Of bijv. ontwikkeling of ligging gebied in het algemeen?]
  - Wat voor invloed heeft het stadion volgens u daarmee gehad op het voorzieningenniveau in/voor de buurt/wijk?
  - Zou u zeggen dat het stadion heeft gezorgd voor of bijgedragen aan ‘verstedelijking’ van het omliggende gebied?
  - En is het EP hierdoor ook meer een onderdeel geworden van de stad (‘bij de stad gaan horen’)?
- Wat is volgens u de invloed van het stadion op de kwaliteit van de openbare ruimte van het gebied (positief/negatief; en hoe)? [→ “openbare ruimte creëren”]
- Wat is volgens u, over het algemeen, de invloed van de Euroborg (geweest) op de aantrekkelijkheid van het gebied:
  - Voor bedrijven en voorzieningen?
  - Voor (potentiële) bewoners?
- *Jelle Dijkstra: “Lijntjes aan elkaar geknoopt”, gecombineerde ontwikkeling van Europapark en Euroborg.* Hoe had het EP er volgens u nu uitgezien, als de Euroborg er niet was gekomen?
  - En had dit de buurt aantrekkelijker, of minder aantrekkelijk, gemaakt wat u betreft?
- En omgedraaid; in hoeverre is de ontwikkeling die het Europapark heeft ondergaan/gekend, volgens u daadwerkelijk toe te wijzen aan de ontwikkeling van het stadion in het gebied?
  - Heeft het daadwerkelijk een versnellend/‘katalysator’ effect gehad op de invulling/ ontwikkeling van het EP? Of anders, of juist niet?
  - Wat zijn volgens u de belangrijkste redenen daarvoor?
- Deze ‘aanjager’ functie voor gebiedsontwikkeling: hoe ver reikt dit volgens u? Alleen directe omgeving, hele EP, omliggende buurten, (...)? En evt. de rol van afstand?
- En qua tijd? Vooral een kortetermijneffect, en nu minder zichtbaar en hooguit indirect; of nog steeds een aantrekkingskracht voor verdere ontwikkelingen in het gebied?
- In hoeverre was deze verdere ontwikkeling van het gebied – en daarbij de komst van bijkomende ontwikkelingen en voorzieningen – voor u van belang, of zelfs een voorwaarde, als [zittende/aankomende] woningbezitter in het gebied? [En voor bewoners? – Het zijn natuurlijk wel soc. huurders en geen kopers, dus wellicht niet zo van toepassing]
  - Was het voor u problematisch geweest als er alleen het stadion was neergezet, zonder enige bijkomende ontwikkelingen? [En voor bewoners?]
  - Speelt ontwerp/architectuur hierbij nog een rol? [Aandacht voor hele stadiongebied; multifunctioneel complex; geen ‘opzichtig’ voetbalstadion (positief/negatief?); etc.]

- Aanvankelijk was gepland dat in 2015 het Europapark voltooid zou zijn, ‘gevuld’; Wat is volgens u de reden dat dit niet zo snel en uitgebreid is gegaan?
  - Alleen invloed van de crisis, of is denkt u de aantrekkingskracht/impact van het stadion hierbij ook wat overschat?
  - Wat had evt. kunnen zorgen voor een grotere impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Is dit iets waar u op had gerekend? Of anders gezegd, iets dat u is tegengevallen? [En bewoners?]
  - *[Architect: 30 jaar, (...)]* (Hoe) denkt u dat het gebied nog wel verder zal ontwikkelen?
- Nu u weet hoe het gebied er nu uit ziet, en zich (o.a. n.a.v. het stadion) heeft ontwikkeld; zou u nu [weer/juist] woningen in het gebied realiseren?
- Ondanks deze evt. vertragingen t.o.v. de initiële plannen; zou u de hele ontwikkeling van het EP tot nu toe als succesvol beschouwen?
- Heeft op de oude locatie, Oosterpark, inmiddels al nieuwe ontwikkeling plaatsgevonden? En zo ja, kan dit als ‘succesvol’ worden beschouwd? (*In 2013 i.i.g. nog niet.*)

### Economische effecten:

- Heeft het stadion volgens u extra (structurele) werkgelegenheid met zich meegebracht, voor het gebied, en voor de stad?
- Wat is volgens u de impact van het stadion (geweest) op vastgoedwaarden in het gebied (woningen/kantoren/overige)? [Positief/negatief?]
- In hoeverre zijn deze economische effecten echt toe te wijzen aan het stadion? Anders gezegd, in hoeverre waren deze er ook/niet geweest zonder het stadion?
- Wat is volgens u de schaal van deze ec. effecten? Directe omgeving, EP, stad, ...?
- En schaal qua tijd? Korte termijneffecten, of ook langdurige/blijvende effecten?

