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Livability in Nieuw-Vossemeer

# Redefining a village

Wageningen University & Research

<b>INTRODUCTION.....</b>	<b>4</b>
<b>ASSIGNMENT: LIVABILITY IN NIEUW-VOSSEMEER.....</b>	<b>6</b>
PROBLEM STATEMENT .....	7
<b>THEORETICAL FRAMEWORK .....</b>	<b>8</b>
LIVABILITY.....	8
<i>Core concepts of livability</i> .....	8
RECREATION .....	9
<b>SOCIETAL RELEVANCE: A CHANGE IN AMENITIES .....</b>	<b>11</b>
<b>ANALYSIS .....</b>	<b>12</b>
ACCESSIBILITY AND LOCATION.....	12
<i>Car accessibility</i> .....	12
<i>Public transport</i> .....	12
<i>Accessibility by bike</i> .....	13
<i>Commuting</i> .....	13
DEMOGRAPHICS .....	13
<i>Prognosis for population growth</i> .....	14
<i>Demand for housing</i> .....	14
CORE CONCEPTS OF LIVABILITY .....	15
<i>Social dynamics</i> .....	15
<i>Nature and environment</i> .....	15
<i>Safety</i> .....	15
<i>Amenities</i> .....	16
RECREATIONAL FACILITIES IN AND AROUND NIEUW-VOSSEMEER.....	17
<i>Natural swimming pool</i> .....	17
<i>Sunclass recreation park</i> .....	17
<i>Local hiking / cycling</i> .....	18
FINANCIAL ANALYSIS .....	19
HISTORICAL ANALYSIS.....	19
SWOT-ANALYSIS .....	21
<b>VISION: REDEFINING LIVABILITY IN NIEUW-VOSSEMEER .....</b>	<b>22</b>
<b>PRINCIPLES .....</b>	<b>24</b>
<b>MASTER PLAN: STEPS TOWARDS THE FUTURE .....</b>	<b>26</b>
THE DEVELOPMENT AXIS.....	26
TRANSLATING PRINCIPLES TO INTERVENTIONS .....	27
<b>INTERVENTIONS .....</b>	<b>28</b>
RIETKREEK .....	28
CARNAVAL WAREHOUSE.....	29
CONSTRUCTION OF NEW WALKING AND CYCLE PATHS.....	29
HOUSING .....	30
TUNNEL.....	31
FUTURE HOUSING ON FORMER SUNCLASS PARK.....	31
TERRACE BESIDE THE MILL.....	32
WATERSIDE.....	33
.....	34
WATCHTOWER .....	34
THE OLD FERRY'S DOCKING POINT.....	34

<b>ORGANIZING BOTTOM-UP INITIATIVES .....</b>	<b>35</b>
<b>CONCLUSION.....</b>	<b>37</b>
<b>DISCUSSION &amp; RECOMMENDATION .....</b>	<b>37</b>
<b>REFERENCES .....</b>	<b>39</b>

# Introduction

Nieuw-Vossemeer is a small village of 2300 citizens in Noord-Brabant, on the border of the province of Zeeland. It is part of the municipality of Steenbergen, a city nearby. The Schelde-Rijnkanaal, a canal that is intensively used for cargo, forms the boundary between Nieuw-Vossemeer and its counterpart, Oud-Vossemeer. Because of fertile clay soils in the area, a lot of the surrounding area is used for intensive farming. These fields provide work for many migrant workers from eastern Europe, and over 70 households of such workers are housed in the nearby former recreation park Sunclass.



*Figure 1: Nieuw-Vossemeer, central in this picture, is surrounded by a remarkable amount of green (and blue) landscapes. Source: Bingmaps.com*

Over the last decade, recreational visiting of the area has declined. More and more of the Sunclass park's houses have been purchased by agricultural landowners to house migrant workers (Ouhajji, 2017). According to personal communication with Angelique Schreurs, owner of the neighboring campsite explained in a personal conversation: "the area suffers from impoverishment and it is largely unattractive for many people to live and recreate here". Nevertheless, to adhere to national regulations on migrant housing, the municipality finally decided in 2019 that the destination plan for the Sunclass recreation park would remain housing for laborers (BN De Stem, 2019).

The natural swimming pool, located adjacent to the camping site, was also removed due to financial shortcomings in 2016. Over the preceding decade, the number of visitors dwindled and maintenance costs grew to be much higher than profits, forcing it to run on a

loss. As of yet, no new function has been assigned to this area and the pool is now overgrown with wild vegetation.

Nieuw-Vossemeer has seen attractive recreational facilities disappear, which is putting pressure on the livability of the village. Altogether, the village is faced with the question of how it can remain livable and attractive in the present and in the future.

The village council of Nieuw-Vossemeer came up with an ambitious vision to conserve nature and reinforce recreational activities at the beginning of 2020 (Peppelaar, 2020). The core aim of the vision was improving the livability of Nieuw-Vossemeer and making the entire area attractive again for both residents of Nieuw-Vossemeer and visitors. Recreational amenities were not the end goal in themselves, but would contribute to the safeguarding of livability through drawing visitors and creating an inflow of both financial resources and placemaking.



*Figure 2: The natural swimming pool, as seen from outside the fencing. This body of water depicted here is nowadays almost entirely overgrown. Source: [Breda-en-alles-eromheen.nl](https://breda-en-alles-eromheen.nl)*



# Assignment: Livability in Nieuw-Vossemeer

The initial assignment, as presented to us by our commissioners, revolved around the preservation of livability in Nieuw-Vossemeer. The village council has constructed a vision involving recreational facilities in 2020, aimed at rebuilding the flow of citizens and recreation-seekers through this area. They approached the WUR with the request for insights on how to realize these ideas and to give them coherency, in order to add to the integrity of the plan. The main obstacles for the village council in this plan were the lack of financial resources and the lack of expert insights on the matter. The design as proposed by the village council lacked financial support, as Nieuw-Vossemeer was only a small village in a municipality with a larger city at its head. However, as was pointed out to us in our conversations with the village council members Annelies van Loenhout and Leon Havermans, Nieuw-Vossemeer had citizens that would be willing to participate in local development projects. To us, the ambition was clearly present among both the village council and the municipality to make substantial changes in the project area.

As a project group, we began our analysis of the area. We contacted important stakeholders, including the municipality of Steenberg, the owner of the nearby camping site, and Staatsbosbeheer, Rijkswaterstaat, and Waterschap Brabantse Delta. Additionally, we searched academic literature for relevant articles concerning the loss of amenities and livability in small villages in the Netherlands. As will be explained later in this report, our findings pointed out the unlikelihood of the perspective on recreation as presented by the village council succeeding in stimulating the village's livability. This forced us to reconsider this approach as a whole. After running a SWOT-analysis on our appraisal of the village and the surrounding area up to that point, we came to the conclusion that an approach based on present strengths and opportunities was likely much more feasible, considering both the village council's request and the lack of financial means.

Based on this conclusion, we changed our perspectives on the project as a whole. Instead of focusing on accommodation recreation and visitors as a central solution to the loss of livability, we reconsidered the definition of livability and what it meant to this project. Livability was originally the main goal of the project and in our new perspective, it would remain as such. Recreation, however, no longer played a *central* role in our design. Instead, recreation would function like a regular factor similar in worth to, for example, the natural surroundings of the project area, or the housing situation.



Figure 3: The above flowchart displays the our perspective change throughout the project and our resulting new focus.

## Problem Statement

Our SWOT-analysis pointed out to us the strengths and potentials of Nieuw-Vossemeer, rather than its weaknesses. Initially, we had been focused on compensating for or repairing the previously lost recreational facilities. We did this because the initial problem stated by the village council was that the loss of the recreational facilities led to a decline of livability. Now, our analysis pointed towards the likelihood of strength-based interventions fitting very well with both the initial request to restore livability, combating neglect and the financial context of the project. We redefined our main research question in this project to fit our renewed perspective on the process of ensuring livability.

***“In what way can Nieuw-Vossemeer utilize its strengths and redefine its future in terms of livability?”***

# Theoretical framework

## Livability

Livability is a concept that bundles many dimensions (Gies & Nieuwenhuizen, 2017). In general, livability is the extent to which our surroundings match the conditions and needs set by mankind (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2015). Additionally, livability describes the attractiveness and qualification of an area or community in regard to working or living here (Gies & Nieuwenhuizen, 2017).

In order to operationalize the term livability to be used in this report, it is important to dive into the dimensions of livability. As livability is a broad term, these dimensions have to be narrowed down to the dimensions that are relevant to this report. Literature shows several key themes of livability: the physical domain, housing and facilities, mobility, social participation, cohesion and resilience, health and safety (Ruth & Franklin 2014; WUR, 2018; Gies & Nieuwenhuizen, 2017; P10, 2019). In this report, these themes are limited to four core concepts. These concepts encompass livability as we consider it to be relevant to the case of Nieuw-Vossemeer. Narrowing it down to only four concepts allows for us as a project group to handle an endlessly complex concept like livability within time- and capacity restraints. Health and “physical domain” are merged because our approach to both aesthetics and environmental effects on health is based around the central premise of creation a green a natural environment that supports human interaction with it. “Housing & facilities” and mobility are merged because of their direct link to one another. Mobility supports accessibility of housing and facilities, and without such facilities, there would be little need or demand for mobility.

