MIDDLE-SEGMENT HOUSING BY IMPLEMENTING PASSIVE LAND POLICY

An exploratory case study on how middle-segment housing is developed by using land-use instruments in wicked problems and with low municipal landownership.

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Colophon

Middle-segment housing by implementing passive land policy

An exploratory case study on how middle-segment housing is developed by using landuse instruments in wicked problems and with low municipal landownership.

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Abstract

The Dutch housing market has a shortage and especially a shortage in its middle-segment between, lowincome, social housing, and higher-income, homeownership. Because of this, municipalities have become more active in creating middle-segment housing, but most Dutch municipalities have few land positions which has urged them to create middle-segment housing in developments with no or low municipal landownership. The so-called passive land policy. However, this has proved difficult as there no longer are extensive national housing plans which were used in the past. In addition, Dutch municipalities do not have much knowledge on creating more middle-segment housing in developments with a passive land policy. Therefore, this thesis asks what land-use instruments exists in the Dutch passive land policy to create more middle-segment housing and how successful these instruments are in creating middle segment housing.

The passive land use instruments are within their relative typology the regulatory minimal percentages and eternal land lease, stimulating by anterior agreements, and communicational means by policy documents. When analysed it was found that these instruments are more often used in combination with each other. So, in implementation, this meant that some regulatory pressure was given on a developer to make them negotiate with the municipality. After this, the municipalities used stimuli to help create a financially feasible project with middle-segment housing and gave permits or sold (small portions of) land. Moreover, the policy documents were used more in advance to let any market party know what conditions were necessary to make the municipality cooperate with a plan.

Dutch municipalities thus influence the amount of middle-segment housing made by the passive landuse instruments used. Therefore, the municipality negotiated with market parties on projects in a context to create an agreement that is possible. In this several factors and actors played an important role. Most important for the agreement were the financial feasibility and the gaining of permits. The procedure for the permits started after the negotiations and the financial feasibility would be reached through the negotiations in which the municipalities stimulated in kind, by lowering other requirements, or by lowering taxes. The context could also play a role through an abundance of social housing in the area, political will, or land positions. There also seemed to be a correlation between more regulative instruments and less trust or a more strained relationship between the municipality and the developer in the network.

Keywords: Middle-segment housing, Passive land policy, Municipal housing policy, Land-use instruments, Wicked problem, Governance network

Preface

This is my master thesis for the master track Management in the Built Environment (MBE) from the Master of Architecture, Urbanism and Building Sciences. Within the MBE track, the thesis touches on the subjects of housing policy and land development.

I experienced relative freedom in deciding what my MBE master thesis would be about. It seems that if the subject was about housing, construction, or buildings the students are free to choose a topic. Personally, I saw this as an opportunity to understand a difficult societal issue and to write something interesting for myself or others in this problem. Additionally, in a previous project, I had been working with the land policy in the Binckhorst in which a somewhat different land-use plan is used in which developers are forced to make a certain percentage of social and middle-segment housing in developments. This interested me as it seemed like a simple method to create a housing type above the lower segment social housing and below the higher segment homeownership. Or simply said middlesegment housing. However, throughout the process of writing my thesis, I found out that this issue cannot be solved this easily.

I would like to thank my tutors Herman de Wolff and Marietta Haffner from the TU Delft for their feedback and guidance throughout the process of writing the thesis. This has been a process with faster and slower progress throughout the past year.

From the municipality of Rotterdam where I was able to do an internship, I would like to thank Marieke Middendorp-Mars and the whole section who helped me find interviewees and as a nice distraction from the thesis that had its ups and downs in progress. Moreover, it also gave me interesting insights into the comings and goings of a municipality. In addition, I would like to thank the interviewees in the cases without whom the research would not have been possible, and also in giving some general understanding of Dutch municipal land policy.

Lastly, I would also like to thank my parents, brother, friends, and others who have supported me in the past year while writing my thesis.

Dirk Weulen Kranenberg

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Executive summary

This summary describes the thesis, its research, the findings, conclusions, limitations and recommendations.

Introduction

The Dutch housing market is currently experiencing a housing shortage (Boelhouwer, 2020) which has forced municipalities to become more active in creating new housing (Voogt, 2021). When doing so, municipalities react to the current housing market in which the middle segment, in between the social and higher housing segments, has a lower supply than demand. Moreover, middle-segment housing, especially in the rental sector, is relatively new in the Dutch housing market, as in the past the Dutch housing system provided social rental housing with regulated rent which was often used until a person could afford homeownership in the higher segment (Van der Krabben & Jacobs, 2013). However, due to the housing shortage, there are long waiting lists for social housing and homeownership is unaffordable for a larger group. Therefore, municipalities are keen on making new middle-segment housing, however, municipalities had to sell most of their land due to mayor financial losses on land in the global financial crisis (starting in 2008), causing them to now be dependent on market parties to develop housing. However, there remains a large shortage of middle-segment dwellings as the market does not create enough currently. This thesis, therefore, aims to understand how Dutch municipalities may create more middle-segment housing in de developments where the municipality has no or low landownership. Lastly, when a municipality has a land policy without or with no or low landownership this is called a passive land policy.

Understanding how municipalities can create more middle-segment housing in development on private land starts by defining middle-segment housing. As stated above, the middle-segment has not been around for long and, because of this, there is no unilateral definition. However, as the research is from the municipal point of view, their definition is used in this study. The middle-segment rent starts at the same amount in all municipalities, at the top of the social housing segment with a rent of ϵ 763.47 per month (in 2022). The maximum end differs more but was in all cases in the research around ϵ 1,050 per month (with less than a 2.5% difference) or between ϵ 1,015 and ϵ 1,075 per month (Gemeente Amsterdam, 2022b; Gemeente Den Haag, 2022b; Gemeente Rotterdam, 2022a; Gemeente Utrecht, 2022a). Homeownership also has a different definitions per municipality. However, most cases used ϵ 210.000 as a minimum and ϵ 355.000 as a maximum (also the national mortgage guarantee (*NHG-grens*)).

The research question is: 'What land-use instruments exist in the Dutch context of passive land policies to create more middle-segment housing, and how does the use of these passive land-use instruments influence the success in creating middle-segment housing in (urban) developments?'

This question has been answered by four sub-questions that are further elaborated upon below

Framework

The first sub-question asked: *How can the success of land-use instruments as part of a passive land policy to create middle-segment housing be assessed?*

This was answered by making a framework to assess the success of a land policy through a literature study. Therefore, three theories from the literature have been used to create one model. These are the production model of Dooren, Bouckaert, and Halligan (2015), governance network in wicked problems (Klijn & Koppenjan, 2016) and the three levels of success for urban developments (Franzen et al., 2011). In this, a development is seen as a wicked problem for which there is not one solution due to its complexity and conflicting interests of stakeholders (Adams & Tiesdell, 2013). The adapted model made as shown in Figure 1 uses the base of the production model to assess the implementation of a policy.

However, it is a general model that can be used on most policies. Therefore, the three levels of success are used to assess the success of land-use instruments to create middle-segment housing. In this, success in urban developments is influenced by the three levels that are context variables, critical success factors, and veto criteria. As shown in Figure 1 the three levels have been placed in this order in the model. The context is a combination of the municipal objectives in a project and a PESTLE analysis of abnormalities in the project. After this, the activities are the critical success factors which assess the soft factors of the project. Here the governance network and wicked problem come to play as the soft factors are difficult to measure. The governance network is described, and the negotiations in the development are analysed. Lastly, the veto criteria are the items that must be in agreement for the project to start. The three levels of success are the financial feasibility, land acquisition, and gaining permits. These are then assessed through the conditions described in the development agreement. Altogether, the adapted model is the framework set up to assess the success of land-use instrument to create middle-segment housing.

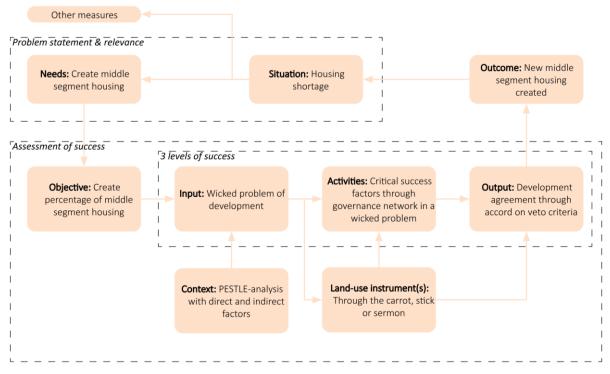


Figure 1: Adapted production model of performance by Dooren et al, (2015).

Land-use instruments

The second sub-question is: 'What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?'.

This was answered through literature research and analysis of municipal documents on land policy for middle-segment housing. First, there are three types of instruments which are often used (Hartmann & Hengstermann, 2018), the sermon through communication, the carrot by stimulation, and the stick by regulation. The land-use instruments that fit with these typologies to create middle-segment housing are policy documents (communication), anterior agreements (stimulus), minimal percentages (regulatory), and eternal land lease (regulatory).

Empirical research – Instruments

After this, empirical research by cases was done and the cases have been cross examined to answer the third sub-question: *How are these instruments used and is success influenced*?

The land-use instruments from the second question were all used in the cases but often differently. The used cases for this were Amsterdam, Rotterdam, Utrecht, and The Hague in which two example projects were used in Rotterdam and the other cases had one example project. Moreover, except for the minimum percentage the instruments were all used in combination with each other. Therefore, the most used combination was starting the process through regulatory pressure by eternal land lease agreements, conditions on land, and/or permits. The regulatory pressure is conveyed through communication means in publicly available policy documents. After this, negotiations for an anterior agreement were used to find a solution agreeable for the key actors involved with the project through the governance network. Furthermore, the governance network comprised at least of a developer and a municipal project manager and was in some cases expanded by a housing corporation. From this, it was learned that the instruments used to make the project financially feasible, give permits, or involves land acquisition. Additionally, in one case only regulatory pressure was used to influence the success of creating middle-segment housing.

With the empirical research done the third sub-question is answered in a cross-case analysis. Through the adapted model of production, the land-use instrument usage has been assessed on success in creating middle-segment housing. This turned out to be more difficult than expected due to the differences found in the analysis. However, some conclusions on the sub-question can still be drawn. Firstly, all instruments had success, but there was a lot of difference in the amount of success between the cases. Moreover, three other factors were often also part of the negotiations for middle-segment housing. These were the amount of social housing, the size of the middle-segment housing, and how many years the housing would stay in the middle segment. In addition, the municipalities also aimed at different percentages of middle-segment housing to be created.

The instruments have been described through the three levels of success. From this it can be learned that differences in the levels of success, can have consequences for the instrument used. From the cases, it seems that more regulative land-use instruments are unfavourable for relations between the municipality and the developer in the governance network. Moreover, in two projects in which the negotiations did not go smoothly, consultants were hired to support a statement by one party while in three projects with better relations consultants were in mutual gain. The use of a more regulatory instrument or pressure may thus cause for different consultancy usage. However, regulatory instruments also give more certainty in executing policy. Stimulus is much used by Dutch municipalities, but there is a difference in how it is used. The three methods used were direct financial compensation by the municipality in exchange for policy objectives, lowering social housing requirements in exchange for policy objectives in the middle segment, or lowering municipal taxing on the project in exchange for similar commitments by the private parties involved.

Empirical research – Recommendation

The fourth and last sub-question asked: 'What recommendations can be made on creating middle segment housing?'. This sub-question cannot be completely answered due to the low number of cases. However, with the context of the used cases, it is possible to recommend two types of cases. These are a project within a redevelopment area, and a project within an existing area. These differed in that the municipality had a clear plan set up in the area redevelopment while the developments in existing areas used means that were at hand define the municipal objectives. The two projects in a redevelopment area both had more regulative approach with one using only regulative power and the other using mostly regulative pressure. The option only using only regulative power did not have any extra costs for the middle segment housing while the other project required municipal stimulus contributions. After

this, the other context with redevelopments in existing neighbourhoods had instrument usage that combined the three types of instruments. In these projects the municipalities and the developer found similar objectives through communication which were then implemented by financial stimuli, while there was some regulatory pressure by the use of eternal land lease and permits.

Conclusion

The research question can now be answered. First, the different land-use instruments are placed in the typologies of regulation, stimulus, and communication. These instruments were then used in combination with each other to successfully have middle-segment housing created. Multiple methods were used to combine land-use instruments and create middle-segment housing. This starts from more regulatory to less with The Hague. Here the municipality used a land-use plan fully focused on regulatory means. Similar to this was Amsterdam, with regulatory pressure and stimulus which had more success in the amount of middle-segment housing created but also more expensive. This is followed by the Rotterdam cases which mainly focused on stimulus by creating a project with somewhat aligned goals between the developer and the municipality. They did this by for example lowering social housing requirements while also using permits to have some regulatory pressure. At last, the case in Utrecht did not have to use much regulatory pressure as the plan was already aligned with municipal policy. Because of this, the negotiations were mainly focused on creating a financially feasible development.

The instruments affected the success in different ways. However, influencing the financial feasibility was necessary in all cases except for The Hague. Therefore, municipalities use different methods which were financial contributions, lowering other municipal objectives, or lowering municipal taxing. In the last typology, communication was used to convey the municipal requirements, and it can make the municipal preconditions clear before the negotiations.