### Sociaal-culturele impact en functie:

- Hoe zou u het belang omschrijven van de EB als amusementsvoorziening voor de stad/regio Groningen? [En t.o.v. oude Oosterparkstadion?]
- Heeft het stadion volgens u een bepaalde sociale functie **binnen de buurt, wijk, stad**?
  - Fungeert het stadiongebouw bijv. ook als een soort ontmoetingsplaats voor buurtbewoners, en andere mensen?
  - Doet het stadion bijv. ook dienst als een soort buurthuis of buurtcentrum?
  - Heeft het stadion een bepaalde functie in sociale projecten, of buurtactiviteiten of –bijeenkomsten?
  - Kortom; is het stadiongebouw in uw ogen dan ook wel een soort buurtvoorziening, of is het toch puur een voorziening voor de voetbaltoeschouwers?
  - Is het stadion naar uw mening voldoende geïntegreerd in/met de buurt, en de bewoners; of zou deze verbinding met de buurt volgens u nog beter kunnen, en hoe?
  - Heeft de Euroborg volgens u [wel/ook] een bepaalde invloed op de sociale binding binnen de buurt/wijk?
  - Zorgt het stadion bij bewoners van de buurt, en wellicht de hele stad, voor bepaalde gevoelens van trots, of binding?
- Daarnaast, heeft het stadion misschien ook een bepaalde sociaal-culturele functie **naar buiten** toe, voor Europapark en de stad Groningen als geheel?
  - *Positief element in de uitstraling van gebied en stad, als symbool of iconisch gebouw?*
  - *Element van ‘city marketing’; ‘uithangbord’ voor EP en Groningen?*
- Wat is de rol van ontwerp/architectuur van het stadion hierbij volgens u?
- Heeft het stadion volgens u ook bepaalde negatieve effecten op de omgeving/buurt?
  - *Bijv. overlast, zoals verkeersdrukte en supportersstromen op wedstrijddagen?*
  - *Bep. invloed op de mate van, of althans gevoelens van, (on)veiligheid in de buurt?*
  - Bestond er op basis hiervan vooraf veel weerstand tegen de komst van het stadion in omliggende buurten (NIMBY)? Of werd er o.h.a. wel positief tegenaan gekeken?
  - En is dit beeld door de buurtbewoners inmiddels bijgesteld/veranderd?
  - En is er volgens u een verschil merkbaar tussen bewoners van het EP (die er dus voor de ontwikkeling nog niet woonden) en bewoners van andere buurten (verder weg)?
- Concluderend: hoe zou u de invloed van het stadion op de algemene leefkwaliteit of leefbaarheid van de buurt omschrijven of beoordelen?
- Is het stadion volgens u eerder een trekker van potentiële bewoners naar het gebied, of eerder een negatief element (of geen van beide)?

- In hoeverre zijn deze sociaal-culturele effecten toe te wijzen aan het nieuwe stadion? Of is dit vooral ook gerelateerd aan (de prestaties van) FC Groningen?
- Wat is volgens u de schaal van deze sociale impact van de Euroborg? Is dit alleen merkbaar in het Europapark, of ook in de omliggende buurten, of zelfs de hele stad, of regio?
  - En zitten er verschillen tussen de buurt(en), en de stad als geheel?
- En qua tijd? Vooral korte termijneffecten kort na ontwikkeling, en is dit nu afgezwakt, of zijn er ook langdurige/blijvende effecten?
- Wat is volgens u de reden dat deze sociaal-culturele impact er wel/beperkt/niet is?
  - [→ Gemeente: sociale impact niet zo zeer een doel vooraf; maar wel enigszins gerealiseerd toen het er eenmaal stond; Bewoners: beperkt, (te) weinig integratie in/met buurt;]
  - Wat had volgens u evt. kunnen zorgen voor een grotere sociale impact? En/of welke voorwaarden hadden daarvoor aanwezig moeten zijn?
  - Had er volgens u bijv. – vooraf en/of naderhand – meer aandacht moeten zijn voor deze sociale impact van het stadion, en de sociale functie/rol ervan voor de buurt?