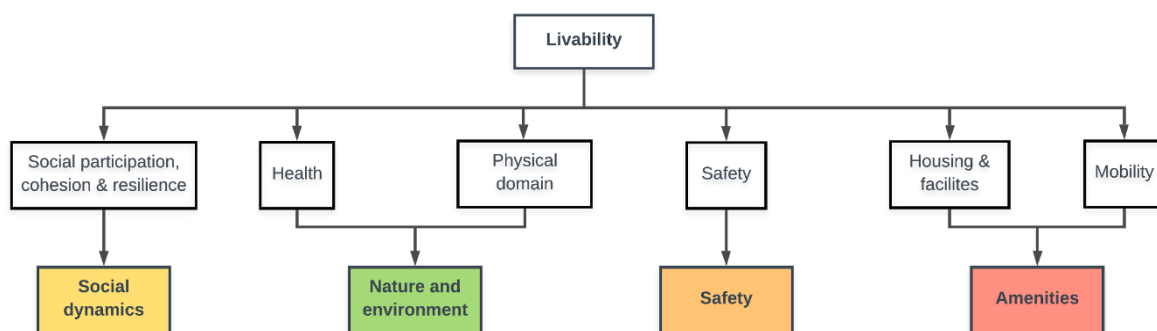


Figure 4: In this report, livability is divided into four main aspects: social dynamics, nature and environment, safety, and amenities.

## Core concepts of livability

### Social dynamics

This term refers to the connection of citizens with each other and their engagement with local activities and developments. Citizens connect through daily face-to-face contact. Allowing for them to participate in local projects that concern their shared interests, a sense of ownership may come about, subsequently creating a sense of community (P10, 2019; During et al., 2018).

Furthermore, a village community has and develops social capital. The social relations within a community enable citizens to gain access to all sorts of resources, such as information, finances, and people being willing to actively help out. This gives



a village community the power to develop and maintain projects. The arrival of the Dutch “Omgevingswet”, a law that sets out to open up to citizen initiatives, enables the possibility of local projects being developed without continuous involvement of governmental bodies. This active participation of citizens can in turn improve social cohesion and the willingness to take on new projects (During et al., 2018).

#### *Nature / environment*

Natural features have a positive effect on livability through health benefits. A green environment stimulates physical activity and can help reduce stress (Hartig et al., 2014). Greenery also stimulates social interactions if there are green areas to meet and run into other citizens. This in turn stimulates the social dynamics within a populated area (Gies & Nieuwenhuizen, 2017). Lastly, green surroundings add to the aesthetic of the area, making it visually more pleasant to users (Klemm, Heusinkveld, Lenzholzer & Van Hove (2015). It is therefore inherently fruitful to promote a green living environment.

#### *Safety*

Livability is also affected by safety and by people’s perception of safety (Balsas, 2004). For example, parks and dense vegetation are associated with a fear of crime (Jansson et al., 2013; Maruthaveeran and van den Bosh, 2015). In general, a lack of lighting negatively affects perceived safety (Adams et al., 2009; Troped et al., 2003). Studies show that people are less physically active in residential areas if they are not confident about the safety of a location. In relation to the concept of nature and environment, a perception of unsafety may interfere with a green environment being a stimulus for physical activity (Evenson et al., 2012, Foster et al., 2016). A pervasive feeling of safety may thus contribute to experienced livability.

#### *Amenities*

Amenities are an important asset of livability. This term refers to the availability of housing, schools, shops, restaurants, and cultural and recreational features. In relation to livability, the most important condition of this concept is its accessibility. This refers to the relative distance of amenities, in terms of time and effort, rather than physical distance (Gies & Nieuwenhuizen, 2017). Should amenities be unreachable to certain people, these people will experience the area from which they wish to reach these amenities as less livable (Gies & Nieuwenhuizen, 2017).

## Recreation

In academic literature, there are a lot of different definitions of recreation. There is no one single answer to the question: “what is recreation?” Recreation has a lot of overlap with leisure and tourism. These three concepts are very much related to each other and have some intriguing parallels (Smith & Godbey, 1991).

Lengkeek (1996) suggests that “recreation, leisure and tourism are social and historical constructions that change in nature and meaning over time, depending on social, political, cultural and economic relations”. A way to find a distinction between these three concepts is to divide them in terms of duration and place. In the model below several typologies of leisure, recreation, and tourism are plotted opposite from a view of time and spatial reach (Lengkeek,

1996). This gives several categories within the concepts of leisure, recreation, and tourism. In the model, local leisure consists mainly of a low quantity of time and takes place on a local level (Hall & Müller, 2004). Brey & Lehto (2007) call these activities daily recreation. These daily recreational activities are a significant predictor of quality of life (Russell, 1990). Hall & Müller (2004) show with their model that a day excursion is placed on the border of local and national scale and around the duration of a daypart to a whole day. A trip of multiple days and on a national level moves more towards tourism. This model shows that leisure, recreation, and tourism depend on the context.

		Spatial reach		
		Local	National	International
Time	Years	Permanent migration		
	Months	Seasonal migrants Educational visits Extended holiday tourism		
	Weeks	Holiday tourism		
	Days	Business travel Short break holidays Day excursions		
	Hours	Local leisure Commuting		

Figure 5: Categorizations of recreation, based on spatial reach and time. Source: Hall & Müller, (2004)

Within leisure, as well as in local leisure, it is possible to make distinctions. Elements that fall under leisure in cities are: relaxation, sports, culture, recreation and tourism. In this form, leisure is evolving towards a leisure economy. This leisure economy consists of four pillars. The first one is recreation, which is divided in recreation from inhabitants and recreation from visitors. The second pillar is tourism, which is divided in day tourism and overnight tourism. The third pillar are the core activities, which are: city trip, culture, stages, museum, catering industry, retail, attractions, events and sports- and other manifestations. The last pillar is supporting recreational shared use. This consists of the built environment, public spaces, public green spaces, nature and water (Jansen-Verbeke, 2003).

Besides leisure in the city, leisure recreation and tourism is also strongly related to nature. Areas with high biodiversity and nature are attractive for recreation because the amenity value for the holiday maker is higher (Fontein, et al., 2009). The combination of nature and recreation has different influences on the landscape and its inhabitants. According to Kuhlman et al. (2012):

*“The improvement of the landscape quality and the creation of recreational facilities such as hiking trails and attractions can not only benefit the vitality of the tourist sector in the rural area, but also the quality of life for both inhabitants as the visitors of the area. This in itself can be a sufficient reason to invest in landscape, nature and recreation.”*

Recreation and nature contribute to the development and maintenance of livability of both people and nature. In addition, nature often has a positive influence on cooperation, which contributes to social support for the maintenance and possible expansion of green space. This shows that continuous efforts must be made to ensure the connection between nature and recreation and the opportunities that arise in this respect (Veer, et al., 2002). Not only opportunities for nature and recreation, but also opportunities and possibilities for changing, possibly shrinking village centers, to maintain the quality of life (Thissen & Loopmans, 2013).

# Societal Relevance: A Change in Amenities

Nieuw-Vossemeer is an example of a village of which the livability is threatened by a loss of accessible amenities. The natural swimming pool fell out of business, the local supermarket is under financial pressure, and a lack of customers threatens other small business owners in Nieuw-Vossemeer. This pattern of facilities leaving small villages can be seen elsewhere as well (Gies & Nieuwenhuizen, 2017; Niessing, 2017; Steenbekkers, Vermeij, & van Houwelingen, 2017). However, this loss of amenities does not *necessarily* result in a loss of livability (Gies & Nieuwenhuizen, 2017; Steenbekkers, Vermeij, & van Houwelingen, 2017).

We propose redefining the livability of small villages by putting emphasis on the existing strengths, rather than attempting to compensate for weaknesses, like the loss of amenities. A village can be more than its flaws and should in developmental perspective not be limited to its weakest point. In the case of Nieuw-Vossemeer, strengths can be found both in and around the village. They include an abundance of open nature, quiet surroundings, relatively affordable housing, and the low crime rate. These elements together make Nieuw-Vossemeer into a potentially very attractive housing location. Building upon these traits promotes livability, regardless of amenities. Making use of these potentials may prove to be a rewarding strategy in other contexts as well.

Moreover, livability as a concept is still highly contested these days (Gough, 2015; Miller, Witlox & Tribby, 2013). This project contributes to the overarching debate on livability by applying a contextualized notion of the term to a specific case. A new perspective on livability may prove useful for similar situations, where villages find themselves struggling to adapt to changing patterns in their amenities and resulting questions of livability (Gies & Nieuwenhuizen, 2017; Steenbekkers, Vermeij, & van Houwelingen, 2017). Solutions to questions of livability are heavily context-reliant, much like livability itself, but can provide insights on the possibilities in resolving these questions on varying scales.

On a related note, as Gies and Nieuwenhuizen (2017) point out that amenities do not disappear from villages altogether, but instead move towards more concentrated areas like cities. As a result, there is no substantial harm done to local livability in terms of amenities, as long as the moving amenities remain easily accessible to local citizens. Vice versa, this means that low-mobility groups like the elderly, especially if they lack a strong social network, are vulnerable to experiencing a personal loss of livability. It is therefore important to ensure that the changes in amenities do not negatively affect such vulnerable groups (Gies & Nieuwenhuizen, 2017). Nieuw-Vossemeer is a prime example of a village that is faced with this challenge, and interventions that help maintain this aspect of livability may prove of relevance to similar cases. For example, alternative solutions that bypass the mobility problems experienced by less-mobile groups of people may be applied to similar or even very different contexts.

# Analysis

This project largely consists of an extensive analysis of the village of Nieuw-Vossemeer and the surrounding area. This analysis consists of a general area analysis, a detailed analysis of the recreational situation, and an applied analysis of the quality of life within Nieuw-Vossemeer.