Discussion and limitations

The research had some success in describing and assessing the use of land-use instruments by Dutch municipalities. However, the findings also have some issues due to the research methods and circumstances during the thesis trajectory. Starting with the qualitative research in which a framework is made which is then used. This method has a disadvantage in that something is tested on the criteria created through a (literature) study. Moreover, some of the boxes in the model had some overlap. This made it difficult to exactly pinpoint what influenced the implementation of the housing policy and what the weight of a specific part of the negotiations was. However, it is still possible to describe how certain parts were connected to each other and what influenced what.

Secondly, the circumstances of the study influence empirical research. This was due to the short timeframe required for the thesis, limiting the number of projects and interviews per project. Moreover, one case project had to be dropped as no contact could be made with the necessary interviewees. This has led to the number of cases being lower and making it difficult to make a statement with certainty. However, a framework has been set up to assess instrument usage, and this has been tested on several cases. Therefore, this research still has value to other research or policymakers aiming to describe or assess their policies.

Recommendations

For future research it is advised to do more case study research to further expand the knowledge on factors and actors that influence the success of land-use instrument. This would make it possible to give advice on instrument usage with more certainty. Moreover, due to municipalities still adapting their relatively new passive land policy, it would also show what is eventually chosen as the best working land policy in different contexts.

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1. Introduction

This introduction starts by highlighting the two main problems that cause the thesis's subject. After this, the societal and academic relevance are given to continue to the main topic and the research question asked. The introduction ends with a description of the report's structure.

1.1. Problem statement

Due to lower housing demand during the financial crisis, the development of housing halted and has since not recovered which has caused a housing shortage and a gap between the housing demand and supply (Boelhouwer, 2020). Especially in the Dutch social -and middle-housing segments the gap and the shortage have caused long waiting lists and difficulties for tenants in finding suitable housing (Kraniotis & Jong, 2021). Because of this, governmental and municipal organisations responsible for housing in the Netherlands try to stimulate the realisation of more housing (Voogt, 2021). Hereby, there is a focus on stimulating the development of middle and social housing segments as these segments have the most issues and more middle-income housing is necessary as a bridge between the regulated social housing sector and the unregulated homeownership and private rental sectors (Boelhouwer, 2020). Therefore, in an attempt to shrink the housing shortage, the Dutch government has expanded the planning law options for Dutch municipalities to create more housing. However, this also clashes with the right of property.

The Netherlands already has an expansive legal framework for governmental influence in the built environment and the creation of sufficient and well build housing. In this, land use planning affects the constraints of property rights and public policy (Hartmann & Hengstermann, 2018) (p.14). Therefore, there is a conflict between governmental planning power and property right in the implementation of municipal policies by land policies. The Dutch government has to be involved with housing but must be careful not to deprive the right of property which is shortly described below.

Firstly, housing and its availability are an activity of the Dutch government through the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the Dutch constitution The ICESR describes under article 11 par. 1 (ICESCR, 1966) that the right to adequate living is somewhat stipulated. However, it is not a right that a resident can call upon to force a government to provide housing (Thiele, 2002). The Dutch constitution states in article 22 par. 2 that '*It shall be the concern of the authorities to provide sufficient living accommodation.*'. The further elaboration and implementation of this law are regulated through the Dutch housing act (Woningwet) which influences the housing supply and the quality of the supply.

Secondly, as the Dutch government has some responsibilities in the provision of housing it also has to abide by regulations protecting the owners of the land. Land is protected by the United Nations Declaration of Human Rights (UNHR) article 17 from 1948 (Hobma & Jong, 2016): *'Everyone has the right to own property alone as well in association with others.'* And *'No one shall be arbitrarily deprived of this property.'*. This article both protects those who own property and gives a government the incentive to expropriate property (Hobma & Jong, 2016).

Lastly, another protection of property is through the European Court of Human Rights and Fundamental Freedoms (ECHR) from 1950 which affects both property rights and private land ownership. The first article of the first protocol describes this describes (Ploeger & Groetelaers, 2007): 'Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.' And 'The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.'

As a consequence of these laws, Dutch municipalities have responsibility for housing supply but may not simply take land from its owner for their housing policy. This can only be done through long and expensive processes if the owner is unwilling to sell their land. The influence the Dutch government has in shaping urban developments is enough to be involved in adequate housing but without arbitrarily taking land. For land policies, this means that they must reach their goals without interfering too much with these two sides.

1.2. Societal relevance

The difficulty of creating more middle-segment housing is divided into three problems. First, there is a housing shortage in the Netherlands in which the middle-segment plays a role as a steppingstone between (low-income) social housing in higher-income homeownership. According to the Ministerie van BZK (2021a), there is a housing shortage of 279,000.00 dwellings in 2021 that will grow up to 317,000.00 in 2024. To counter this shortage, it would be necessary to build an average of 83,000.00 dwellings per year from 2021 up to 2035. Of this in total 5,400.00 dwellings per year would be for middle-segment rent and 15,000.00 per year for middle-segment homeownership (Groenemeijer, Gopal, Stuart-Fox, Leeuwen, & Omtzigt, 2021). However, there is a 13,000.00 gap as only about 70,000.00 houses have been built in 2020 (Ministerie van BZK, 2021a). Therefore, there seems to be a need for the government to intervene in the housing market.

Second, the last national housing policy steered by the state was the so-called VINEX, a national policy document on spatial planning. The VINEX was passed in 1992 and was executed in cooperation with municipalities facilitating the development of housing projects in specific locations throughout the Netherlands from 1995 up to 2010 (Van der Krabben & Jacobs, 2013). Since this policy ended, no new national policy similar to the VINEX has started. Additionally, the national spatial planning policy from 1992 tried to make Dutch municipalities cooperate more with the market that would also have most land ownership instead of the municipality that used to have land ownership. As a result of this, more Dutch municipalities work with lower land ownership in development today (Leve & Geuting, 2021).

Third, the combination of the need for more middle-segment housing and the low(er) municipal landownership has given some difficulties. This is because, municipalities are yet to adapt to market parties having land ownership and with this, also more power. Adding to this, as the creation of middle-segment housing is relatively new (especially rent), there is not much experience with the success of land-use instruments in a passive land policy. In 2017 the municipality of Utrecht in the Netherlands has been the first municipality to make an 'action plan middle-segment rent' and after this, other municipalities made similar documents. Furthermore, in 2018 the municipality of Amsterdam enforced minimal amounts of social and middle-segment housing through its vast landownership. Additionally, other municipalities are using existing and new means to create more middle-segment housing when they do not have the majority of the landownership in a development.

This means there is a shortage of housing and not enough is being built to catch on. There has been no extensive national housing policy in 10 years and municipalities have few land positions. Last, municipalities do not have much experience in using land policy to create middle-segment housing. However, the Dutch government has a role in the provision of adequate housing and must thus especially be involved with the middle-segment for which there is relatively low experience. Moreover, when intervening through land policy municipalities must abide by the protection of landownership.

1.3. Academic relevance

The academic purpose of this research comes forward from the need to assess policy implementations, specifically aimed at a (passive) land policy and the land-use instruments used to implement this. Therefore, a there are existing models to assess the performance of public policies (Dooren et al., 2015). However, these are not focused on the use of land-use instruments. Moreover, there also is a need to

take in account the difficulties of complex urban redevelopments and wicked problems (Klijn & Koppenjan, 2016). Therefore, there is a need develop a framework to describe the implementation in complex developments. The framework made for this thesis allows the comparison of the land-use instruments used in different case studies. Moreover, the research also tests the framework made through the qualitative research and a first assessment of the proposed model can be given. However, this is part of the aim of the research to assess the Dutch municipal passive land policy on creating middle-segment housing.

1.4. Research goal & research question

With the problem statement and (societal and academic) relevance the goal is to understand the use of a land-use instruments, as a part of a land policies, that aim to create middle-segment housing when the municipality has no land ownership position. The usage of these land-use instruments is determined and supported by the municipal land policy. Additionally, when influence is exerted on private land developments, a municipality will have much less power than when they have landownership. Therefore, it is assumed that it is more difficult to have successful middle-segment housing developments with no or low municipal landownership. With this, the research question asked is:

What land-use instruments exist in the Dutch context of passive land policies to create more middle-segment housing, and how does the use of these passive land-use instruments influence the success in creating middle-segment housing in (urban) developments?

In the research question, there are some terms to describe. Starting with the middle-segment housing which is divided into the middle-segment rent and middle-segment owner-occupied housing. Middle-segment rent is described in Table 1 as the liberalised market segment for middle-income housing. The middle-segment rent minimum starts were Dutch social housing ends, at a rent of ϵ 763.47 per month. However, the middle-segment rent does not have a unilateral maximum in the Netherlands. Therefore, the maximum of the used cases is used as these are at similar rent levels. The lowest maximum of the four cases is The Hague at ϵ 1,015.31 per month and the highest maximum is Rotterdam at ϵ 1,075 per month (Gemeente Den Haag, 2022b; Gemeente Rotterdam, 2022a). In between this are Amsterdam at ϵ 1068,83 per month and Utrecht at ϵ 1037,30 per month (Gemeente Amsterdam, 2022b; Gemeente Utrecht, 2022a).

The price for owner-occupied housing in the middle-segment differs per municipality in the Netherlands, but the National mortgage guarantee (NHG) with a maximum of \leq 355,000 is often used as an indicator (Gemeente Den Haag, 2020; Gemeente Rotterdam, 2021; Gemeente Utrecht, 2017). Furthermore, the minimum for middle-segment owner-occupied housing is placed at 210,000 as this is used as a minimum in some municipalities. However, due to the current land and construction prices very few to no housing below this minimum is being built.

Category	Owner occupied housing	Rent (€/month)	Income (€/year)
Social housing/ lower segment	>€210.000	<€763.47	<€40.765/<€45.014*
(Liberalised market segment for) middle-income housing	€210.000-€355.000	€763.47 - €1,015.31/1,075	€40.765 - €55,500*/ €45.014 - €74,000*
High-income housing	<€355.000	<€1,015.31/1,075	<€55,500/<€74,000*

*= Depending on single -or multiple person households

Table 1: Social housing -and free-market segment.

(Ministerie van BZK, 2021b; Ministerie VROM, 2021; Rijksoverheid, 2021)

Success is created by the usage of a land policy to influence urban developments to create middlesegment housing with an (anterior) agreement or building permit as a response to a development. This may require more or less input and has higher or lower output depending on the success factors. *Urban developments* are characterised by three factors in this thesis: the *wicked problem*, a *network* of actors *and success factors*. The development itself is a wicked problem in which there is a network of actors with different objectives. The response of a municipality to the wicked problem is assessed by success factors.

The *wicked problem* is a problem for which there is no unambiguous solution due to the unavailability of objectifiable information and there being no consensus on the applied standers to solve the problem (Franzen et al., 2011). In the case of urban developments, there is also the additional problem of actors with different objectives. The network is created by actors involved in a development who are dependent on each other and aim to achieve common ends in a relatively flat/horizontal organisation through the governance network (Adams & Tiesdell, 2013).

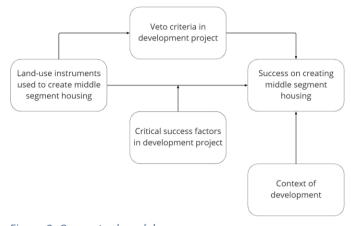
A governance network is described by Mullins and Rhodes (2007) as one of five possible categories of thinking about systems and networks. From the five given in their paper, the governance network comes closest to the methods used by Dutch municipalities in negotiated development plans. Specifically, a governance network is a network in which there is a high interdependency between actors with different objectives, that are shaped around a policy and its implementation. The network governance can, for the understanding of the actors involved with developments, be applied to understand the co-production of housing.

Success factors (and fail factors) are inputs used to determine the success of developments. The success of the development differs for involved actors and may change throughout a project. Success factors are split into three levels by Franzen et al. (2011): context variables, veto criteria, and critical success factors. From these, the context variables can be used to describe the context and to distinguish between projects. The veto criteria and critical success factors can be used to describe the influence of interventions as a part of a land policy.

The *passive land policy* is used for developments in which the municipality has low or no landownership and creates influences in developments through planning permission and the land-use plan/legislation. Opposite of this would be the active land policy in which the municipality has most land ownership and has power through this. The land policy is then implemented through *land-use instruments* which may be done by force, stimuli or communicational means.

The *Land-use instruments* are defined similarly to Debrunner and Hartmann (2020) as this is a similar research. Land-use instruments are intervention ways or measures that, as a part of land policy, are needed to achieve a certain public policy goal.

A conceptual model has been made to show what the influence of the land-use instruments was expected to be (see Figure 2). The independent factor here is the type of land-use instrument used which results in the success of creating middle-segment housing. The three levels of success have been used to describe the moderating, mediating and controlling factors. The context of the development influences the development however the instruments do The not influence this. land-use instruments are used to affect the veto Figure 2: Conceptual model



criteria which then influence the success of creating middle-segment housing. At last, the critical success

factors are the softer process-oriented factors. The trust, leadership and municipal governance role are not influenced by the land-use instrument but are a factor in success.

This structure has changed throughout the research; however, it still shows the early idea that land-use instruments are chosen independently of the context. Moreover, the critical success factors also and land-use instrument also affect each other. However, there still is some correctness in the model as al three levels of success influence the success in creating middle segment housing.