### **Overige:**

#### **Overige & algemene vragen m.b.t. Euroborg:**

- In hoeverre is de locatie van de Euroborg, het EP, redelijk dichtbij het centrum, volgens u van invloed of belang (geweest) bij de impact ervan op de omgeving en stad?
- En wat is volgens u in het algemeen het belang van de locatie(keuze) bij een nieuw stadion, en de rol/functie die het daarmee heeft voor gebied en stad?
  - Moet volgens u in deze afweging ook de impact voor de stad een (belangrijke) rol spelen, of zijn praktische zaken als bereikbaarheid en overlast toch het belangrijkste?
- [De gemeente en provincie hebben ook in financieel opzicht deels bijgedragen aan de ontwikkeling (lening dan wel gift/subsidie) ]
  - (In hoeverre) is dit volgens u wel gerechtvaardigd? Was in dat geval het ondersteunen en behouden van FC Gr. (als eredisclub) voor de stad voldoende, of moest daar dan ook wel iets tegenover staan qua ‘stedelijke ontwikkeling’?
- [Naar wat ik heb begrepen zijn er wel enkele harde voorwaarden gesteld, m.b.t. bijkomende voorzieningen. Dit was in eerste instantie gericht op de exploitatie van de ontwikkeling, maar zorgde ook wel voor i.i.g. een aantal bijkomende voorzieningen.]
  - Had de gemeente naar uw mening misschien nog uitgebreidere eisen moeten stellen, m.b.t. ‘stedelijke ontwikkeling’ (bijv. bij verkoop gronden of vergunning-verlening), of is dit naar uw idee voldoende gebeurd/had dit niet gekund?
    - [Natuurlijk met als risico dat de ontw. langzamer/niet v.d. grond was gekomen; onderhandelingen, vinden van geïnteresseerde partijen/fin. middelen, etc.]
- [Als we bijv. kijken naar Alkmaar en DH; daar zijn gedurende het proces voorwaarden voor bijkomende ontwikkelingen losgelaten (“club staat op één”); maar daar is dan ook beperktere ‘impact’ te zien.]
  - Waarom is dit in Groningen wel deels geslaagd denkt u, en in deze steden niet?
  - Is dit in uw ogen ook iets waar een gemeente actief achteraan zou moeten gaan in zo’n ontwikkelingsproces? Of moet de gemeente alleen zo goed mogelijk faciliteren, en dit volledig overlaten aan ‘de markt’?
    - [Dilemma: enerzijds risico op vertraging of niet van de grond komen proces; aan de andere kant kan hiermee wel een ‘bredere’ impact, een zekere extra functie/ betekenis voor de stad gerealiseerd worden, en daarmee ook extra ‘rechtvaardiging’ van de betrokkenheid van de gemeente [actief/passief].]
- Is het stadionproject in uw ogen succesvol:
  - O.b.v. uw eigen verwachtingen?
  - En wat betreft ‘stedelijke ontwikkeling’? [Initiële doelen – evt. bijstelling gedurende proces – huidige situatie?]
- Stel dat het idee voor ‘n nieuw stadion in Gr. nu op zou komen; Zou dit denkt u in de huidige situatie nog steeds zo mogelijk zijn, of überhaupt v.d. grond komen? Hoe zou de ontw. nu verschillen van die destijds, en wat zouden de gevolgen daarvan zijn voor de hele ontw.?
  - Qua locatiekeuze?
  - Qua beleid en betrokkenheid gemeente?
  - Qua bijkomende ontwikkelingen & interesse van marktpartijen?
  - Qua financiering?
  - Qua overige doelstellingen en eisen?
  - Qua uiteindelijke impact?

Persoonlijke opvattingen algemeen [Optioneel]:

- Denkt u dat een stadion vergelijkbaar is qua impact, zoals besproken, met andere (grote) culturele of amusementsvoorzieningen? Of is die groter/kleiner, en/of anders?  
[ → Enerzijds worden stadions maar vrij beperkt gebruikt (voor de hoofdactiviteit), en worden ze ook nogal eens geassocieerd met overlast etc., maar aan de andere kant trekken ze wel meer mensen aan, en hebben een grootsere uitstraling dan veel andere voorzieningen.]
- Hoe groot, en wat, denkt u dat in het algemeen de impact van een stadion op de buurt/stad kán zijn – op de 3 algemene dimensies?
  - En wat is over het algemeen de schaal van deze impact?
  - En is er een verschil tussen dichtbij en verder af van het stadion?
  - En de tijdschaal van deze impact?
- In het algemeen, welke factoren en voorwaarden zijn volgens u nog van belang, of noodzakelijk, bij het realiseren van een zekere impact van een stadion?
- *De praktijk van gebiedsontwikkeling en R.O. is nogal aan het veranderen; kleinschaliger, minder uitgaan van groei-principe, beperktere financiële middelen bij zowel overheden als marktpartijen, minder actief gemeentelijk grondbeleid, benutten bestaande stad, etc.;*
  - Hoe ziet de toekomst voor stadionontwikkelingen (in NL) er volgens u uit?
    - Past een grootschalig project als een stadionontwikkeling, mét bijkomende (gebieds-)ontwikkeling, volgens u nog wel in dit tijdsbeeld? Of in ieder geval, wat zijn de gevolgen van deze veranderingen voor projecten zoals stadions?
    - Welke partijen spelen een rol bij de ontwikkeling, (hoe) kunnen dergelijke projecten nog worden gefinancierd?
    - Moeten we ons beeld bijstellen wat betreft grootse ontwikkelingen en impact voor de stad; of juist iets dat zulke projecten mogelijk, en te rechtvaardigen, maakt?
    - Wat betreft locatie; past in dit tijdsbeeld nog wel het algemene idee van zulke grootschalige voorzieningen en ontwikkelingen op afgelegen locaties buiten of aan de rand van de bestaande stad (gericht op bereikbaarheid, veiligheid, overlast)?