## Accessibility and location

### Car accessibility

For small villages, accessibility is an important factor concerning livability (Gies & Nieuwenhuizen, 2017). Nieuw-Vossemeer has a good accessibility by car, especially since the extension of the highway A4 in 2015 (Boskalis, n.d.). It only takes ten minutes to reach the highway, which makes a big difference compared to the past and reduces the travel time to the surrounding cities as Bergen op Zoom and Roosendaal a lot. Even the big cities Rotterdam and Antwerp are accessible by car, in less than one hour. This puts Nieuw-Vossemeer in a relatively central location and allows for citizens to access these cities and vice versa. For those that own a car, these connections are sufficient in both daily and less-regular use.

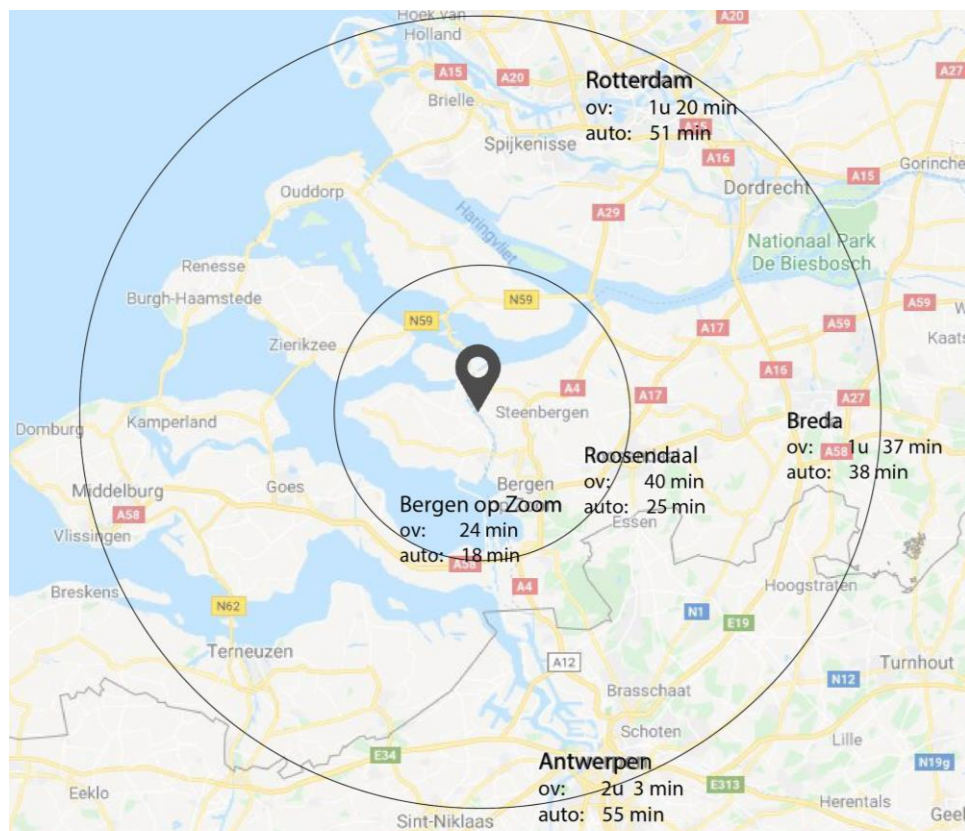


Figure 6: Nieuw-Vossemeer has a central location, making Roosendaal, Breda, and even Rotterdam easily accessible by car.

### Public transport

In terms of public transport, however, Nieuw-Vossemeer is not especially well-connected to surrounding cities. The village is only accessible by bus, as it has no train connection. There



is a bus connection that passes every hour, between Bergen op Zoom and Oude-Tonge. Besides that, a school bus passes once in the morning and once in the afternoon, as well as a neighborhood bus that passes every hour and a half. None of these bus connections drive during evenings and weekends. Considering the number of residents in the village and the surrounding area, there is no immediate need for a better connection and it will probably not be economically feasible to improve upon these connections.

However, it is important to note that a lack of good connection through public transport can cause problems for the livability of less-mobile demographics, such as people with physical disabilities and the elderly. These groups may rely strongly on public transport and it may therefore be difficult to reach amenities without proper transportation facilities (Gies & Nieuwenhuizen, 2017). As of now, this has the potential to become a threat in the future development of Nieuw-Vossemeer.

### Accessibility by bike

Nieuw-Vossemeer is very well connected to the cycle nodes route in the area. As seen from Nieuw-Vossemeer, surrounding cities are easily accessible by bike and it is possible to go in all directions. This good connection for cyclists is important for the inhabitants of Nieuw-Vossemeer, as well as for inhabitants of surrounding cities who like to cycle in the area and cycling recreationists. Figure 7 displays the most prevalent cycling connections in the direct surroundings of Nieuw-Vossemeer.

### Commuting

Conversations with the village council pointed out that a lot of inhabitants of Nieuw-Vossemeer work outside the village, often in surrounding cities. This results in a high amount of commuters, people who leave the village for work every day.

The accessibility of the village and the surrounding cities by car makes this possible. Commuting by public transport, as explained, is much less convenient. The lack of timely connections, capacity, and direct routes makes it very time- and cost inefficient to commute by public transport. Without substantial changes to the currently existing network, commuting by car will remain the only viable option.

## Demographics

A general trend in the Netherlands as well as in the municipality of Steenbergen is the aging population. Currently, about 19% of the Dutch population is 65 years or older. 20,5% of the inhabitants of Steenbergen are older than 65, and the prognosis is that this will be 29,0% in 2035. This would be higher than the Dutch national average of 25,0% (CBS/PBL, 2019). Nieuw-Vossemeer has a total of approximately 2.300 citizens. 22% of the citizens are 65 years of age or older (AlleCijfers.nl, 2019). This is close to the national average. This means that the aging population is as much a problem in Nieuw-Vossemeer as it is elsewhere in the country.

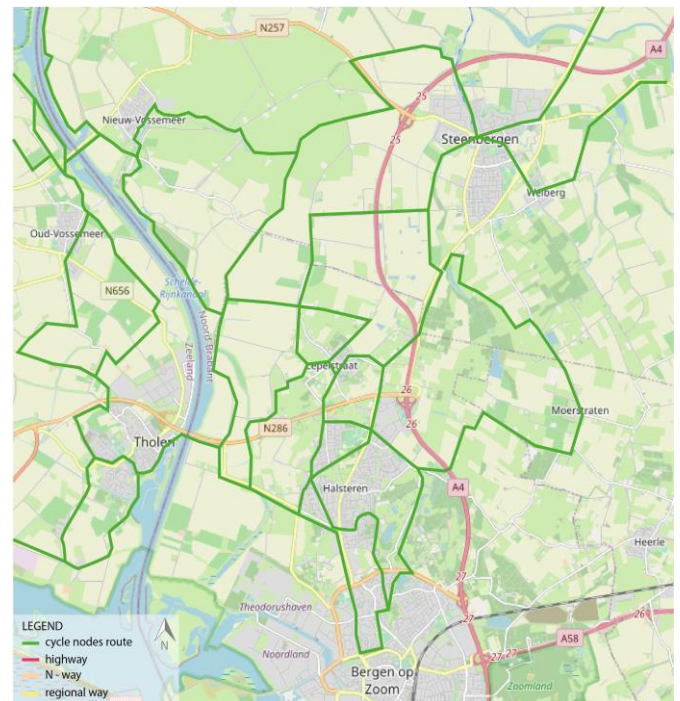


Figure 7: The area has an extensive cycling-route network, ideal for recreational cycling.



The trend of an aging population leads to a shift in household composition and housing opportunities. Due to aging and fewer possibilities to move into a retirement home, elderly people are likely to live on their own for longer, decreasing the amount of housing that becomes available as a result (CBS, 2016). This tends to put pressure on the housing market in the local area.

It is important to note that elderly people often have different needs than younger demographics, due to physical restraints. This means that amenities being easily accessible can be of increased importance to these demographics (Bakker, Hu, Wittkämper, 2018). This can also apply to people with physical disabilities that make them unable to travel longer distances or for longer periods of time.

There is also a fair share of migrant workers among the Nieuw-Vossemeer citizens. Migrant workers, predominantly Western migrants, make up 11,3% of the total population, similar to the national average of 10,3% (AlleCijfers.nl, 2019). This means a significant portion of the population is of non-Dutch origins or descent. A significant portion of these migrants currently resides in the former Sunclass vacation park, which provides housing to over 70 migrant households.

### Prognosis for population growth

The population of the Netherlands is likely to increase in the coming years (CBS & PBL, 2019). This is mainly because of the immigration numbers being expectedly higher than the emigration numbers. Many foreigners migrate to the Netherlands because of job opportunities. The prognosis is that the population growth will be the largest in Randstad.

The municipality of Steenberg is also projected to experience a population growth of 10,2% by 2035 (CBS & PBL, 2019). Several probable explanations for this exist. Firstly, the increasing numbers of migrant workers in this area may result in future growth. Secondly, the councilor of the municipality explained that expansion of new neighborhoods in the city of Steenberg and to a lesser extent the expansion of the small surrounding villages such as Nieuw-Vossemeer could contribute to the population growth in this area. Lastly, the constant growth of the Randstad, and specifically Rotterdam in this case, may result in an increase in demand for housing within commuting distance. Nieuw-Vossemeer could be the target destination for such housing demands.