1.5. Report structure

This thesis has nine chapters after the introduction. First chapter two, will give the sub-questions for the thesis, describe how these are answered, and give the research methods. After this, the third chapter is a literature study that goes into the assessment of land-use instruments. The chapter after this, chapter 4, will also be a literature study and in addition a document analysis. However, this review describes the middle-segment housing policy and land-use instruments used as part of the passive land policy. Chapter 5 describes the first case, namely, Amsterdam. cases of Rotterdam, Utrecht, and The Hague are then described in Chapters 6, 7, and 8. With all cases described, chapter 9 will assess the success of the land-use instruments used to create middle-segment housing and a discussion is given on the findings. At last, chapter 10 will give a conclusion and recommendation to the research question asked.

2. Research sub-questions & methods

This chapter elaborates on how the thesis research is executed. Therefore, the chapter starts by giving sub-questions for the research questions which are then further expanded upon. This will lead to the research methods used, the table of contents and the planning of the thesis.

2.1. Sub-questions

The sub-questions are answered through the model shown below in Figure 3. Through this model, the interventions for middle-segment housing, municipal landownership position, types of instruments and usage of instruments are analysed. After this, the success of the instruments is analysed. With this, it will be possible to evaluate the use of instruments and make a recommendation.

The sub-question asked are:

- 1) How can the success of land-use instruments as part of a passive land policy to create middlesegment housing be assessed?
- 2) What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?
- 3) How are these instruments used and is success influenced?
- 4) What recommendations can be made on creating middle segment housing?

The questions are linked to the conceptual model in the introduction. Sub-question 1 described landuse instruments used to create middle-segment housing in the most left bubble. Sub-question 2 describes the success of creating middle-segment housing in the bubble on the right. After this, subquestion 3 finds what the influences of the three levels of success are through the three remaining bubbles. After this, the information from sub-questions 1,2 and 3 to assess success. At last, sub-question 4 determines what instrument higher success by has influencing the veto criteria. Herein, the context and critical success factors influence the project but cannot be influenced by land-use instruments.

In Figure 3 the methodology for the thesis has been added. In this, the first two sub-question are answered in the literature study. After this, the third sub-question is an empirical study through case studies with which the success will be assessed. The fourth sub-question can give a recommendation. The sub-questions will now be expanded upon.

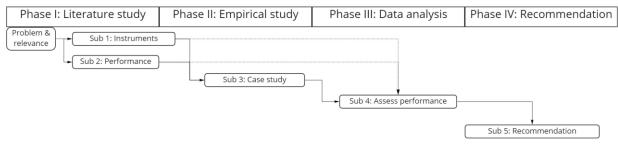


Figure 3: Methodology of research

2.1.1. Sub-question 1: Assess the success of instruments

The first sub-question:

How can the success of land-use instruments as part of a passive land policy to create middlesegment housing be assessed?

It is necessary to understand how land-use instruments are used as part of a policy and what success is. The question is answered by the use of literature which describes how policies work in developments and in what context these policies are implemented. This is then used to make a framework in which land policy and land-use instrument usage are combined to be assessed. Therefore, literature in the field of policy implementation is used to understand the general process of a policy and land-use

instrument. Added to this is the condition for success in developments which helps create a framework for successful instrument usage. After this, literature on the conditions in which land-use instruments are used is put in the framework to complete it. It can then be used to assess different types of landuse instruments that are found in the literature and used by Dutch municipalities.

2.1.2. Sub-question 2: Land-use instruments

The second sub-question

What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?

This question asks what land-use instruments there are and how these are used and can be categorised. With this question, the types of land-use instruments further examined are given. The assessed land-use instruments are placed in different typologies to better describe the differences between them. Therefore, three possible frameworks have been considered. These three methods aim to typologies instruments in different spectrums and are the: 'instrumentenwaaier' (Verheul, Daamen, Heurkens, & Hobma, 2018), four practices of urban development in the Netherlands (Hartmann & Hengstermann, 2018) and policy instruments (Bemelmans-Videc, Rist, & Vedung, 1998). For this thesis, the policy instruments were chosen as the most useful. The four practices of urban development were deemed less useful as they describe different governmental land policies and the thesis's research is conducted in only one of their four policies. However, four practices are used in the literature review to elaborate on what policy the thesis focuses on. The instrumentenwaaier was not chosen as it makes no distinction between different land ownership scenarios and is less adaptable than the policy instruments.

After creating a framework within which the land-use instruments are placed, there is a need to further understand what land-use instruments are used and how they might be used by the municipalities that use them. As middle-segment housing regulations and the (stronger) aim to create more of it, are relatively new in the Dutch context, the existing use of land-use instruments is analysed. Through an analysis of bigger Dutch municipalities, the used passive land-use instruments are to be found. When a list of instruments within the context of the land policies used in Dutch municipalities is finished, it is determined how they are used.

2.1.3. Sub-question 3: Empirical research

The third sub-question is:

How are these instruments used and is success influenced?

This question asks how the instruments found as part of the passive land policy in the second subquestions are used on a project base. When land-use instruments are used during the negotiations towards an (anterior) agreement, they might have different success in creating middle-segment housing. Therefore, the governance network between the key actors is analysed and it is checked how the instrument used influenced the levels of success.

This is answered by describing the passive land policy that is used and then determining how different instruments have been used on a project basis and what the influences of these instruments were on the success factors. Furthermore, to understand how a certain starting point in negotiations resulted in a (most likely) different agreement, an understanding of the involved actors is reached. Therefore, it is necessary to have an expanded understanding of the most important actors and factors in the development process of created middle-segment housing. This means qualitative research is needed in which the most important actors are mapped.

The case study selection has already been started in sub-question 2 by finding out which municipalities use what instruments. Additionally, several informal unstructured interviews with municipal civil servants have been done to gain an understanding of how land-use instruments were used in possible case municipalities. From this, it was learned that there is a vast difference in how municipalities use

the possibilities of planning law. Most prominently different is the focus on the use of public or private law. Here, some municipalities are very much focused on placing as much as possible in the public law requirements while others leave this (relatively) empty and focus much more on the private law options. From Dutch municipalities with more than 100.000 dwellings, four were chosen. These are the four largest Dutch cities in housing supply. From these cities, in The Hague, only a single area is analysed as this area uses a pilot for new legislation which is very regulative. The reason for the first two cities is the opposing land policies in which Amsterdam seemed to be more regulative and Rotterdam more fiscally incentivizing. The third case city, Utrecht, was selected as it has a past of passive land policy with middlesegment rent (about 5 years). Within the chosen case cities projects are taken as examples of how the housing policy is executed through the land-use instruments used. After choosing the case cities, the selection criteria for suitable projects are:

- Middle-segment housing as an objective in negotiations
- Projects for which the (development) agreement is finished
- Projects with low or no municipal landownership
- Relatively new (in the last 5 years an agreement)
- Land-use instruments determined in the second sub-question are used

Cases and determining projects

To assess success, Dutch municipalities have been taken as cases and in these cases several projects are taken as examples of how the passive land policy in these municipalities works. The projects in the municipalities are plots with low or no municipal landownership on which the creation of middle-segment housing was an objective. In these cases, it is determined what the land-use instrument's influence was within the context while taking into account the negotiations.

From the criteria for projects, a shortlist of possible projects to be used has been made. As there are not a lot of projects like these, only a couple of projects in each of these case cities were found (if more than 1). If multiple projects are available, the project most aligned with the municipal land policy is chosen. Per case, about 1 to 2 projects are described and the actors most extensively involved with the process towards a building permit or anterior agreement have been interviewed. This means about 1 to 2 persons have been interviewed to create an image of the process and the land-use instrument's success. The persons interviewed are as described in Figure 4 in the high power halve of a power interest matrix.

Data collection in case study projects

There are multiple types of data sources defined by Blaikie and Priest (2019). The case study uses two types of data: social artefacts and interviews in a semi-natural setting. For this, the social artefacts contain three possible options for documentation of the cases: official statistics, public documents and private documents. These options require the documents shown in Table 2.

Social Artefacts	Documents
Official statistics	Housing types by segments in the area
Public documents	Actieplan middenhuur
	Actieplan middenkoop
	Project information websites
Private documents	Project evaluations

Table 2: Used documents for case study

Second, interviews have been used as a part of the case study (see Appendix II for the interview protocol). Describing case studies required an understanding of the actors involved and therefore the involved actors have been profiled for their part in developments. In defining the sampling methods Blaikie and Priest (2019) give multiple options on how to determine the interviewees for research. For this research, there is a need to interview the actors most important in decision-making during the

development process and the network of actors. This network between the public and private parties involved in a development project is as earlier named governance network. As so, there is a relatively flat hierarchy between the actors involved which aims to come to an agreement that is in each actor's general interest. With this and the current uncertainties with who is involved with the possible case, selected sampling is the most suitable sampling method. The goal was to interview at least two actors and both a market party and a public party in each of the projects.

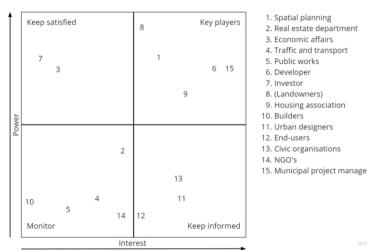
The actors involved in developments come from three groups: public groups, private groups, and citizens and interest groups (Franzen et al., 2011). The first group is comprised of a municipal department, governmental agencies and the national government. Additionally, the municipal departments may differ per municipality, however, the following departments are often represented in some way: the spatial planning department, the housing department, the municipal real estate department of public works. The second group has some important actors, namely the developer, the investor and landowners (if not the developer or investor). It furthermore contains housing associations, builders, urban designers and end-users. The last group contains the users in the old and new situation, civic organisations and NGOs. However, these did not have an important role in the developments and were thus not interviewed.

To analyse the cases, a power-interest matrix is used. For this, a power-interest matrix for a generic project has been filled in Figure 4. The power and interest of these parties will most likely differ in development projects as all projects somewhat differ. However, this indicates are expected to be interviewed and then determine their position in the power-interest matrix. As the research tries to understand how success factors are influenced by land-use instruments, only key actors are interviewed who influenced this. In the power-interest matrix, the 'key players' and 'keep satisfied' categories are most important as no agreement can be reached without their approval. These parties are expected to have influenced the project and with this also the success factors.

These are the:

- Municipal civil servant on (middle-segment) housing policy
- Municipal civil servant on land policy for (among others) middle-segment housing
- Municipal project manager
- Developer
- Landowner(s) (if this is not the developer)
- Housing association.

Attempts have been made to interview these actors until enough was known to answer the third sub-question for a case.





Ethical considerations

The interviews are transcribed and analysed with Atlas.ti software while taking into account the Findable, Accessible, Interoperable, and Reusable (FAIR) principles for the collection and reproduction of the interviews. However, at the request of the interviewees the cases have been anonymised which makes not all data shown, unfortunately. Although, the function and case municipalities of the interviewees have been given in Table 3 to show which actors have been interviewed. It is also shown which interviews were executed and which were not. These were two interviews in Utrecht and one in

The Hague. The two interviews for one project in Utrecht could unfortunately not go through as contact with the interviewee was lost. Moreover, this interviewee would also be used to contact the developer on the project. Because of this only one project is used in Utrecht. In The Hague, no civil servant that had been highly involved with the specific project could be found. Although, the municipality had a third party make an evaluation of the land-use plan in the area which covered the needed information.

Nr.	Municipality	nr.	Function	Project	Done?
1	Amsterdam	1	Civil servant municipal land company	1	Yes
2	Amsterdam	2	Civil servant Project management	1	Yes
3	Rotterdam	1	Civil servant Project management	1	Yes
4	Rotterdam	2	Civil servant Housing	1	Yes
5	Rotterdam	3	Developer	1	Yes
6	Rotterdam	4	Civil servant contract law	2	Yes
7	Rotterdam	5	Developer	2	Yes
8	Utrecht	1	Civil servant real estate strategy	1	Yes
9	Utrecht	2	Developer	1	Yes
10	Utrecht	3	Civil servant real estate strategy	1	No
11	Utrecht	4	Developer	1	No
12	The Hague	1	Developer	1	Yes
13	The Hague	2	Civil servant	1	No
12 13	The Hague	1 2	Developer	1	Yes

Table 3: Cases, projects, and interviewees

With the social artefacts and the interviews, the instrument usage that led to success is described which makes it possible to compare the different cases in sub-chapter 9.1. Through the case studies, the effect of land-use instruments on the success factors has been described in the adapted model of production.

Sub-Chapter 9.2 describes what influenced success in developments. Therefore, the chapter starts by comparing the objective and output in the cases. In this, the differences in objectives often negotiated together with middle-segment housing are weighted in. Moreover, some other topics often negotiated on together with the percentage of middle segment housing is taken in account.

This is followed by a description and comparison of the 3 levels of success which in the adapted model is in between the input and output. This helps to determine what factors and actors had the most influence on the success in creating middle segment housing with different land-use instruments. This is followed by a cross analysis on the instrument usage in the cases and how the usage of different typologies differed. This will make it possible to compare the cases and to answer the third sub-question.

2.1.4. Sub-question 4: Evaluation on instruments

The Fourth and last sub-question Is formulated as follows: What recommendations can be made on creating middle segment housing?

As the research is qualitative it is difficult to give a clear advice to make for a better performing land policy. However, through the last sub-question it is attempted to couple the used case to similar context. This makes it possible to advice on what land-use instruments are used in some cases. Although due to the research method used this is only a brief comparison of the cases context, the instrument used and the differences in success. This is done by comparing the part of the context that had influence in the agreement made at the end of the negotiations. From the types of contexts, found the governance network and the instrument usage is also compared to find differences in between the projects in the same/similar context. With this, it is expected to give a brief description on the found context types. It should here be taken in account that there are more context types that are not found in the used cases. At last, it is possible to conclude on the last sub-question.

2.2. Research methods

The different sub-questions are answered by different types of data collection methods, and logic of inquiry used as shown below in Table 4. This starts with sub-question one which is a literature study on policies that determines how the success of land-use instruments may be assessed. After this, the second sub-question is a literature study that uses professional -and academic literature to find what land-use instruments are and that uses municipal policy documents and literature to find used land-use instruments and their respective legal basis. The third sub-question will then, by a qualitative study, finds case studies of municipalities where the instruments researched in this thesis are used. Furthermore, after the right cases are found, the instruments used in these case municipalities are analysed by the use of projects that are an example of the municipal land policy. This is done by document analysis and interviews are conducted to elaborate on parts that are not described by the municipality. This will make it possible to start the evaluation of the land-use instruments on success and answer the third sub-question. At last, the fourth sub-question is again a qualitative study and will use the data from the previous sub-questions to advise on when certain passive land-use instruments might have more success.

SQ	Type of study	Data collection methods used	Logics of Inquiry	Output
1	Literature study	Literature	Inductive	Assessment method success
2	Literature study	Literature & document analysis	Inductive	Framework land-use instruments
3	Qualitative	Document analysis & interviews	Inductive	Analysis instruments case study & the success of instruments
4	Qualitative	Primary source	Deductive	Advice on instrument use
RQ				Conclusion

Table 4: Research methods used, data collection methods, and logic of inquiry per sub-question,

3. Assessing the success of land-use instruments

How can the success of land-use instruments as part of a passive land policy to create middle-segment housing be assessed? Success is as stated in the introduction assessed by success factors according to Franzen et al. (2011). This chapter will first present an existing model for assessing the success of organisations and programmes. After this, the success factors for urban development are described which is used to elaborate on success. Thereafter, the model is placed in the context of a wicked problem of a development with a government network of actors that negotiate in a mutual dependent setting. The chapter is closed off by a conclusion on how the success of land-use instrument will be assessed.

3.1. Performance of instruments

Success can be divided into parts that can be assessed. For this thesis, the success of a policy or instrument may be assessed through the framework of Dooren et al. (2015) which is added in Figure 5. This model aims to assess the performance by comparing output and outcome with socioeconomic changes, needs, inputs and outputs. The definition of these and other numbers in the model can be found in Table 5. The model for performance starts with a socio-economic issue and the need for action. Priorities determined by the political system are translated into objectives for policies. Thereafter, within the programme or policy, the objectives are coupled with the input of the policy and are reflected with the need to determine the relevance. The inputs create activities that result in the outputs of the policy or instrument. The outputs of the instrument are then assessed through intermediate and final outcomes which are influenced by the context. This performance is assessed by effectiveness, efficiency, cost-effectiveness and utility and sustainability. As qualitative research is used it is difficult to measure the performance of land-use instruments. Therefore, the success of certain land-use instruments is assessed.

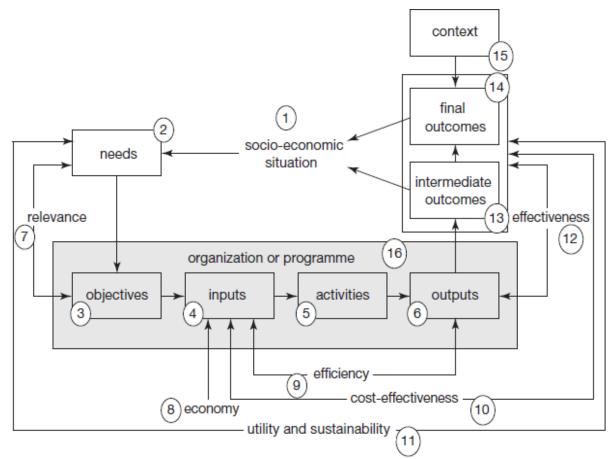


Figure 5: Production model of performance (Dooren et al., 2015).

The model added above shows that parts of a policy can be assessed and compared. For this research, it is necessary to assess the effect of certain instruments. For the assessment of instruments promoting middle-segment housing, performance may be assessed by the weighing out advantages and disadvantages of instrument usage relatively to factors affecting the instrument(s) in a project. Therefore, the usage of an instrument is during the programme period in the model which starts with an objective and ends with an output. In between this the input and activities are the implementations of the instrument.

Nr.	Term	Definition
1	Socio-economic situation	Issues induce a need in accordance with the traditional politics– administration dichotomy.
2	Needs	A need for action by the public sector.
3	Objectives	Priorities/ needs that are translated into objectives of the organization or programme under review.
4	Input	For example, financial and human resources
5	Activities	Allocation of organisations and programmes
6	Outputs	Result(s) of activities
7	Relevance	Assessing the confrontation of the objectives of a policy with the needs.
8	Economy	The ratio of a monetary input over another input.
9	Efficiency	The ratio of the input over the outputs.
10	Cost-effectiveness	The ratio of the input over the outcome.
11	Utility and sustainability	The confrontation of needs and outcomes.
12	Effectiveness	The ratio of output over the outcome.
13	Intermediate outcomes	Outcomes (usually) in the short term.
14	Final outcomes	Outcomes (usually) in the long term.
15	Context	Influences on the outcome on which the organisation or programme has a limited or no impact.

Table 5: Definitions of the model of performance (Dooren et al., 2015).

However, as the model of Dooren et al. (2015) is a more generic assessment tool it is necessary to expand the parts affected by land-use instruments to be able to further elaborate on this. Therefore, the success factors in section 3.2 are used, which is then supplemented by the theory of wicked problems and governance networks in section 3.3. At last, these three parts are combined in the chapter's conclusion to make a model which is used to assess the success of land-use instruments.

3.2. Success factors for land-use instruments

The success factors of Franzen et al. (2011) are used to describe the success of land-use instruments used by municipalities and show how their factors contribute to the project success of an actor. However, as it is used for the effects of certain instruments on the success factors in this research it requires some additional work. This is done by the network analysis which will focus on the different parties involved with their respective interest.

The three levels of success are context variables, necessary conditions and critical success factors.

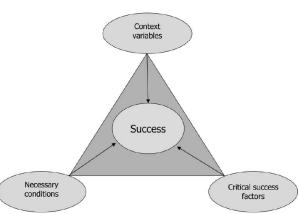


Figure 6: 3 levels of success factors (Franzen et al., 2011).

Firstly, the context variables are differences in external and internal factors between different projects. This can be started with a description of the case (and the project) which is elaborated upon by a PESTLE-Analysis. This will thus describe the political, economic, social, technical, legal and environmental conditions of the possible development. This also includes the landownership position causing the opinion of the landowner on the developer.

Secondly, the critical success factors influence the project in making a project successful but are difficult to influence by land-use instruments. These are the soft factors. Examples given are trust & openness, leadership, the image of the development, reduction of complexity, proactive policymakers, and designing modern approaches. For the use of understanding what influence these had on a development the trust & openness, leadership and proactive policymakers seem most important and will thus be used. Additionally, determining how these factors were during a development is further elaborated upon in section 3.3 by the literature about a governance network in a wicked problem.

At last, the necessary conditions, are also called the veto criteria as they are needed but will not mean the direct success of the project. Examples given of this are acquisition of land, scope definition, economic feasibility, realistic cost estimates, independent sub-projects and robust financial engineering. These criteria are aimed at the financial feasibility and project definition of the development. Therefore, these are seen as hard criteria, without them the development will surely fail. From the given examples the acquisition of land and the economic feasibility are seen as the two most important factors without which a project will fail. Additionally, gaining necessary permits was added as this played an important role in all the negotiations.

3.3. Negotiations for a wicked problem

The soft critical factors from the three levels of success are seen as and shaped by negotiation between actors involved in a development. However, these actors have different ideas of a development which are not aligned. Therefore, a development is seen as a wicked problem for which there is not one solution due to the different objectives of actors. These different actors in a development are the developer, the municipality and sometimes a housing association in which the developer aims at creating profit, while a municipality has a public goal with a development and the housing association want to develop social housing. This leads to the governance network theory of Mullins and Rhodes (2007) in which the government does not singularly have the power in an urban (re)development. However, it shares the power in a flat or horizontal network between multiple (key-)actors involved in a project. In negotiations, these actors aim to come to an agreement which is agreeable to the involved actors (Mullins & Rhodes, 2007).

In understanding the influence of land-use instruments it is important to take into account how the key actors negotiated, as different types of actors could cause different types of effects of certain instruments. Therefore, the critical factors (trust & openness, leadership and proactive policy maker) and their influence on a development need to be assessed to determine what hard influence the land-use instruments have. However, according to Klijn and Koppenjan (2016), the performance of governance networks is difficult to measure. This is due to three factors: variety in objectives, changing goals, and different consensus. Firstly, the governance networks have a variety of objectives which might differ from each other. Secondly, the goals might change over time in the process of agreeing on the problem. At last, a consensus is often missing as problem perception change over time and consensus on the problem is missing. However, Klijn and Koppenjan (2016) give a framework for assessing the governance networks process (see Table 6) which can be used to evaluate different governance networks. Evaluating governance networks gives the possibility to assess what influence the soft factors had on a development and which role land-use instruments played in this the development while taking into account the difference critical factors can cause. Therefore, Klijn and Koppenjan (2016) give three assessment criteria for governance networks: content, process and networks.

Starting with content, Klijn and Koppenjan (2016) see the cognitive learning effects in the alignment of perspectives and implementation of a policy/instrument as an evaluation criterion. The actors learn to understand the intricacies of the wicked problem of a development and find agreements. There are two types of cognitive learning effects, joint image building and goal intertwinement. From these, the joint image building aims to create a general understanding of the problem to come to a solution while the goal intertwinement seeks to use policies and services to reduce the diverging objectives by aiming at lowering the negative side effects and compensating for certain costs. However, for goal intertwinement ex-post satisfaction is an issue that should be noted. This causes actors to feel like the process was successful afterwards due to the longitude of the process while not being successful if checked with earlier expectations. This means that documentation in the earlier phases in the process must be made/used to get a good image of the success.

Content

Joint image building

- Frame alignment and consensus building
- The development of negotiated knowledge

Goal intertwinement (win-win situations)

- Ex post satisficing
- Enrichment, integration of services, and inclusiveness of solutions

Process

Transaction costs and duration

Quality of the process

Inclusiveness of process, democratic legitimacy, and accountability

Network

The development of relationships, shared perceptions, institutional rules, and a high level of trust

Internal and external support for the network (resilience and reliability)

research.

Table 6: Assessment criteria for governance network process (Klijn & Koppenjan, 2016).

There is a combination possible of the three models: the production model of performance, the 3 levels of success, and the governance network in a wicked problem. Therefore, Figure 7 is made to show how these are connected from the perspective of the 3 levels of success. Below, in the conclusion of the chapter, the model Dooren et al. (2015) of is adapted to also contain land-use instrument and to be able to describe the process of the implementation of a housing policy through the land policy. In Figure 7, the veto criteria in the left corner, are needed for an agreement in the output field of the production model. The critical success factors are placed in the

Context variables: **By PESTLE-anlysis** creating middle Veto criteria Critical success factors Governance network: Describes Output: Requires agreement critical succes factors on veto crietria Wicked problem of development

Figure 7: Altered 3 levels of success (Franzen, Hobma, Jonge, & Wigmans, 2011).

The process is broken up into three parts, transactional cost and duration, quality of the process, inclusiveness of process, democratic legitimacy and accountability. The transactional cost and duration are not just about being short in cheap as this can indicate that more would have been possible during the negotiation process were made too fast. Oppositely, if the duration and transaction costs are too high it can indicate that the process was not successful.

The quality of the process relates to the way parties find strategies that help with collaboration and negotiations or that negotiations stagnated, and parties were unable to come to an agreement. Therefore, the occurrences of dysfunction and stagnation indicate that actors were unable to find common ground or mutual interest. However, the occurrence of breakthroughs might indicate that actors have progressed or learned the complexities of the wicked problem. At last, the inclusiveness, democratic legitimacy and accountability are less interesting for this right corner through the governance network which in the production model is the activities. Lastly, the context variables, or context in the production model, is described by a PESTLE analysis at the top of the figure. Altogether the model is the measure against the wicked problem of a development. In this the land-use instrument are an outside source influencing the veto criteria and the critical success factors in the wicked problem of a development. The land-use instruments have been added in Figure 8 to show that these are chosen through the input and influence the activities and the output.

3.4. Conclusions assessing success

This chapter started with the question: *How can the success of land-use instruments as part of a passive land policy to create middle-segment housing be assessed?* This question is answered by the use of the production model of production by Dooren et al. (2015) and the 3 levels of success factors by Franzen et al. (2011) in which one level of success is further elaborated upon as a governance network in a wicked problem. The model of Dooren et al. (2015) has been adapted for the influences of land-use instruments in the creation of middle-segment housing (see Figure 8).

Usage of land-use instruments is assessed through the steps undergone in Figure 8. These steps use the objective to create a certain percentage of middle-segment housing in a neighbourhood. This percentage is the municipal starting point in the negotiations in addition to other municipal objectives from different departments, to form the wicked problem of a development together with different objectives of other involved actors. The wicked problem is then approached through negotiations between the involved actors. Herein, the land-use instruments available may influence the negotiations through regulation, stimulation and communication. These negotiations aim to lead to a development agreement which is acceptable to all actors involved with the development.