### Demand for housing

Between 2015 and 2018, the number of inhabitants in Nieuw-Vossemeer grew (AlleCijfers.nl, 2019). Although last year there was a small decrease of one percent in the population, the village council and councilor of the municipality expect a population growth in Nieuw-Vossemeer. It is important for the livability of a village that it does not shrink in terms of housing (Tjoonk, 2013). A growing population in the village may result in a better balance of demographics, which has positive consequences for livability. An important factor in this expected population growth is the demand for housing in the municipality of Steenberg and Nieuw-Vossemeer from the Randstad area. There is a growing demand by workers in Randstad to escape the bustle of the city and instead live in a calmer area. Moreover, house prices are comparatively low in smaller towns, compared to Randstad. As a result, people may choose to live somewhere outside of the city and instead commute to work.

According to the village council the people who move from the Randstad can both be a financial opportunity, as well as a threat for the housing market. As these commuters have

generally higher-paying occupations, they have the financial power to outbid locals of Nieuw-Vossemeer.

## Core concepts of livability

### Social dynamics

The ambition and vision presented by the village council of Nieuw-Vossemeer shows that there is a lot of willingness to develop initiatives within Nieuw-Vossemeer. Social capital is an important aspect of the power that a community has in this regard. The council describes that they could count on a lot of help from citizens, both in coming up with, executing and the maintenance of ideas. Annelies van Loenhout, village council member, illustrated: *“If we need a digger, the community will find a way to get a digger on site.”*

### Nature and environment

Nieuw-Vossemeer is located within an environment that is characterized by openness. Agricultural fields and grassland make up most of the view when travelling around the village. In terms of using these areas for hiking and cycling, it is important that these areas are accessible.

A standout feature of the landscape is the dikes in surrounding Nieuw-Vossemeer. These dikes act as natural sights at times, and blockades at other times. The dikes are lines in the landscape and they offer the opportunity to be used as hiking trails. In other places, dikes are a blockade for hiking trails, where they get cut off instead of continuing along or over the dike.

Lastly, the natural area of the Rietkreek, next to the village, is only partially accessible from the village. The edge of the built-up area covers up a large part of the Rietkreek's accessibility.

### Safety

Safety consists of objective and subjective safety. In terms of objective safety, Nieuw-Vossemeer is doing well. There have been five burglaries in the past three years, which is below the national average (RTL Nieuws, 2019). Moreover, there is a trend of a lowering overall crime rate in the past 5 years. Generally speaking, the average registered offenses per 1000 citizens is 31 (2019), compared to 16 (2018) and 13 (2019) in Nieuw-Vossemeer (CBS, 2020; AlleCijfers.nl, 2019). This objective safety carries over to the subjective safety. The statistics match the statements made by the citizens of Nieuw-Vossemeer, who say they have experienced

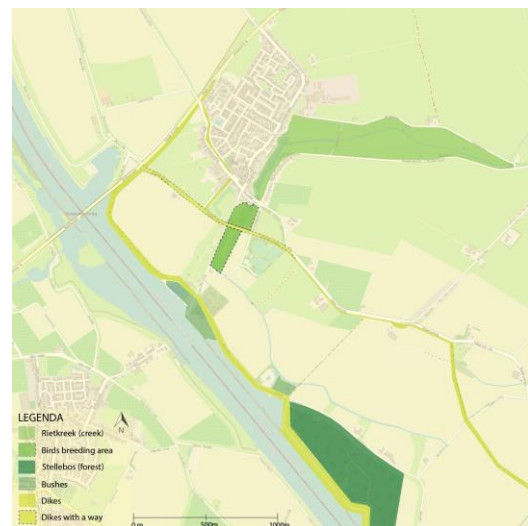


Figure 8: The surroundings of Nieuw-Vossemeer are exceptionally green and open, with large spaces between roads.



Figure 9: The red lines indicate blockades that separate the village from the adjacent nature, while the green and yellow arrows represent existing and potential connections respectively.

little crime and feel generally safe in the area. There are, however, some areas that can be problematic with regards to perceived safety. These areas have design characteristics that can result in users feeling uneasy in these locations. Below, three examples of such locations are given.



Figure 11: The Rietkreek, parallel to the Burgemeester Catshoeklaan, has a lack of lighting because of the trees.



Figure 10: The waterside beyond the old natural swimming pool is overgrown and largely obscured as a result.



Figure 12: The biking tunnel on the Moorseweg is narrow and dark, with no clear view inside and through it from a distance.

## Amenities

While Nieuw-Vossemeer does not have many amenities in and of itself, it does have a lot of amenities within the vicinity in cities such as Steenberg and Tholen. Nieuw-Vossemeer itself has amenities such as the SPAR supermarket, a primary school and a few bars/restaurants. In terms of local leisure, Nieuw-Vossemeer mostly has green surroundings and historical landmarks.

Oud-Vossemeer has additional small amenities like car garages, a bike shop and a petrol station. In the bigger cities around Nieuw-Vossemeer; Tholen,



Figure 13: This map gives an overview of the available amenities in the area around Nieuw-Vossemeer.



Steenbergen and Bergen op Zoom for example, more regional amenities are located. These amenities include bigger hardware stores, clothing store chains and larger supermarkets.

## Recreational facilities in and around Nieuw-Vossemeer

The main recreational facilities of Nieuw-Vossemeer were situated by the canal. Most notably; the natural swimming pool (Natuurbad de Eendracht), the Sunclass recreational housing park, Bowling Venue-Restaurant De Praeter and the adjacent camping. De Praeter and the camping are still up and running and managed by Angelique Schreurs. She used to maintain the swimming pool as well, but, as explained before, it was closed in 2016.

### Natural swimming pool

The upkeep costs of the pool got too high and visitors of the pool got swimmer's itch because of freshwater snails living in the water (BN de Stem, 2016). The irregular maintenance that had to be performed to remove these freshwater snails from the water, as well as cut down wild plant growth outgrew the profits over time. As of 2016, financial burden led Angelique Schreurs to close the pool. At the time, the municipality stated to be unwilling to carry the financial burdens. Due to neglect, the pool and the surrounding area got overgrown and are now inaccessible. Bringing back the swimming pool would in itself be financially irresponsible, and the fact that two outdoor swimming pools are within a half-an-hour bike ride (in Tholen and in Steenbergen) puts a figurative nail in the coffin for a pool in Nieuw-Vossemeer.

### Sunclass recreation park

The Sunclass park transitioned to the temporary housing of migrant workers that work in the agricultural sector surrounding Nieuw-Vossemeer. These are mostly seasonal/temporary workers who work as much as possible and then return to their country of origin. Migrants who would like to see permanently in the Netherlands are not suited for this type of housing. They are required by law to look for a home in the regular market (van de Heuvel, 2018).

Returning the park to its original form of use seems very unlikely, considering financial requirements. The recreational accommodation sector has not been able to provide sufficient quality and the regional market is largely saturated (Dynamic Concepts Consultancy Eindhoven, 2017). Van de Heuvel refers to the Sunclass park as a C-location, because of its inherent lack of attractive factors in the surrounding area. This makes the park largely unattractive to visitors. To return the park to its original form of use, significant investments should be made to improve the quality of the park and its surroundings.

These investments are unlikely to be made. Only market leaders in the sector would have the capital, versatility, and knowledge to make it a success (Van de Heuvel, 2018). Several of such actors have stated they won't invest in a park in Nieuw-Vossemeer. Landal Greenparks and Roompot (market leaders in this field) have stated they won't because, even with possible expansion, the area will not have sufficient space for a profitable park. In addition, the money that would be needed for a hypothetical scenario in which such a park could be built would be preferably spent on other locations in which these parties see a higher potential.

The report by Van de Heuvel (2018) concluded that it is most likely that the park would remain a place for housing for migrant workers. However, for this to be the case in the future as well, investments need to be made to make the housing conform to SNF standards (a standard for the quality of housing of migrant workers). And while the current owners have

stated that they would be willing to invest (Jansen, 2019), experts say that the structure of the houses is not suited for the housing of migrant workers in the long term. As a result, the municipality of Steenbergen is also faced with an issue of housing these migrants in the future, should the Sunclass park be closed. Homeflex, a migrant housing business, has however indicated that they would be interested in developing the adjacent ground north of Sunclass as migrant housing. This way, new housing of higher quality could be realized instead of making continuous investments in the old Sunclass buildings. If the housing is moved to the other plot of land, it could open up the Sunclass ground for a new destination.

### Local hiking / cycling

Nieuw-Vossemeer is well connected to cycling routes and walking routes (as discussed earlier in the analysis). An example of this is “Het Ommetje door de boezem van de Eendracht”. This is a hiking route which has been created by multiple stakeholders (Gebiedscommissie Brabantse Delta et al., 2015). This route takes hikers along the different types of nature around Nieuw-Vossemeer, as well through the village itself. There are other hiking routes adjacent to this, though there are some hiccups in this network, especially around the waterfront. Some paths are not connected to the nearby routes, while they are very close. Connecting these could create a more expanded network of walking paths around Nieuw-Vossemeer.

The village council stated that the area is widely used by the villagers for their daily local leisure, such as taking a walk. In the Netherlands as a whole, people spend 40% of their free time activities in their own municipality (CBS, 2019). This suggests potential in developing local leisure activities.



Figure 14: Adding several connections between walking paths and improving the quality of others would add to the attractiveness of the routes in the area.



Figure 16: The picture above shows a location for a potential connection of walking paths: around the old swimming pool.



Figure 15: A path connecting from the Molenweg dike would improve connections.



## Financial analysis

The village council has indicated that their financial means to invest in local spatial development is very limited. Similarly, the municipality of Steenberghe has stated that they are willing to invest in a solid plan, though their budget is not extensive enough to provide substantial financial support to Nieuw-Vossemeer.