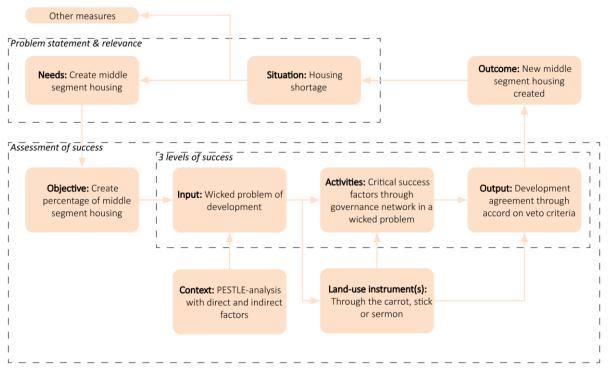


Figure 8: Adapted production model of performance by Dooren et al, (2015)

Furthermore, in Figure 8, the socio-economic situation is the housing shortage in the Netherlands. This then goes to the needs which is divided into creating middle-segment housing and other measures. The need continues to the objective which is the objective to create a certain amount or percentage of middle-segment housing on a project scale. This goes into the input which is the wicked problem of a development. Furthermore, it is determined what land-use instruments are used. These result in

negotiations in a network or activities in the original model. The negotiations, which are a governance network, and the then used land-use instruments will result in a development agreement or anterior agreement as an output. After this the development is executed a new middle-segment housing is created and the outcome has (positive) an effect on the housing shortage.

In the process from the objective of creating middle-segment housing until the development agreement, the governance network affects the use of the land-use instruments as different actors may require a different method. Therefore, the influence of negotiations on land-use instruments is checked by the use of the assessment criteria for the governance network process by Klijn and Koppenjan (2016) (see Table 6). With this, the critical factors during a development can be taken into account. The success of the land-use instruments is thus assessed through the original objective, the negotiations and the result. Additionally, the surrounding factors of a development are also taken into account as a part of the objective to know the difference between multiple cases.

At last, the success assessment of land-use instruments will be done by weighing the input and cost of the activities against the output. In addition, the objective of the municipality is taken into account to know how much the eventual development agreement differed from what was planned. With this, land-use instruments can be assessed on their success in developments. However, it is yet unclear what passive land-use instruments are and how they are used in the Dutch context and housing policy. Therefore, the next chapter will go into the passive land-use instruments in the Netherlands.

4. Middle-segment housing & land policy

This chapter answers the theory-based sub-questions asked to develop a framework for municipal land instruments that aim to create more middle-segment housing development. The sub-question is "What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?".

Section 4.1 describes the different land policies there and in section 4.1.1 the different policy instrument typologies that are available are given. After this, section 4.2 will first describe the types of instruments used by Dutch municipalities which are followed by a summary of what instruments (bigger) Dutch municipalities use. At last, the chapter ends by answering the second sub-question in section 4.3.

4.1. Dutch Land policies

Although interfering in the middle-segment housing and its policy instrument is relatively new, social housing has been part of the land policy for longer. Buitelaar (2010) describes the history of the Dutch housing policy from the post-WO2 period up to the late 2000s. Social housing was supported by the Dutch government and municipalities by a system called the 'golden triangle of housing provision. In this system, the central government provided housing subsidies, housing associations used these subsidies to lower expenses and municipalities provided cheaper land to housing corporations to further lower the price of social housing developments. By the 1980s and 1990s, a change in political power caused a shift to more liberal policies which resulted in a change from the public to the private sector. This resulted in a stop to social housing subsidies and a lowering of land prices for social housing. Also, the lowering of municipal landownership in combination with more brownfield development instead of greenfield developments caused higher land costs and smaller developments. This meant going from an active approach, in which municipalities initiated projects, owned the land and had the power, to a passive approach, where the municipalities acted on the market initiative, had low landownership and had to negotiate with local developers (Buitelaar, 2010). As a result of this, in 2020, 39 percent of the municipalities had a passive policy, 35 percent combined or uses both active and passive land policies and 24 percent uses active land policies (2 percent is unknown) (Leve & Geuting, 2021). Because of this, municipalities have to negotiate with market actors while having no or low land ownership positions and whose objectives differ from those of the municipality. At last, since 2008 new regulations have been introduced with which municipalities may enforce certain public cost recoveries.

Land policy goals are described by Van der Krabben and Jacobs (2013) as three objectives. Firstly, making land available for development by assembling land of different parties and making it ready for further development which can also be done without the government owning the land. Secondly, to recover costs of the necessary infrastructure and services. And thirdly, some see the capturing of unearned increment in the land value created when the land use of an area is changed. However, when the municipality has no landownership, it will affect these criteria by leaving land assembling to the private market and giving more difficult options for cost recovery and capturing unearned increments. Therefore, this sub-chapter finds literature on defining passive land policy options and their implementation through private agreements towards land-use instruments in the next sub-chapter.

4.1.1. Policy instruments

Governments may use different types of policy instruments and governmental power. This is theorised by giving typologies to policy instruments for which Bemelmans-Videc et al. (1998) are often used according to Hartmann and Hengstermann (2018). Bemelmans-Videc et al. (1998) use the carrot, stick and sermon as three typologies to define policy instruments. These three typologies of possible policy instruments treat with sanctions, frustrations, and force (stick), spend the funding of the state aimed at their interest (carrot), or give symbolic rewards for those acting in state interest (sermon).

	Type of Instrument
Classic authoritative interventions	Legislative and regulatory (stick)
	Fiscal and economic (carrot)
Less authoritative interventions (sermon)	Govern by contract
	Communication -and information-based
	De jure -and de facto-standards
Table 7. Intervention instrument Adaptation on // a	(a)

 Table 7: Intervention instrument. Adaptation on (Lascoumes & Gales, 2007).

This framework was expanded as shown in Table 7 by Lascoumes and Gales (2007) who first distinguish between classic intervention on a legal basis and less authoritative interventions through other means. Second, the classic route is split into two parts, being 'legislative and regulatory' which is similar to Bemelmans' stick and 'fiscal and economic' incentives which are similar to the carrot. After this, Bemelmans sermon remains the less authoritative intervention which is divided into three parts. This starts with the 'govern by contract' that is described as a framework of agreement where the state renounces its power. After that, the 'communication -and information-based' instruments are used as 'audience democracy' based on representation and explanation of decisions. At last, de jure -and de facto standards are given as instruments that organise power relationships between different private stakeholders involved with a project.

These typologies of the carrot, stick, and sermon correspond with the use of the public and private law instruments which are available to Dutch municipalities. Additionally, this is also coupled with the practice of urban development. Therefore, the next section will describe the practices of urban development with the usage of law and policy.

4.1.2. Typology and urban development policy

A Dutch municipality or government can use different methods of land policy. Therefore, two important distinctions can be made for developments in the setting of this thesis. Firstly, public or private landownership of the developed land is also called active (public land ownership) and passive (private land ownership). Secondly, governmental organisations may use public and private law instruments for redevelopments in which the public law is regulatory, and the private law is economic. This leads to Table 8 which gives four practices of urban development.

	Active land policy: municipality (co-) owns the pooled land at some point in the development process.	Passive land policy: municipality does not (co-) own all land at any point in the development process.
Changing land-use plan (public law) without negotiation over contracts with developers.	1. Traditional situation of full active land policy	2. 'Facilitating' land policy – public law cost recovery
Contracts (private law) signed between municipality and developers before changing land-use plan.	3. PPP (building claim model, joint venture model)	4. 'Facilitating' land policy – private law cost recovery

Table 8: 4 practices of urban development in the Netherlands (Hartmann & Hengstermann, 2018).

When public policies are used changes in the land-use plan are not negotiated with private parties, while if private law is used there will be negotiations with private actors and usage of private agreements with one or more private parties and developers (Gielen, 2014). The private agreements are part of the Dutch housing policy. These started with active land instruments wherein local Dutch municipalities used landownership to control developments (nr. 1) (Hartmann & Hengstermann, 2018). Later, after developers became the landowners instead of municipalities, Dutch municipalities started using passive land instruments in which they no longer influenced developments by landownership, but by

regulations, economic measures and communication. Within the passive approach, there are public and private paths. The more often used variant is the private passive approach (nr. 4) which has negotiations between the municipalities and private parties which, if successful, result in private agreements and a change in the land-use plan. The public passive approach (nr. 2) was first introduced in the 1990s as a measure against developers that did not contribute local infrastructure or postponed developments until the majority of an area was already developed. The policy that followed from this must be seen as a minimal variant which only covers cost out of necessity (public infrastructure, sewer, etc). Furthermore, if the negotiations by private law fail, a municipality can use public law to stipulate the development contributions for a private party by a site development plan (exploitatieplan) (Hobma & Jong, 2016). Additionally, land development (grondexploitatie) is regulated through the land development act and since 2008 the spatial planning act (wet ruimtelijke bepaling) gives more options for passive land policies (BBV, 2019). Although, it should be noted that both the municipality and the market party want to avoid this, as it is expensive to make a site development plan for the municipality and the market party has to abide by the resulting site development plan without the possibility of negotiating. Therefore, this study will focus on the passive land policy by means of private agreements (or often called the anterior agreement).

4.1.3. Creating private agreements

When a municipality and a developer negotiate to create a private agreement for a development, the municipality will base their objective on different policy documents. In case of middle-segment housing, a shortage will further be defined in smaller groups with specific housing types in the housing vision (*woonvisie*) which describes what a municipality wants with their existing housing stock and how it will be adapted. Additionally, a woonvise is the starting point for the performance agreements (*prestatieafspraken*) with the locally active housing association, developers and tenant organisations with the municipality. These agreements will indicate what the objectives different local actors are. From these objectives, the input for land-use instruments will follow.

When a passive land policy is used, both the municipality and market actors may initiate developments. As part of developments by the use of private law measures, market actors and municipalities need to come to an agreement on costs through an anterior agreement. When a developer makes it known they want to develop a project they may negotiate on the housing mix with the municipality until an agreement is reached on a site development plan. The site development plan then consists of the estimated revenue and costs set out in time (Hobma & Jong, 2016). The agreement will entail cost recovery for public infrastructure but can also include whatever goals the municipality has for the area or city. Negotiations towards an anterior agreement start before a land-use plan is adapted and before a land development plan is made.

When a passive land policy by private law contracts is aimed to be used by a municipality, there are multiple instruments possible to be used which use different kinds of governmental power of influence.

4.2. Instrument usage

This sub-chapter gives the legal foundations of Dutch land-use instrument and what is used by Dutch municipalities. The question asked for this is: *"What land-use instruments are used to create more middle-segment housing by Dutch municipalities and what legal constructions are used to influence how market actors by these instruments?"*. This is done by describing what land-use instruments are used and after this the instruments used per municipality are described. The chapter ends with a short conclusion.

4.2.1. Legal foundation of land-use instruments

This part describes the legal foundation of the land-use instrument described in the previous chapter. The land-use instruments are split into two groups of those who aim to create more middle-segment housing and those who aim to preserve the middle-segment housing after completion.

Regulatory: Minimal middle-segment rent percentages

The Dutch national government has changed the spatial planning decree to give municipalities a tool to demand middle-segment housing through a land-use plan (Ministerie VROM, 2021). Therefore, municipalities use the spatial planning decree (*Besluit Ruimtelijke Ordening (BRO)*) as a legal foundation to regulate middle segment rent developments. All of the seven municipalities use the same method as a legal foundation to develop minimal middle housing segment dwellings (see Table 9). However, some state the instrument is only used through the land-use plan by public law which seems to be an indicator that these percentages are only enforced when a municipality and an investor cannot agree on an anterior agreement. Three articles have been changed:

- Article 1.1.1, defines liberalised market segment dwelling for middle-segment rent (*geliberaliseerde woningen voor middenhuur*).
- Article 3.1.2, adds liberalised market segment dwellings for middle-income housing as a term that is allowed to be used for implementation purposes in land-use plans.
- Article 6.2.10, adds the same as for article 3.1.2, but for site development plans.

With these articles the middle-segment rent is first described and elaborated on the specific rent price. This article is also used in the preservation of the middle-segment rent. The other two articles give the possibility to use middle-segment rent in the land-use plan and the site development plan. with this, the municipality has a stick to regulate minimal amounts of middle-segment rent.

Regulatory: Eternal land lease

In some cases, land-lease can also be a passive tool. Eternal land lease (*eeuwige erfpacht*) may be used with the possibility to pay all future increments in advance. The legality of eternal land use is regulated by the civil code book 5 art. 85 (Hobma & Jong, 2016). This makes it possible for the municipality to stay the owner of the land while the lessee has the right to hold and use the property. After, a (first) period of use a user or developer may want to change the function of a plot. To do so, the developer must sign an agreement with the municipality to agree on the change of a function. Although the municipality has sold the land by eternal land lease it is legally arranged in a way that the municipality still has power over the plot through the land lease conditions (*erfpachtvoorwaarden*). Therefore, eternal land use is a passive regulative land-use instrument to create a better starting position in negotiations for a municipality.

Stimulus: Anterior agreement

For the fiscal typology municipalities may use an anterior agreement *(anterieure overeenkomst)* to negotiate requirements for middle-segment housing. If a new function is not in line with the existing land-use plan a municipality may use their power to change it to make certain demands. Through this a municipality may give certain advantages to a developer (lower the required amount of parking places for example) in return for specific municipal request on the development plan (minimal percentages of middle-segment housing) which is then stipulated in an anterior agreement. The anterior agreement is a much-used tool by Dutch municipalities (VNG, 2017). Additionally, anterior agreements may also be used to stipulate the preservation of middle-segment housing in the middle-segment through either self-residence requirements or prescribing a (yearly updated) minimal and maximal rent.

Communicational: Policy documents

A municipality can convey their vision for the amount of middle-segment rent to a developer by the use of multiple policy documents such as quotas, area plans or special action plans for middle-segment housing (*actieplan middenhuur*). These are part of the non-statutory policy documents which means that they have no direct legal power, but the municipality may show their vision on developments.

Without land ownership, this is a passive communicative land-use instrument to share what the municipality might want with a certain area. Furthermore, if the land-use plan of an area needs to be changed to a new possible function it will show what the municipality will aim to ascertain during negotiations. Although it is a non-statuary policy document, it may cause development proposals to be adapted before a municipality is approached (Hobma & Jong, 2016). Additionally, a municipality may make an area vision with possible quotas on a city, sector or neighbourhood level.

Ascertain middle-segment housing

There also is a need for regulation to keep middle-segment housing in the middle segment. With rent, this is relatively simple by placing an average range and allowing raise per year in the contract. However, it is more difficult with homeownership as it is more difficult to place a restrain in this. Therefore, there municipalities use the requirement of self-residence in the anterior agreements. Self-residence requirements or in Dutch 'Zelfwoonplicht' has the municipality regulate the buyer or renter of a house which is an instrument to ensure that dwellings will not be bought to be rented out after completion. For new housing, this may be regulated through private agreements which the government will make as part of the negotiated approach to developer-led redevelopments.

4.2.2. Existing use of land-use instruments

So far municipalities in the Netherlands use different methods to realise more middle-segment rent. To summarise land-use instruments for middle-segment housing used in Dutch municipalities, the instruments used for this effort in Dutch municipalities with more than 100,000 dwellings are analysed. The instrument used are summarised in Table 9 below and is concluded upon in section 4.3. Herein, the numbers per city are the used instruments which will be further elaborated upon below.

			<u>Regulatory</u>	<u>Fiscal</u>	Communication
City	Dwellings	Minimal percentages	Eternal land lease	Private/ anterior agreement	Quotas or area vision
Amsterdam	447,340		2	3	4
Rotterdam	315,361	(1)	2	3	4
The Hague	262,492	1	2	3	4
Utrecht	156,678		2	3	4
Groningen	116,448			3	4
Eindhoven	112,964			3	4
Tilburg	100,418			3	4

Table 9: Instruments used. Source for the number of dwellings CBS (2021).

*= Although the self-residence requirement may only be used since the 1st of January 2022 all seven municipalities aim to use it (Eerenbeemt, Uffelen, & Albers, 2021).

Amsterdam

Starting with the regulatory typologies, Amsterdam dictates percentages of middle-segment housing through its active housing policy with vast amounts of land lease in the city. The municipality of Amsterdam uses eternal land lease (*eeuwige erfpacht*) in the regulatory typology (Gemeente Amsterdam, 2020b). Although most municipalities use eternal land use, the municipality of Amsterdam has far more land ownership through land lease than the other municipalities on the list. Whenever there is a development, the municipality will only greenlight the development if it is in accordance with its policy. This means the municipality strives to develop in accordance with the 40-40-20-policy (and any other required conditions). This means, there is 40 percent social housing 40 percent middle-segment and 20 percent higher segment (Gemeente Amsterdam, 2017b).

For fiscal instruments, the municipality of Amsterdam uses anterior agreements. In the communication typology, the municipality of Amsterdam uses non-statutory documents to communicate to market

parties what their objective is for certain areas and of the city altogether. Additionally, the municipality uses an investeringsnota (*investment note*) which describes the vision of the municipality for a redevelopment area. Although it is not a statutory document, the municipality uses its available land-use instrument to implement the urban planning in the investment note.

In preserving the middle-segment housing, the municipality uses the requirement of self-residence and anti-buy to let regulation. Which are used by the municipality of Amsterdam to keep middle-segment housing in the segment and to lower speculation on newly developed housing. Additionally, it is also possible to state a period in which the housing must remain in the middle-segment in an anterior/private agreement. This would make it part of the fiscal typology as the private agreement will mean some financial incentives for the developing party (Gemeente Amsterdam, 2017b).

Rotterdam

The municipality of Rotterdam also uses multiple instruments to influence the middle housing segment. Starting with minimal percentages of middle-segment housing stipulated by regulations. However, the minimal percentages are not yet used in an area or plot. So far, the municipality is waiting for an area in which their goals for affordable housing are not met in developments. This is done through *'doelgroepenverordening'* and the spatial planning decree. Likewise, the doelgroepenverordening is only aimed at selected neighbourhoods. However, the municipality of Rotterdam only uses this through public law and tries to use (private) anterior, -land allotment -and land lease agreements. Furthermore, land lease is also used, but much less due to lower landownership of the municipality (Gemeente Rotterdam, 2019). In the fiscal typology, Rotterdam uses as described above the anterior agreement to influence developments. Within the communication typology Rotterdam also uses non-statutory documents.

In the preservation of middle-segment housing, the municipality of Rotterdam is using both the selfresidence requirement and the anti-buy-to let regulation (Gemeente Rotterdam, 2021). Furthermore, by the use of private agreements Rotterdam also prescribes how long housing must stay in the middlesegment.

The Hague

The municipality of The Hague uses the Dutch spatial planning decree (*Besluit Ruimtelijke Ordening* (*BRO*) it then uses this together with the 'doelgroepenverordening' (translates roughly to target-group ordinance) certain parts of the city are selected in which the minimal percentages of middle-segment are enforced. However, it has only been used in one area so far and the municipality only aims to use it on one other area in the near future.

The minimal percentages of middle-segment housing in new developments with which the municipality of The Hague aims to create 20 percent middle-segment housing (besides 30 percent social housing) (Gemeente Den Haag, 2020). Similar to Rotterdam, the municipality of The Hague also influences the development of middle-segment housing that uses eternal land-lease but also does not own a large portion of the land in the municipality. Furthermore, The Hague also uses anterior agreements to influence developments through fiscal means. At last, in the communicational part, the municipality also uses non-statutory documents such as a housing vision (*woonvisie*) (Gemeente Den Haag, 2021).

Later on, in this thesis, only an area in the Binckhorst is used as this is the only place found where regulatory percentages of middle-segment housing are used. This is done in the Binckhorst area as a pilot for new regulations called the 'crisis- en herstelwet'. Through this, the municipality has made a plan in which developments are only checked through public law. When the plan is in agreement with this check a building permit is given.

Utrecht

The municipality of Utrecht uses no regulatory minimal percentages for middle-segment housing. However, the municipality is working on this. Additionally, Utrecht also aims to use (eternal) land lease to regulate certain amounts of middle-segment housing. After this, for the use of fiscal instruments, the municipality uses anterior agreements to stimulate the creation of middle-segment housing. At last, communicational methods are used such as the housing vision which includes performance agreements (*prestatieafspraken*) and was earlier in using the actieplan middenhuur (*action plan middle-segment rent*) (Gemeente Utrecht, 2017, 2019).

In preserving the realised middle-segment housing the municipality goes about requiring self-residence, does not have anti-buy-to let regulation yet and lastly does use private agreements to preserve middle-segment housing in its segment.

Groningen

The municipality of Groningen aims to use the minimum percentages of middle-segment housing through regulatory land-use instruments. However, it is uncertain whether the municipality has already selected neighbourhoods or whether is the only addition to the local regulations (Gemeente Groningen, 2020a). Furthermore, in its housing vision, the municipality described possible future use of land lease as an instrument but has yet to take action here (Gemeente Groningen, 2020b). In the other two fields, the municipality uses both anterior agreements whenever possible and uses a housing vision to convey their objectives per city district.

In preserving the middle-segment housing the municipality of Groningen uses the requirement of selfresidence but does not regulate buy-to-let yet. At last, anterior agreements are also used to stimulate middle-segment preservation.

Eindhoven

Eindhoven uses minimal percentages of middle-segment housing through public law to regulate certain percentages of middle-segment housing in selected areas. However, there is no use of land lease to promote middle-segment housing by the municipality. Furthermore, in the typologies of fiscal and communication the municipality uses anterior agreements and the standard housing vision and performance agreements to promote middle-segment housing (Gemeente Eindhoven, 2020).

Middle-segment housing is preserved by requiring self-residence in a certain part of the city and using anterior agreements to keep middle-segment rent in the middle-segment (Gemeente Eindhoven, 2020).

Tilburg

Tilburg uses the doelgroepenverordening to regulate a minimal amount of middle-segment rent through the public law route with at least 10 percent middle-segment rent (and 20 percent social housing). It has no use of land lease for the middle segment. Financial incentives are given through anterior agreement to stimulate the creation of more middle-segment housing and also communicational means are used like in the other municipalities. The preservation of the developed middle-segment housing is again through the self-residence requirements and may be stipulated in an anterior agreement.

4.3. Conclusion housing & land policy

The sub-question asked for in chapter was: *What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?*

The role of the municipality in housing provision has changed over the years and has been adapted to give municipalities influence over developments where municipal land ownership is low or zero. Since 2008, a municipality may enforce certain amounts of social housing when it has no land ownership and

as of recently (2017) middle-segment housing has also gotten this option. Therefore, it can be stated that restrictions on passive land policies exist, but they have been lowered as an adjustment to the new economic/land ownership circumstances for Dutch municipalities.

When the land-use instruments are categorised in policy instruments. Policy instruments differentiate instruments between the carrot, stick and sermon. These typologies can be coupled with regulations, fiscal instruments and the expansion of communications. Additionally, in negotiations for developments both municipalities and market parties aim to use private agreements and avoid using the route by public law. Therefore, if the municipality does not have landownership the passive private approach is used.

The last part of the chapter sought to find what instruments there are when a passive housing policy is used. This is done by a short analysis of the instruments used in Dutch cities with more than 100,000 dwellings. The result of this analysis is shown in Table 9. All municipalities use the anterior agreements, communicate through housing or area vision, and aim to use regulation against buy-to-let. However, the other instruments are differently used by municipalities. Starting with minimal percentages of middle-segment housing for which about half the municipalities state they only use it with public law. This would mean that otherwise minimal percentages are part of an anterior agreement. The reason for this lies most likely in the strain this regulation puts in the property right. Furthermore, land lease is only used by the biggest four cities to create more middle-segment housing. However, Groningen does speak about the option to use it in their housing vision. At last, buy-to-let regulation is only used in the four biggest cities so far. Although again this can also be fiscally arranged through an anterior agreement.

Also, other instruments have been found. In the regulatory framework, eternal land lease can be used as tool to create more municipal influence. This is more useful for a municipality as they do not have to cooperate with a change in a land lease agreement, while the municipality has to somewhat cooperate in a permit procedure if it is in alignment with municipal policies for the area. Furthermore, in the stimulus typology the municipality can use the anterior agreement to negotiate on a development which is agreeable to both the developer and the municipality (or other parties involved). At last, in the communicational typology a municipality can convey their requests to the market by means of policy documents.

In the further understanding of the performance of passive land-use instruments, it is necessary to elaborate on instruments used by municipalities in practice. Therefore, the next chapter describes the land policy in case municipalities and see how this is brought to implementation in an example project. This is started by the municipality of Amsterdam which was first analysed (and used as a test case). After this, the municipality of Rotterdam and Utrecht are described is described and at last, the municipality of The Hague is described.

5. Amsterdam

This chapter describes the case of Amsterdam and with this a development project is used as example of the execution of the middle-segment housing policy of Amsterdam. This is the first chapter committed to answering the third sub-question: 'How are these instruments used and is success influenced?'

This chapter describes the organisation of Amsterdam with its housing policy, the context of the case, the objectives for the case, the negotiations for the case, the eventual development agreement, the usage of land-use instruments and at last gives a conclusion on the use of the passive land policy for middle-segment housing by the municipality of Amsterdam.

5.1. Municipal organisation and housing

In doing the empirical research it is necessary to first do a test case to further sharpen the interview questions and understand what information is needed. This is done in a case in Amsterdam as this municipality has less experience with the use of passive land policies and land-use instrument usage with no or low municipal landownership. In this sub-chapter, the organisation of the municipality is shortly described giving an overall look. This is a quick overview of the municipality which shows what departments are involved with the project. This, as all case municipalities are large organisations (4,000-18,000 employees) for which there is no need to be described in detail.

5.1.1. Organisation of the municipality

The municipality of Amsterdam is divided into multiple departments as shown in Figure 9. Of these departments, the department of Ruimte en Economie (Space and Economy) is most involved with urban developments.

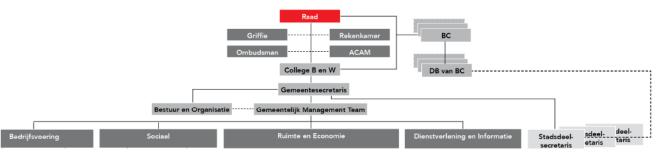


Figure 9: Departments municipality of Amsterdam (Maaskant, 2016).