Pure Energie, a company realizing sustainable energy production across the Netherlands, is currently working on a plan to build a solar field north of Nieuw-Vossemeer. The organisation has indicated in personal communications that they would be willing to invest in the livability of Nieuw-Vossemeer through their *Omgevingsfonds*. This is a fund in which part of the profit of the park is to be used to improve the environment and surroundings in and around Nieuw-Vossemeer. This fund is estimated to provide 20.000 euros on a yearly basis (Pure Energie, personal communications). These funds could help support small, periodic expenses in Nieuw-Vossemeer, but would not be enough to realize larger projects. It is apparent that though sources for financing exist, willingness and capacity is currently very limited.

It is to be noted that financial means are largely dependent on willingness of private or public organizations to invest in development. This willingness is directly related to the financial potential these organizations see in the area. Should Nieuw-Vossemeer or its surroundings become more populous, or should more people visit the area regularly, willingness to invest will naturally follow.

## Historical analysis

The village of Nieuw-Vossemeer has several historical points of interest. The location of the small village on the edge of Zeeland and Brabant has played a central role in its history. Although Nieuw-Vossemeer is not connected to the “Zuiderwaterlinie” or the “West Brabantse waterlinie”, the village is on the edge of the old “Linie van de Eendracht”, the former Schelde-Rijnkanaal. To defend Zeeland and the passing cargo, fortresses like Fort Oranje were built along the canal. Nowadays, these fortresses are no longer visible in Nieuw-Vossemeer. However, in other places alongside the defensive line, initiatives have been set in place to restore the defensive line in an effort to strengthen the historic identity of the area (Zuiderwaterlinie Noord-Brabant, n.d.). As of yet, this has not been realized in Nieuw-Vossemeer.

Nieuw-Vossemeer also has a historical link with the flooding disaster of 1953. In this flood, 50 people died in Nieuw-Vossemeer. This was a significant number of people, considering the size of the village at the time. At the location the sea broke through the dike, a memorial cross was built in memory of those who died (4681.nl, 2019). That year, six different countries aided in the rebuilding of the village by donating quick-build housing supplies (Watersnoodmuseum, 2020). These houses consisted almost entirely of wood, which was unique by Dutch standards. Some of them are still in use to this day and stand out among the standard brick houses

Another remarkable element is the ferry between Oud- and Nieuw-Vossemeer. From 1567 until 1973 this was the connection between the two villages. The ferry disappeared when Rijkswaterstaat built a new bridge one kilometer from the ferry (bhic, 2019). Citizens that remember the time when the ferry was still in use have pointed out the strong connection they felt with it.

In personal communications with the village council and other inhabitants of Nieuw-Vossemeer, it came forward that the connection with the Schelde-Rijnkanaal as a whole was of significant value to the inhabitants. Inhabitants felt the historical link with this waterbody and considered the canal an important part of the identity of the village. According to Aalvanger (2011), historical sites are good ways to display and convey a village's identity. This village identity is important to the social interests, especially in small villages, where the local identity functions as a binding factor (Aalvanger, 2011).



*Figure 18: The memorial to those that had died in the flood, being unveiled (1954). Source: Wikipedia.*



*Figure 17: The old ferry that was used to get people across the canal, travelling between Oud-Vossemeer and Nieuw-Vossemeer. Source: BHIC.*

# SWOT-Analysis

Once our analysis was almost entirely complete, we took a step back to reappraise the information we had gathered. The SWOT-analysis shown above displays an overview of all strengths, weaknesses, opportunities and threats we saw in the present and / or future of Nieuw-Vossemeer. The grey rectangles represent ways to combine strengths and threats for example, in order to minimize threats. This approach to analysis helped us take a new perspective on our knowledge at the time and allowed for logical creations of interventions to come about. For example, through combining the strengths of green surroundings, a safe environment and bike-friendliness with the attractive housing conditions, a logical connection to an intervention aimed at capitalizing on these aspects presented itself.

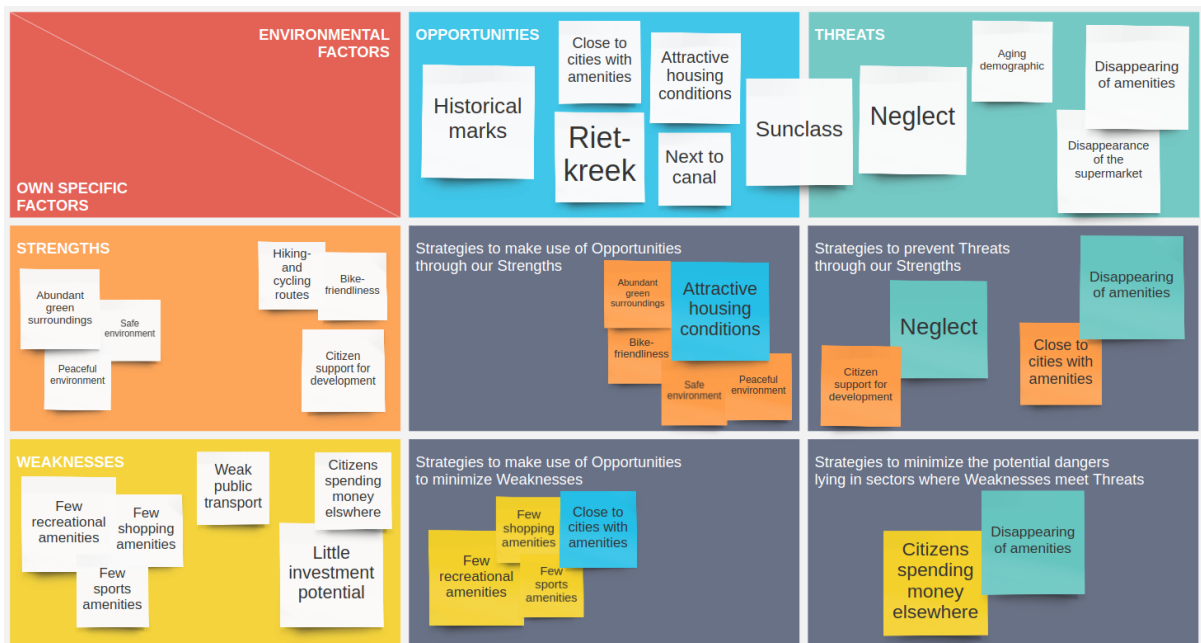


Figure 19: The SWOT-analysis above displays the strengths, weaknesses, opportunities, and threats we had discovered through our analysis. Making use of strengths or opportunities helped us develop solutions to current weaknesses and possible future threats.

# Vision: Redefining Livability in Nieuw-Vossemeer

Nieuw-Vossemeer has developed into an ideal housing location in the border area between Noord-Brabant and Zeeland, where the present helps build towards the future. Characterized by the exceptionally green surroundings, calm and quiet, safety, and small-scale life, Nieuw-Vossemeer is a peaceful alternative to the busy city life. Local history has a worthy spot and gets the care it deserves, especially the 1953 flood disaster and other connections between the village and the canal. The existing strengths of the area have a central position that lets them shine to their full potential, and are maintained to make sure that they stay that way. Locals provide input and assistance in this, only adding to the social cohesion and friendly character of the village. Furthermore, the location of Nieuw-Vossemeer allows citizens to reach several cities within a reasonable amount of time, enabling daily commuting between the village and cities like Steenberghe, Roosendaal, and Bergen op Zoom, as well as Rotterdam and Antwerp.

## **New perspective on livability**

Livability has gained new meaning in the light of national changes in consumer and amenity trends. As amenities have moved towards gravitational economic points like cities and large recreational facilities, small villages like Nieuw-Vossemeer are at risk of losing important aspects of their livability (Gies & Nieuwenhuizen, 2017). It is because of this national trend, that Nieuw-Vossemeer has reframed its perspective on livability. Instead of defining livability as something that fails or succeeds based on availability of amenities and physical utilities, livability is created out of environmental strengths. The village leans into its strengths and redefines both livability and itself. The green, peaceful surroundings, the beautiful sights, and the opportunities for walking and cycling now define the village as an attractive housing location, centrally located between several bustling cities. This new perspective is core to the comprehensive design of the area.

## **Strong connection between nature and the village**

Effort is put into the accessibility of nature. Walking- and cycling paths make it possible to access the nicest spots in the area without having to travel over larger roads. Green amenities like the Rietkreek, Stellebos, and the canal can be easily accessed from the village. Locals can enjoy these features freely and without much effort. This way, the green (and blue) strengths of Nieuw-Vossemeer are being used as optimally as possible.

Simultaneously, the integrated natural surroundings add to the village's identity. Citizens are proud of the characteristic sights of the environment and experience this to be part of what makes Nieuw-Vossemeer the village it is.

## **Social innovation and feelings of ownership**

Social dynamics plays an important role in maintaining the quality of public spaces and accessibility of nature, while simultaneously being an aspect of livability in Nieuw-Vossemeer. To ensure the preservation of the qualities of Nieuw-Vossemeer, the municipality actively works on countering neglect of both the village and its surroundings. In small-scale projects, citizens are urged to share their opinions on which spots deserve attention at that point in time, as well as assist in the execution of the resulting plans. This contributes to a feeling of social connection to the project and fellow citizens, as well as the village as a whole. The citizens of Nieuw-Vossemeer have a reinforced feeling of "being at home in Nieuw-Vossemeer".

Additionally, a figurative spotlight shines upon several historical points of interest. Landmarks representing forts like Fort Oranje and memorials to honoring those lost in the flood disaster of 1953 add to the historical value of Nieuw-Vossemeer. Citizens contribute to the maintenance of these historical features, increasing historical awareness and connection to the present among the inhabitants of the area, as well as promoting the experience of a strong village identity.