The department of space and economy is divided into multiple sections as shown in Figure 10. Multiple of these sections are involved with urban developments and the municipal requirements in an area depend on agreements between these groups. The groups involved in the development are:

- Wonen (housing)
- Economie (economy)
- Projectmanagement
- Grond & ontwikkeling (land & developments)
- Ruimte & duurzaamheid (space & sustainability)
- Verkeer & openbare ruimte (traffic & public space).
- In addition, the bedrijfsuitvoering department gives support to the legal and financial aspects of the redevelopment.

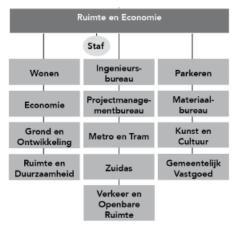


Figure 10: Groups within the Space and economy department (Maaskant, 2016).

5.1.2. Housing

The municipality of Amsterdam is the Dutch capital and the city with the most residents in the Netherlands and had 417,096 houses within the municipal borders in 2015 divided into segments as shown in Figure 11 (Gemeente Amsterdam, 2017b). This shows that more than half of the housing in Amsterdam is social housing, while another quarter is divided into middle and higher homeownership and the last 15 percent is the middle and higher segments rent and the lower income homeownership. Furthermore, the Municipality of Amsterdam aims to build 30,000 dwellings in the period from 2022 to 2025 with an average of 7,500 dwellings per year. Respectively to this, in 2021, the construction of 7,410 dwellings started (NUL20, 2022).

In this period, the middle-segment tenure is expected to grow from 6 in 2015 percent to 9 percent in 2025 bringing it more to the expected demand of 11 per cent. However, middlesegment housing is also used by tenants from the higher income groups which lowers the availability of middle-segment rent for the middle-income groups. Therefore, the municipality of Amsterdam aims to build at least 1,500 middle-segment rent dwellings per year from 2017 and up to 2025. The municipality aims to do this through both active and passive land policies. When the passive policy is used middlesegment housing may be enforced by minimal percentages as part of the public law as well as by an anterior agreement in private law or in some cases the market will supply a project with more than a required number of middle-segment dwellings. The municipality of Amsterdam defines middle segment as above €763,45 per month and up to €1068,83 per month (Gemeente Amsterdam, 2020a).

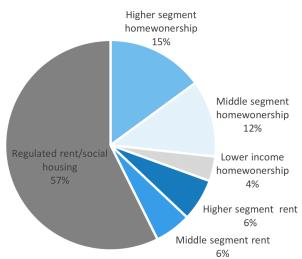


Figure 11: Housing types in Amsterdam (Gemeente Amsterdam, 2017).

5.2. Land policy and instruments

Already described in section 4.2.2 this section will elaborate on the policy and instruments used in Amsterdam in the case. The land policy used in the municipality of Amsterdam has been mostly unchanged since 1896 in that it is the most active land policy. This policy is to only buy land and lease this out for set periods while almost no land is sold to other parties. In recent years this policy has slightly changed so that the municipality now also leases out the land for an eternal period instead of only doing so for set periods. Additionally, the policy of municipal land ownership has caused a heavy focus on active land policy in Amsterdam, while very few passive land-use instruments are used. This can for example also be seen in the project area, where the municipality used pre-emptive rights on all plots in the redeveloped area and only after this used passive instruments for the plots that would not come into their possession.

Because of the high landownership, the municipality of Amsterdam does not need to use the public law minimal percentages, as they can use land-lease to enforce housing to be built in the ratio of 40, 40, and 20. This means, that at least 40 percent of middle-segment housing is in the new development agreement if it is municipal land. This causes a land policy in which the municipality is well covered unless it does not have land ownership. However, if the municipality does not have landownership, it may find it difficult to develop according to the required percentages.

Although, there are exceptions in case of renovations or if less than 30 dwellings are developed. Also, projects of more than 800 dwellings have to realize both rent and homeownership dwellings while below this only has to make for rent dwellings in the middle segment. At last, these percentages are an objective in area developments and some plots can be only social housing while others are only more expensive housing

In private law, the municipality of Amsterdam uses eternal land lease and mostly anterior agreements. The eternal land lease may be used to enforce a certain amount of middle-segment housing in case of redevelopments but does not seem to be used this way. The anterior agreements are the outcome of negotiations between the key actors involved. In exchange for financial incentives and a change in the land-use plan a developer will often choose to make less profitable or public functions as not cooperating with the municipality gives more uncertainty. This is also the most used land-use instrument and preferred above public law instruments. However, with 80 percent social -and middle-segment housing, the municipality of Amsterdam requires the creation of more affordable housing than Rotterdam with 50 percent by means of public law.

5.3. Project 1 Amsterdam

The neighborhood in which the project will be constructed is part of a district in the municipality of Amsterdam, not being the city center. In addition, Figure 9 shows there are also stadsdeelsecretarissen per district of the city who are involved with the implementation of policies. The district has about 15 percent of the housing stock in Amsterdam. Furthermore, the project has been also bought by an institutional investor which goes simultaneous with a rise of institutional investor ownership in Amsterdam (Kranenborg & Damen, 2021).

5.3.1. Development project 1

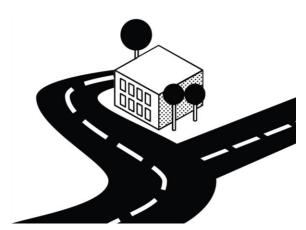
The redevelopment of the neighbourhood aims to create 2000 dwellings according to the 40-40-20policy in the area. The design was influenced by local residents in a citizen group. Currently, the area is used for small industry which is difficult to be relocated. Therefore, most of the stores there cannot disappear and will decrease in size within the neighbourhood. Because of this, most developments will create commercial space on the plinth/ ground floor above which housing is created.

For the middle segment, the municipality aims at the creation of 2 or 3-room apartments with both rent and homeownership. This is coupled with an average rent and a minimum size of the housing to avoid developments of small apartments in the middle-segment which are (for example) too small for a family to live in. The for-rent housing in middle-segment is required to stay in the middle-segment for at least 25 years with the possibility of higher rent by the CPI + 1% for the first 20 years and in the 21st to 25th years the rent for new tenants is unregulated (Gemeente Amsterdam, 2020a). Furthermore, the middlesegment homeownership must have a sales price below the National mortgage guarantee and must be at least a certain amount of GBO's. Additionally, there is a self-residence-requirement (Gemeente Amsterdam, 2017a, 2022a).

The housing supply in this area has been low in general. However, the housing supply has started to steeply increase in the past years. Furthermore, the amount of social housing in the area can be neglected. Additionally, the average housing value (WOZ-waarde) in the area has tripled since more housing started to be built here in the five years. This increase seems to be simultaneous with the expansion of the housing stock in the area which is caused by the transformation of the area from an industrial area to a residential area (Gemeente Amsterdam, 2022a).

For the analysed project in Amsterdam, the lot has partial private landownership and partial municipal landownership and on which middle-segment housing is created. This situation has been sketched in Figure 12 to show to private owned land under the existing building and the public owned land around this. Additionally, as the building is the first development in the area and a key building in the future area, the municipality found it important that the development would be in alignment with their most important policy, namely the 40-40-20-policy. Negotiations between the municipality and the developer have led to an anterior agreement and Figure 12: Sketch Project 1 Amsterdam old situation.

the municipality will rent a part of the building for



a public service. However, the main function of the building will be for about 150 dwellings which are created in line with the 40-40-20 policy of the municipality. Furthermore, the plinth will be used for retail and a public function. The developer has sold the building to a long-term institutional real estate investment fund (Gemeente Amsterdam, 2022a).

5.3.2. Timeline

Through interviews with civil servants involved with the project, a rough timeline has been set up. The redevelopment of the neighbourhood went public in 2016 by placing pre-emptive rights on plots in the area through the municipal executive (college van B&W) which was approved by the municipal council in 2017. The municipality did not aim to buy all plots. However, the pre-emptive rights were used as an anti-speculative measure to ensure the land price in the area would not rise by speculative parties. Therefore, the municipality either bought the plots or let them be sold to a buyer that would develop in accordance with the municipal plan of the area. Additionally, almost all plots in the area were owned by parties (in land lease) that could not self-develop their plot except for a couple of plots, one of which was a part of the plot into the project area which had been bought by the developer before the preemptive right was used.

A consequence of using the pre-emptive right is that the municipality has to make a development plan for the pre-empted plot within a certain period or else the municipality loses both the pre-emptive right and the option to recover the cost from a future development. However, it is not necessary to make a development plan if an agreement is reached to develop on the land. If so, the anterior agreement and building plans can be used as a development plan. After the pre-emptive rights were guaranteed, it took about a year until negotiations with the developer started. Thereafter, eventually, the negotiations between the municipality and the developer started in 2018 and ended in 2021 and took about two and a half years. These negotiations started with defining the plan and ended with an anterior agreement and a building permit with an adaptation to the land-use plan.

5.3.3. Negotiations

The negotiations of the cases were in a flat hierarchy, mainly between the municipality and the developer which depended on each other to make an agreement in a governance network. Through personal communication (2022) with two civil servants from Amsterdam heavily involved with the project, a description of the negotiations can be made. Starting with the involved parties as shown in Table 10. The most prominently involved parties were the municipal project manager, land & development, and the developers. Furthermore, the district secretary would also be involved through agreements with whatever was decided upon in the negotiations with the developer and in some cases, decision also needed to be greenlighted by the municipal executive. In addition to these parties directly involved with the project, there were also several advisors involved when required. These were for example appraisers or lawyers who would be hired by the municipality or the developer. As the municipality of Amsterdam did not have full land ownership but still wanted to create social-and middle-segment housing they needed some means to create influence. As stated by interviewee A:

So we said, you can't just build on your own piece [of land], it has to be on our land too. And so, you need us to buy land. We'll work with you on that, but we'll have to go to the college [of B&W].

The municipality did this through the plot structure in the urban development plan in which the private land was only a part of a plot (and was partially on a future road). By public law, it is possible to force a party to develop in accordance with the plot structure as a part of the land-use plan. Therefore, the developer was pressured to negotiate with the municipality on the development.

Public groups	Private groups	Interest groups
Municipality of Amsterdam	Developer	-
Space and Economy	Investor	
Housing	Architect	
Economy	Other advisors	
Project management		
Land & development		
Space & sustainability		
Stadsdeelsecretaris		

Table 10: Actors involved with Amsterdam project (Author).

To describe the negotiations of the project, the content, process, and network of Klijn and Koppenjan (2016) are used to elaborate on the negotiations in a governance network. Therefore, Table 11 is filled in to describe and assess the governance network and the influences the instrument had or did not have on the negotiations and the eventual development. This starts with the content by joint image building and goal intertwinement.

From these, goal intertwinement was important in the negotiations. The post-satisfaction of the project is positive, although the negotiations were difficult the result is that the key building in the area is in agreement with the urban plan for the area. However, within the content field, the different objectives of both parties led to prolonged negotiations. The developer was most interested in profit as a private party, while the municipality aimed at creating public value through the redevelopment. This resulted in different perspectives from the developer and the municipality on creating a both financially and politically feasible project.

Moreover, the win-win situations described by Klijn and Koppenjan (2016) seemed to aim more at creating an agreeable solution. Through the negotiations, it was learned what was acceptable enough to agree with a certain part. Also, in some cases, the parties would demand requirements in the negotiations which they knew were unattainable or heavily opposed by the other party. This was mostly used if the other party had no other option than to agree or see the project fail. As stated in by interviewee A:

Yes, it is a cheap negotiating trick. You have to wait until the other person is against the wall and then hit them. They do that too, you know. That is just the game.

An example of this is the placement of the public function on the lot. The municipality brought the function later to the project, as it was replaced by a different lot to the disapproval of the developer who saw the addition of a staying place for homeless as unpleasant and probably risky. However, the developer eventually agreed to this by pushing it long enough by the municipality. Additionally, they now see it as a low-risk investment which will be hired by the municipality for the coming 30 years.

However, there were also issues in which both parties took a loss. An example of this is that a total of 80 percent of the housing in the development will be affordable. This was not an issue as the developer uses a concept with small studios with which they make social -and middle-segment housing profitable. However, the sizes of these are lower than the municipality prescribed in its urban-investment plan. In this case, the municipality allows housing smaller than prescribed in return for 40 percent social housing and 40 percent middle-segment housing.

In the process field, it can first be stated that the negotiations took the maximum amount of time possible and were finished only at the last minute. However, the agreement was reached as both parties preferred this over a development plan. Additionally, the transaction costs were thus extended by a development plan made in case the negotiations failed. After this, on the subject of quality of the process, when asked about how the negotiations have been experienced the answer was that they were particularly unpleasant. This was due to a disagreement in the working method between the negotiators on the municipal side and on the developing side. An example given by an interviewee is that during the negotiations the developing side used different consultancy agencies than the municipality and weighted the advice of their above that of the municipality.

On the topic of inclusiveness of the process, democratic legitimacy, and accountability, it is interesting that, according to the interviewee, when the development agreement was internally checked it was asked whether the financial compensation for the middle-segment housing was in agreement with the municipal policies. However, as this decision was checked with the municipal executive it was no further issue. The interviewee also stated that the municipality in some issues during the negotiations gave in financial incentives just so the project would be built quickly/first as this would kickstart developments in the area. In this, the municipality seems to have been successful as the execution of the project is more than a year ahead of any other developments in the area.