### **Well-connected to amenities**

Finally, mobility and connections are structured to accommodate the changes in amenities. As amenities have moved to nearby cities, rather than disappeared altogether, a large part of it is maintained in the surrounding area (Gies & Nieuwenhuizen, 2017). Care is taken to ensure that low-mobility groups can still access essential facilities, such as a local supermarket. Both the village council and municipal council are actively concerned with This way, Nieuw-Vossemeer remains pleasant for all its citizens.



# Principles

Based on the combination of the theoretical framework, an extensive analysis of Nieuw-Vossemeer and the surrounding area, and the vision for the village, several important principles of design were established. The main goal of these principles was to improve the level of livability, as well as respond to the demand of local leisure for the inhabitants of Nieuw-Vossemeer. These principles form a leading motive and translation between the vision and future interventions.

The influence of the physical, or spatial environment has a strong relationship on the living experience and satisfaction of inhabitants. This living experience and satisfaction, in other words livability, exists more or less out of the relation between the 'social' and the 'physical'. But mainly out of the social aspect, because livability is a social phenomenon. The importance of physical space is that this is the basis for the context within which people live and interact with each other. This leads to the fact that the physical space and the design of this space has a direct influence on livability. Because it determines the way people (can) use the space, and because the physical quality of the space directly influences the livability perception (Verweij, 2006). In conclusion, physical or spatial interventions are a useful instrument to improve livability, both spatially and socially.

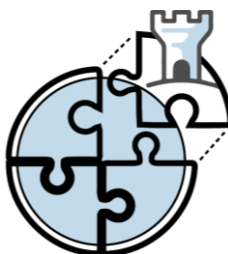


## Accessibility of nature

The creation of approachable connections to the surrounding nature areas, as well as recreational facilities such as hiking trails and other attractions which provide a strong connection to nature are beneficial for the quality of life for both the inhabitant as the visitors of an area (Kuhlman et al., 2012).

## Maintenance of public space

The perception of social quality of the living environment has a strong relationship with the state of maintenance of the public space. This maintenance plays an important role and has an indirect influence on livability (Verweij, 2006). Maintenance contributes to the appearance of public space and streetscape.



## Integrating history

Use history and cultural heritage from another perspective, instead of static monuments, history can strengthen the identity of a place by integrating and making it part of public space by means of different functions and user forms (Janssen, et al. 2013).

### Fitting amenities

Give space for innovative interpretations of amenities that fit within the changed context of small villages. The service of the amenity will continue to exist, but the amenity may exist in another form or other place. It is important to choose which amenities to strengthen or concentrate and reduce others, in consultation with relevant stakeholders, including citizens (Gies & Nieuwenhuizen, 2017).



### Social innovation



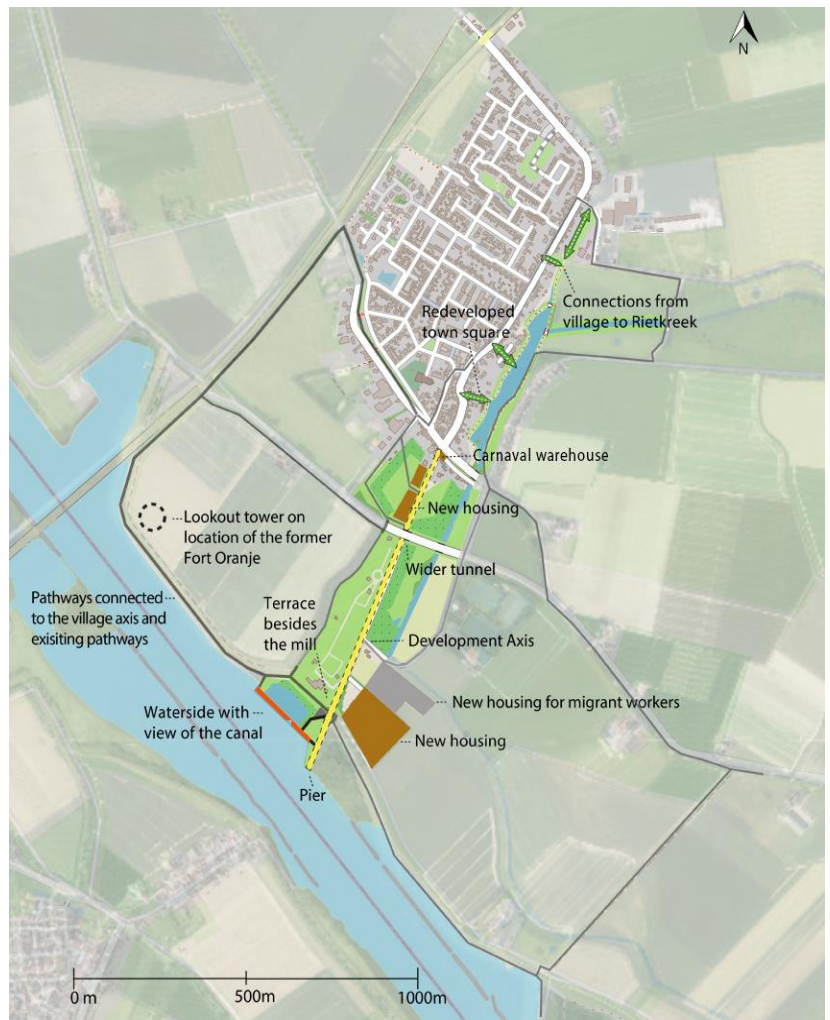
As a part of social dynamics this principle focuses on citizen participation. Citizens and entrepreneurs are increasingly taking charge into their own hands for the livability of their village. They take up opportunities, take on new responsibilities and thereby break through the traditional social structures where the municipality plays an important role. Inhabitants have a strong voice and are supplemented in the required means to be active when needed (During, 2013).

# Master Plan: steps towards the future

## The development axis

We chose to develop the area surrounding the Rietkreek and the Veerweg into a “development axis”. This development is based on both the wishes of stakeholders as well as in the analysis we did for Nieuw-Vossemeer.

The wish of the commissioner as well as the municipality was to create a stronger connection with the water. They stated that from a historic perspective, Nieuw-Vossemeer has a strong connection with the water and that the water is an important part of the village's identity, which they would like to see reinstated through interventions. In addition to that, both the municipality of Steenberg and the village council stated that a stronger connection to the waterfront would greatly enlarge the enjoyment of the natural surroundings of Nieuw-Vossemeer. The development axis forms the main connection between Nieuw-Vossemeer and the waterfront. However, at this moment, due to the area around the pool and the former ferry stop being overgrown and closed down, the waterfront is inaccessible. Through developmental interventions, this connection to the waterfront could be reinstated.



*Figure 20: This map displays the development axis as envisioned within this report. Interventions in the area are centered around this axis to connect all designs in an attractive, cohesive manner.*

As shown in the analysis, Nieuw-Vossemeer used to be a more accommodation- and day trip recreation-focused village, mainly because of the Sunclass park and the adjacent swimming pool. Because of these areas now being used much less, they are prone to neglect. These parts give the current street a run-down feeling, even though it has the potential to be both an extension of the village as well as a transitional-place from village to nature. In addition, the axis offers the possibility to connect several walking paths in the vicinity of the axis, making it into a central node in the network of paths. Combined with the access to the waterfront, the axis could be the perfect place to slowly immerse yourself in the green peace and quiet of the surroundings of Nieuw-Vossemeer after a long day of work.

## Translating principles to interventions

In this following segment, the principles as established are translated into practice through specific designs, fit for Nieuw-Vossemeer. First, a short explanation of how these principles translate into practice will be given to clarify the logical connection between these principles and interventions.

Firstly, *accessibility of nature*. As mentioned repeatedly, there is a relatively diverse amount of nature in the surrounding area of Nieuw-Vossemeer. However, the accessibility from the village towards nature is insufficient in several places. Interventions that contribute to this principle will minimize such disconnects and contribute to the integration of nature in the village.

Secondly, the perception of livability in Nieuw-Vossemeer has a strong relation to the state of *maintenance of the public space*. The neglected appearance of the surroundings of the Veerweg require attention to shine as they should, showing off the natural assets of the area. Within maintenance of public space, there is a strong relation between the social aspect and the physical aspect. First of all, maintenance is needed to create the first steps in improved accessibility of the Schelde-Rijnkanaal. Once this has been achieved, it is up to both citizens and municipality to maintain the developed strengths of the area, ensuring proper upkeep. This is where *social innovation* comes in. Citizens need to have a strong voice and power to execute their plans to make this work in practice. An explanation of how this could be achieved will follow near the end of this report.

Citizens of Nieuw-Vossemeer also value the historical aspects of their village. To emphasize local history, *integrating history* is essential. This integration consists of different elements, but most remarkable is the connection with the Schelde-Rijnkanaal, which has played a central role in the village's history. The location near the canal and the history are key components of the historical identity of the village. Historical identity may contribute to citizens feeling connected to each other and their living space.

Finally, *fitting amenities* as a principle is integrated into several parts of the master plan that contribute to the overall demand for amenities in the area. Examples of this are housing and local leisure activities. Amenities on a larger scale, like clothing stores for example, fall outside of the scope of this principle. Because of this, *fitting amenities* suit the financial and social context of Nieuw-Vossemeer better than they otherwise would.



# Interventions

The development axis is the master plan consisting of various interventions that together build this design. This segment takes the reader through the axis, north to south, and discusses the interventions and their link to the specific locations.

## Rietkreek

**Main principles:** Accessibility of nature & social innovation



**Before:** The Rietkreek is surrounded by the buildings of Nieuw-Vossemeer, lining and enclosing the waterbody. This makes it less connected to the village than it could be. The Rietkreek functions as a border, instead of an integrated part of the village. The town square is currently the prime entrance to the Rietkreek. However, because the square does not have a real draw-in factor, this location is not optimally utilized as both an access to nature and a place for social interaction.



*Figure 21: The redesign of the Rietkreek and town square open up the area and have an inviting aura.*

**After:** The town square becomes a visible, central entrance point of the Rietkreek. It draws people to the Rietkreek from within the village. The square turns into a central point where people can meet or run into each other, improving social interaction and cohesion. The square extends into the water by means of a deck, emphasizing the relation between the natural site of the Rietkreek and the urban site of the town square. The playground with water features enables children to play and experience water in a playful manner, playing with the strong relation between Nieuw-Vossemeer and the water (Niessing, 2017). The new connections between the village and the Rietkreek causes that the Rietkreek is more integrated with the village. The two present connections between the creek and the village will be enhanced and accentuated with greenery, bringing the creek into the village. Additionally, there will be two

new connections. These new connections will provide a better access to the Rietkreek seen from the north side of the village.

## Carnaval warehouse

**Main principle:** Maintenance of public space & social innovation



**Before:** The current intersection of the Voorstraat and the Hoogte has a neglected appearance because of the warehouse. The warehouse is quite old in itself and its appearance is quite weathered. This damages the generally friendly appearance of the village, especially considering the importance of the intersection to the village's mobility network. The intersection is connected to one of the main entrances to the village and makes one of the first impressions people get of Nieuw-Vossemeer.



Figure 22: The warehouse in its current form looks unappealing to those unfamiliar with its regular use. Source: Google Maps.

**After:** The warehouse gets minor renovations to improve its outward appearance. Passers-by get to enjoy the sight of the building and appreciate it as an addition to the character of Nieuw-Vossemeer. Citizens of the village can contribute through helping with painting or coming up with ideas to design the improved look of the building. Furthermore, as the building houses carnival wagons that are iconic for Noord-Brabant culture, the building may be a nice display of local culture and character.

## Construction of new walking and cycle paths

**Main principle:** Accessibility of nature & integrating history



**Before:** The dikes in the area of Nieuw-Vossemeer may both form a blockade and an opportunity for development. The structures create a divide between Nieuw-Vossemeer and the adjacent canal, while also providing views of the same canal. A lot of walking paths lay along (or on) the dike. Additionally, some spots along the dikes lack walking or cycling accessibility. Nevertheless, the dikes are an iconic part of the landscape which provide some wonderful views.

**After:** An improvement of these walking paths is to move on the top of the dike. Especially on the dike along the Schelde-Rijnkanaal, this replacement would create beautiful views over the canal. Another improvement to create a better access and connection with nature would be the construction of a walking path on the Nieuw-Vossemeersedijk. This dike is connected to the Molenweg dike. The new walking path along the Molenweg dike creates a connection towards the canal.



Two other walking paths need an extension to connect missing parts of a path. This is the road crossing of the Moorseweg between the campsite and the football field. And the path along the Moorseweg between the Molenweg dike and the Veerweg. All these walking paths lead to or from the central development axis, which is the new vein of life for the connection towards nature, the canal and an improvement for livability.

## Housing

**Main principles:** Integrating history & fitting amenities

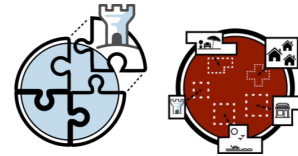


Figure 23: Attractive housing and the largely preserved park behind it create a pleasant atmosphere.

**Before:** The lot adjacent to the Veerweg is a prime location for development. It is well connected to both the village and the waterside through the Veerweg. There is space to combine the openness of the field, used for events and playing football, with a row of housing while keeping the functionality of the field.

**After:** The lot is redeveloped to accommodate housing. The typologies of housing are aimed at first-home buyers, as in line with the demand shown in our analysis. The row houses are compact in surface area and built out of wood in the same style and with the same material as the houses which were built during the reconstruction after the flood 1953, making a clear yet aesthetically pleasant nod to the village's history. Tiny houses are used to provide additional housing that is affordable and fits well within its surroundings due to the small surface area.



Figure 24: The possible housing units as seen from above.

## Tunnel

**Main principles:** Integrating history & social innovation



**Before:** The connection between the village and the water is provided by the Veerweg. The tunnel under the Moorseweg disrupts this connection. The perceived safety is not optimal, as there is no lighting within the tunnel and its narrowness hides things happening in the tunnel from the surrounding sight. A feeling of perceived unsafety discourages the use of physical space (Evenson et al., 2012, Foster et al., 2016). With the planned interventions along the Veerweg, the safety of the connection of the Veerweg becomes even more important as more people would be using the Veerweg to move between the canal and the village, as long as the perceived safety is good.



*Figure 25: The reworked tunnel is wider and has room for creative artwork that is openly displayed to passers-by.*

**After:** The village and the water are connected through a visible axis that the Veerweg provides. The tunnel is wide and open, increasing the perceived safety and practicality of the tunnel. Wooden poles indicate the water levels during the 1953 flood and functions as street lighting at the same time. This will give a physical indication how high the water reached during this disaster, giving this history a physical platform which will reach to the existing memorial cross nearby the windmill. The local primary school is invited to design and apply artwork to the concrete span to engage the community with this project. This embeds the intervention in the local community.

## Future housing on former Sunclass park

**Main principle:** Integrating history & fitting amenities



**Before:** Analysis showed that the former Sunclass recreation park currently has little potential and is likely to become vacant somewhere in the upcoming 5-7 years. Experts like Roompot



have already stated their disinterest in investing in this park, both due to its current state and the lack of appeal of the location to recreationists. Additionally, maintaining the current function of the park would require substantial investments (by the current owners) to ensure the buildings would adhere to SNF standards.

**After:** In line with demand for housing from workers in the Randstad area, the Sunclass area is an ideal location for new housing. New housing has an attractive aesthetic that improves the general experience of the area. A historical motif of wooden housing, similar to that of the post-flood emergency housing may add to this character. Next to the former Sunclass park, adequate housing will be provided for the seasonal migrant workers in the area.

## Terrace beside the mill



**Main principles:** Integrating history, fitting amenities & social innovation

**Before:** A main cycling route passes by the mill and the Watersnoodramp monument. However, the cafe-restaurant of De Praeter, including a terrace, is located to the right, hidden behind the mill. The terrace is invisible from the road and only found by people that know the area well. In front of the mill, parking space is located, while three more parking locations are in the vicinity. The cafe-restaurant does not make optimal use of the potential customers passing by.



*Figure 26: The terrace is located under the mill, as well as right beside the dike and the flood memorial, bringing together several key cultural elements*

**After:** The current parking lot under the windmill will be repurposed as a terrace, which highlights the historical site and strengthens both the identity of the location and creates a pleasant place for social interactions. More attention is drawn to this central place on the axis. Inhabitants, but also cyclists, hikers and people visiting the mill and 1953 flood monument can

enjoy a pitstop at the terrace. The terrace is located within sight of its surroundings, drawing people in.

## Waterside



**Main principles:** Accessibility of nature, maintenance of public space & fitting amenities

**Before:** The relation between the water and Nieuw-Vossemeer is strong, formerly visible through the attractiveness of the natural swimming pool. The pool was a place where locals met and enjoyed the natural surroundings together. However, the concrete wall of the former pool, the fence which surrounds the area at the moment, and overgrowth make the nature and water feel inaccessible. Moreover, the overgrown nature shields the site from its surroundings and creates an unsafe experience, making the waterside unattractive as a whole.

**After:** There is an open view of the water, which can be enjoyed through several structures. The benches let people to sit down, enjoy the view and watch the boats, while the deck into the water broadens the view left and right onto the canal. The location no longer has the same neglected feeling as before, because of the replacement of the concrete wall, the fence and the maintenance of overgrown nature. The waterside becomes part of a wider network of paths. A new walking path on top of the dike will connect the Zeeweg dike with the Molenweg dike. This path also connects the path on the east side of the campsite and has connections with the new waterside. Instead of the pool, the waterside now provides users with a pleasant location for social interaction.



Figure 27: The waterside is easily accessible in this design and invites people to take in the view.



Figure 28: The open design allows for a wonderful view of the canal and leaves an impression on visitors.

## Watchtower

**Main principles:** Integrating history

**Before:** Because of a lack of upkeep over time, Fort Oranje and other nearby forts have disappeared from the area. Historical value is not being emphasized and has no chance to add to the overall experience of the landscape.

**After:** The watchtower combines both the historical aspect of information on the nearby forts and the natural beauty of the area. This watchtower forms a remarkable sight that connects to the historical value of the landscape. It also adds to the nearby cycling- and hiking routes, as passers-by have a new point of interest that draws them to Nieuw-Vossemeer's surroundings.



*Figure 29: A watchtower combines a historical point of interest with a pleasing aesthetic that invites people to interact with it. Source: Houthandel Van Dal*

## The old ferry's docking point

**Main principle:** Integrating history

**Before:** The end of the Veerweg intersects with the Zeeweg. From this intersection, it is impossible to see the water because the area between this intersection and the canal is overgrown by trees and bushes. The area appears secluded and neglected, creating an unsafe feeling while standing there.

**After:** The replacement of the trees and bushes in line of the development axis and the extension of the axis down to the water provides a marvelous view on the water. A kind nod to the old ferry that used to connect Oud-Vossemeer and Nieuw-Vossemeer is made, in the form of an information board with pictures of the ferry in use.





# Organizing Bottom-Up Initiatives

In the light of the Netherlands moving towards a society of participation, and civilian participation having a huge role in the new *Omgevingswet*, it is crucial to think about what role an organization such as the village council should play in the future.

In our conversations with Leon Havermans of the village council, he indicated that he really liked the village cooperative in Esbeek. The cooperative in Esbeek has very strong ties with governing bodies, and representatives of the province and municipality attend their meetings, giving the cooperative the opportunity to make initiatives become reality.

To achieve this in Nieuw-Vossemeer as well, the first step to be taken is to discuss with the municipality what their role should be and what their responsibilities are. While the council and municipality do have a cooperative relationship already (as indicated by both in personal communication), in a world which shifts towards more participation it is crucial that relationships between civilians and governing bodies are clearly defined (During et al, 2013). A key addition to this would be a tool to make well-structured proposals for plans and interventions for bottom-up initiatives. Alongside a clearly defined relationship with the governing bodies, this could make for a streamlined process in making bottom-up initiatives.

While the tool has a main focus on the relationship with governing bodies, the mechanics can be used in negotiations with other stakeholders as well. An example of this could be the *Omgevingsfonds* of the solar park to be built north of Nieuw-Vossemeer. This fund has indicated to be willing to invest in initiatives increasing livability if the plans are deemed as worthy of the investment. This tool could help to get to such a plan.

Finally, this tool gives a well-structured process which could help in communicating towards the other citizens what the village council is working on. This potentially leads to a stronger support base.

## Input/mandate

For the village council to play a role in the future, it is crucial that they have a support base, which they currently do. With this support, the council has a mandate to work as representatives of the village. To ensure this support remains constant, it is key for these bottom-up initiatives to have as broad of a support base as possible. Letting villagers of all walks of life have a say in the matters of the council could be a way to upkeep this connection to and support of the citizens.

## Village council

The role of the village council should be to act as a vocal point of the community and as an organization that can take a leading role in picking up issues or ideas within the community. The village council should create a plan to tackle the issue or a plan to bring the idea to reality. They can do this by involving citizens who are

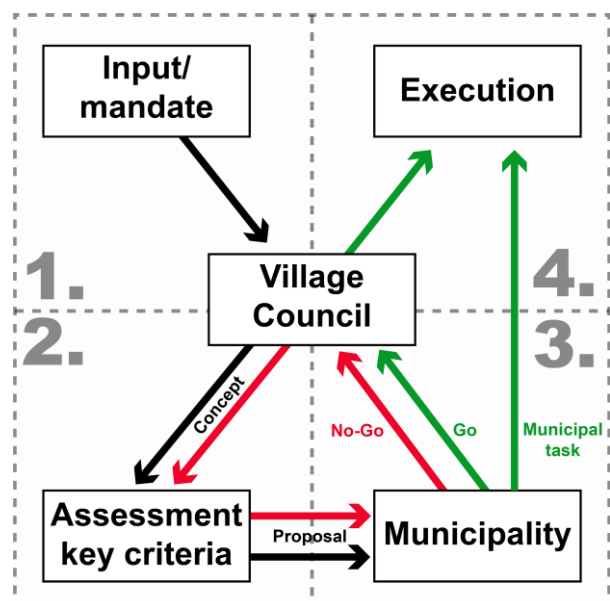


Figure 30: This flowchart displays the process as conceptualized in this segment.



knowledgeable on the matters that are involved in the plan or citizens who are highly enthusiastic for the plan. When a concept plan is formed, it can be taken to the next phase.

### **Assessment Key Criteria**

When a concept plan is formed, whether or not it complies with the criteria which have been agreed upon with the municipality can be assessed. This evaluation can be performed by asking critical questions regarding the criteria. The concept-plan is given a strong foundation, rather than being based solely on an appealing idea. In addition, a good way to test if the plan is well thought-through, a presentation can be given to the citizens of Nieuw-Vossemeer to see if they agree whether or not the criteria have been met. If the village council is convinced the plan meets the criteria, the plan can be sent as a proposal to the municipality. If not, the plan needs to be reevaluated so an updated version or another plan can be assessed at the hand of the mutually agreed criteria.

### **Municipality**

The proposal now needs to be evaluated by the municipality. This mainly consists of a second assessment at the hand of the criteria. And of course the assessment of financial possibilities. After the municipal evaluation there are two main decisions to be made, the first one would be to give the proposal a *go* or to give it a *no-go*. If given a *no-go* the proposal is sent back to the village council alongside an explanation for the refusal. The village council can then start to stop the plan altogether or to start the cycle again with an improved plan.

If the plan is given a *go*, the municipality needs to decide whether they want to execute the plan themselves, or if the responsibility of the execution will be delegated to the village council. Projects of a larger scale will most likely be picked up by the municipality, while those smaller in scale can be handled by the village council.

### **Execution by the Village Council**

If the village Council is given responsibility over the execution it is crucial the council gets the job done and shows it is capable in handling these initiatives. If not, the mutual trust between village council and the municipality could be damaged and as result the municipality could become hesitant to hand projects to the village council in the future. In addition, by letting civilians take responsibility for their own proposals will grant them a feeling of ownership over their own environment (During et al., 2013).

# Conclusion

Nieuw-Vossemeer finds itself faced with a question on how to ensure its livability, both now and in the future. Having had recreational facilities that would draw people to the village in the past, the direct area is now largely devoid of such strong recreational pulls. Financial pressure on other amenities, including the local supermarket, poses a threat to the maintenance of the livability in its current state.

This report has appraised relevant factors in Nieuw-Vossemeer and the surrounding area to gain a comprehensive overview of the current situation of the village and both its future possibilities and challenges. The village's disappearing amenities were pointed out to be an apparent threat to its livability. Additionally, the analysis has pointed out the obstacles in returning attractive, long-distance recreational amenities to the area. Instead, the strengths found in the natural surroundings of the village, as well as the central location between several (large) cities show more potential development to sustain the village's livability.

An array of possible interventions have been proposed, each contributing to the empowerment of one or several principles of livability. These interventions may prove useful as stepping stones towards the enhancement of the image of Nieuw-Vossemeer as an attractive location for housing.

All of this converges in the main research question of this report: *"In what way can Nieuw-Vossemeer utilize its strengths and redefine its future in terms of livability?"* The village of Nieuw-Vossemeer can utilize its strengths by using the area's attractive features to bring about a new image of a location of quality housing and natural quiet. The village should utilize what already builds its character and try to be flexible in a time where a national pattern of moving amenities poses questions of future livability of many small villages. By building on its current selling points, rather than by compensating for what it currently lacks, Nieuw-Vossemeer can redefine its own future of livability, and grow into a location full of history, natural charm, and character.

## Discussion & recommendation

### Future mobility

A critical remark that has to be made is the important role of mobility in the future of Nieuw-Vossemeer as we see it through the lens of our analysis and the resulting principles and interventions. Mobility plays only a supplementary role in this project, as it is seen as a given context that sets limitations for our designs and interventions. However, this is not the case because of a lack of need to integrate mobility in our future perspective. Our analysis has made clear to us the need for Nieuw-Vossemeer to remain connected to its surroundings in the future, especially if local amenities are under pressure. Losing access to amenities like a local supermarket could have gravely detrimental impacts on the livability of the area for low-mobility groups.

Additionally, mobility exists on a scale larger than the scope of our project and would involve a large number of stakeholders like nearby municipalities, public transport organizations, and financial and design consultants. To gain a full understanding of what mobility means to Nieuw-Vossemeer and its future developments, dedicated research is needed.

Therefore, as a research group, we propose the village council and the municipality of Steenberghe to cooperate in a project to gain a comprehensive overview of citizen demands for transport, the current offer of transport, and the possibilities for future mobility development.

### **Untreated fields**

Because of the design focus of this project, several fields of interest were not explored. Should the choice be made to extensively develop the area around Nieuw-Vossemeer, these fields should be considered.

Firstly, related to the above segment on mobility, extensive financial analysis was outside of the scope of our project. As a student group, we have no access to the required resources to perform an in-depth financial analysis of municipal spending, development costs and investment scales. Without comprehensive insights on these factors, financial plans cannot be made.

Secondly, due to a similar lack of access to in-depth information on environmental and ecological aspects, our designs do not consider directly the less overt weaknesses or strengths of the area. For example, Ecological values like animal habitats were not considered. The old swimming pool may be home to protected species now for example, blocking interventions near the waterside.

In short, it is important to contact and employ relevant professionals should real plans for interventions as proposed in this report be made. A large array of important factors has already been considered in this report, but there may yet be hidden obstructions to certain developments. These possible obstructions merit further, specialized analysis by experts.

### **Theme 'Planning and designing for places you haven't been'**

Looking back on the theme of 'designing for places you have not been', interesting points have been gained. Literature on the theme points out that four data sources are important to use to create a good image of a landscape; land cover data, aerial photographs, landscape photographs and field observations (Ode, et al. 2010). In our project we had good access to cover data, decent aerial photographs through Google Maps, as well as some landscape photographs and videos with help of the village council. However, the element of field observations is interesting. Three of the four group members have been on site and have been able to personally experience the project area. In group conversations, it became clear that there were some differences in understanding of the project area between the three members that had visited the area, and the one that had not. Though not extremely problematic in our case, there are certainly obstacles to designing for locations the designers themselves have never been. Misconceptions like locations of subjects and experiences of specific locations are quite likely to occur and can certainly prove problematic.

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