Content		
Joint image building	Different negotiation methods were used depending on the issue and the perceived willingness of the other party to agree with this.	
Goal intertwinement (win–win situations)	Used in negotiations by finding agreeable solutions for different issues in the project. This led to a solution in which both parties gained and lots some objectives	
Process		
Transaction costs and duration	The negotiations required the maximum amount of time and even an (expensive) development plan was made in case the negotiations would fail. However, without this, the same agreement would not have been possible.	
Quality of the process	The process was strained as the municipality and developer had very different goals in the project which often collided during the negotiations.	
Inclusiveness of process, democratic legitimacy, and accountability	During the negotiations, the conditions of the final agreement were checked by a higher municipal servant which was important for accountability after the project	
Network		
The development of relationships, shared perceptions, institutional rules, and a high level of trust	During the negotiations, the reports of the meetings were used as to be trusted documents, while verbal agreements were less trusted.	
Internal and external support for the network (resilience and reliability)	The process was characterised by disagreement not only between the developer and the municipality but also between the different municipal departments.	

Assessment governance network

Table 11: Governance network influence project A

In the network of the negotiations, the municipal negotiators played a role in two networks: the governance network between public and private parties and the governance network between the different municipal departments. According to the interviewee, the policy network required (at times) more effort than the governance network as the sale of land caused was against the municipal paradigm of land ownership.

From the table it can be concluded that although the development had a difficult process and the network was not great either, the building is being built in agreement with the most important rule of Amsterdam's municipal development policy, namely the 40-40-20-policy.

5.3.4. Development agreement

The input for the project in Amsterdam is the aim to create forty percent middle-segment housing in the neighbourhood. As earlier stated, negotiations between the municipality and the developer have led to an anterior agreement in which the functions of the development are stipulated. These are, that the dwellings created will be following the 40-40-20policy, there will be a function with a public service (which is rented by the municipality for the next 30 years), and some retail space on the ground floor. The adaptation of the area is shown in Figure 13 with the replacement of the old building with a building that is both bigger in ground area as in height. Because of this, both a change in land-use as in landownership is needed in this project which has given the municipality influence in this project.



Figure 13: Sketch project 1 Amsterdam new situation.

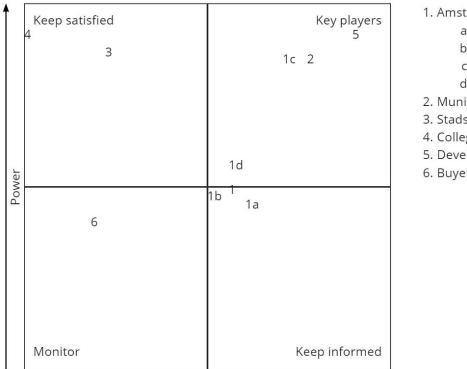
The adapted performance model can be filled in as shown in Figure 15 to assess success. The objective of the municipality of Amsterdam was to develop following the 40-40-20-policy and a lot more objectives from each department. In the middle-segment objective(s), the municipality was successful in the output by signing a development agreement with forty percent middle-segment housing (and forty percent social housing). However, the municipality did not manage to implement all their middle-segment housing demands in the project. Most notably is that the new dwellings in both the social -and middle segments will become smaller than stated in the investment note.

The land-use instruments mostly used were financial incentives and regulatory public law pressure. Additionally, the municipality of Amsterdam communicates the 40-40-20-policy to the market as a requirement. However, the communicational means were much less used in the development as the land-use plan was made during the negotiations.

5.3.5. Influence on the development

The actors have been placed in a power interest matrix through the information gained in the analysis (see Figure 14) to better understand how actors were influenced in the governance network to create middle-segment housing. From Figure 14 it can be learned the key actors during the negotiations were the municipal project manager, the municipal land & development department, and the developer. Furthermore, the stadsdeelsecretaris and the municipal executive (college B&W) are to be kept satisfied by following the set predetermined requirements. The three remaining municipal actors (housing,

economy and space & sustainability) are placed on the edge of key players and to be kept informed as they had an important role within the municipality but not in the negotiations. This meant that they influenced the municipal objectives but not the negotiations themselves. In the left bottom to be monitored party is the future owner/ buyer who only got involved with the project in the ending stages of the negotiations. Therefore, most decisions were already made and neither of the interviewees stated this party had much influence in the negotiations.



1. Amsterdam Space and economy

a. Housing

b. Economy

- c. Land & development
- d. Space & sustainability

2. Municipal project manager

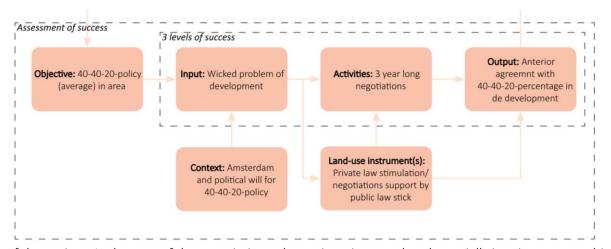
- 3. Stadsdeelsecretaris
- 4. College B&W
- 5. Developer
- 6. Buyer

Figure 14: Power interest matrix Amsterdam project

5.3.6. Instrument usage assessment

The success assessment of the case is made in Figure 15. Therefore, the original objective and input are weighted against the output while the other factors are taken into account. The agreement and the output are important as these are part of the cost of the instrument used. So far, in this chapter the case municipality and the used project have been described, the negotiation process and the reached agreement versus the needed input. Therefore, document analyses and interviews have been used for the framework of the three levels of success by Franzen et al. (2011).

The developer, the municipal project manager and the municipal representative of the land & development department were the three key actors in the negotiations for the development agreement



of the project. At the start of the negotiations, the project site was already partially in private ownership which had been bought by the developer. Although, due to the plan prescribed in the area vision the private land had to be combined with municipal land for development. Because of this, the municipality had public law influence over the to be developed building during the negotiations by using landownership as a tool. In addition, the land-use plan was used to make it difficult for the developer to not cooperate with the municipality.

With landownership as a tool to create influence, the municipality aimed to create a development in alignment with the (relatively heavy) requirements from policy documents. The most demanding requirements in the negotiations were the 40-40-20-policy, the near zero energy requirement for the building and the public function. To make this possible the municipality uses an anterior agreement with fiscal incentives to make the project financially feasible for the developer. Additionally, the municipality was also supported by partial landownership (sale) and public law. Moreover, the development needed municipal land to get a building permit. However, the stick of the public law was only used to get the developer around a table in this project, as the municipality and the developer managed to sign an anterior agreement together.

In terms of regulatory public law and fiscal private law, the municipality used the urban plan and plot borders as a public law regulation. However, the eventual agreement on the development is an anterior agreement in private law. In this, the cost of extra requirements has been calculated through the anterior agreement. Additionally, the negotiations can be seen as a less authoritative intervention by the municipality's financial incentive. Within the municipality of Amsterdam, this project can be seen as the first type of project in which this method was used, and the exact method is not described in the policy documents. However, the result of the negotiations is mostly in line with future developments.

It can be seen that the effort made has caused the creation of middle-segment housing as required by various policy documents. However, the costs of this were the sale of land (a rarity in the municipality of Amsterdam), some downgrades from the middle-segment housing described in the municipal investment plan and unpleasant negotiations for about 3 years.

In reference to other projects in Amsterdam, this project was a rarity due to low landownership and the sale of municipal land. It was also stated that this project will become the key building in the area and the first development in the area. Therefore, it was important for the municipality of Amsterdam that this building would become attractive for the area, but also set an example for other developments in the area. In this, the symbolic value of the building, the implemented 40-40-20-policy, and the public

function(s) should be seen as added value besides the financial losses. Additionally, the municipality aims to use similar methods in other areas where they have low or no land ownership.

5.4. Conclusion

This chapter is the first described case study with the purpose to answer: 'How are these instruments used and is success influenced?'. This chapter answers this for the first case municipality, Amsterdam, by the use of a project as an example of how Amsterdam's passive land policy is implemented. As the general norm in Amsterdam is the use of active land policies the usage of passive land-use instruments is outside the standard land policy. However, in the project analysed the developer had partial landownership and thus passive land use instruments had to be used. The project is now described in the three levels of success in developments.

Within the three levels of success, the context was important as the area is being redeveloped which meant that the municipality was active in the area and keen to start developments. In the political field, the municipal council finds the 40-40-20-policy important and is willing to spend funds and lower other demands for middle-segment housing.

The influence of critical success factors is assessed by the governance network. The governance networks influenced the process through a low trust between the municipality and the developer who formed the governance network in the negotiations. Low trust and different objectives caused longer negotiations which among others led to the creation of an (expensive) development plan by the municipality. Additionally, it was also made clear to the developer that the development plan existed to make clear what would happen if the negotiations would fail. With this, a land-use instrument influenced the negotiations and helped create success with a more unwilling market party.

In the level of veto criteria, being the financial feasibility, land acquisition and, in addition, gaining necessary permits. The municipality influenced these throughout the negotiations. Land acquisition was done by selling municipal land and to the developer when they refused to sell their land to the municipality (as expected). Throughout the negotiations, municipal landownership was used as a method of influence to reach municipal objectives. Additionally, the financial feasibility was also supported by the municipality both in contributions and by lowering the requirements for middle-segment housing.

In addition to the first two veto criteria from the literature, gaining the necessary permits should also be added as a veto criterion as it was made clear in multiple interviews that this was essential for a developer in a development project. this also includes needed adaptation in land-lease agreements and conditions that have been put on the land by a municipality. In Project A necessary permits were given after the development agreement was signed. This was a change in the land-use plan to allow the new functions and the height of the building. Additionally, also a building permit was given but this was not named as an issue.

In the implementation of the passive land policy, the municipality used a combination of regulatory public law and fiscal private law. First, the municipality used a public law, land-use instrument to make it very unattractive not to cooperate with the municipality. After this, the municipality used an, private law, anterior agreement to come to an agreement on the redevelopment of the plot. During the negotiations, the municipality used the sale of land and financial incentives to make the project a viable financial investment for the developer. Therefore, the combination of instruments used influenced the project by creating an agreement through negotiations and financial support. Furthermore, it is interesting that it was possible to create middle-segment housing without regulation that directly enforces it. Instead of this, the municipality used the context of the project to create influence over the development.

6. Rotterdam

This chapter continuous on answering the third sub-question: 'How are these instruments used and is success influenced?'. Therefore, the municipality of Rotterdam is taken as a case and two project are used to describe the use/implementation of land-use instruments in the case. This is done by first describing the municipality of Rotterdam and its passive housing policy in general after this the two cases are described within the framework of the adapted production model of performance. At last, a conclusion if given on the implementation of the passive housing policy for middle-segment housing in Rotterdam, answering the main question.

6.1. Municipal organisation and housing

Unlike the municipality of Amsterdam, the municipality of Rotterdam has (relatively) few landownership positions in the municipality. As so, Rotterdam has a longer history of passive land policies than Amsterdam and thus also has a described policy on this. This sub-chapter will now elaborate on the broader context of the projects.

6.1.1. Organisation of the municipality

The municipality of Rotterdam is organized in multiple departments under the municipal council (see Figure 16). The department involved with housing developments is the city development (*stadsontwikkeling*) department. Similarly, to Amsterdam, Rotterdam also has districts with a commissioner that is involved with the implementation of policies made by the departments (Gemeente Rotterdam, 2022b).

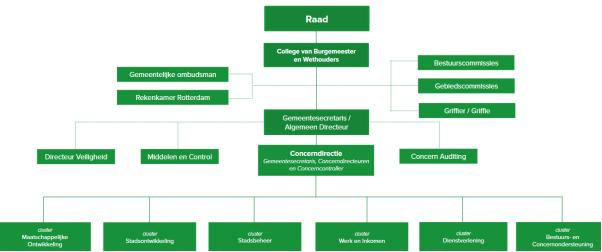


Figure 16: organizational chart municipality of Rotterdam

The department of urban development is split up into three parts (see Figure 17), the spatial economic development (Ruimtelijke Economische Ontwikkeling), urban planning and project management (Stedelijke Onwikkeling) and engineering (Projectmanagement en Engineering). From these, the urban planning department is responsible for the municipal economic affairs in the city. Furthermore, the urban planning section is responsible for the municipal land positions and thus has the municipal land company in its portfolio. In addition, urban planning also had housing in its portfolio that is responsible for, among others, the policy for different types/segments of housing. At last, project management is involved in the negotiations on most projects





6.1.2. Housing

The municipality of Rotterdam is the second biggest in the Netherlands on account of population and housing. With about 311,324 dwellings in 2015 which has since grown to about 317,945 in 2021. This stock is divided in 44 percent social housing 21 percent rent above the social housing limit and 35 percent homeownership (see Figure 18).

The housing stock is aimed to be expanded by 16.000 dwellings. This is shaped by the development of 36,000 dwellings in the middle and higher segments (rent and homeownership) by 2030. The municipality expects these dwellings to be added by new construction, transformations, and rent to be more in line with the market. However, due to a large number of to be demolished social housing (20,000) the actual increase is expected to be 16,000 (Gemeente Rotterdam, 2016).

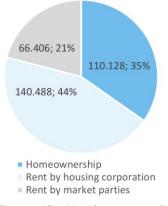


Figure 18: Housing types in Rotterdam

In its action plan for the middle-segment from 2021 the municipality states that from 18,000 dwellings to be created until 2030, 30 percent is aimed to be built in the middle-segment. From this, 33 percent is aimed to be built for homeownership and 67 percent is aimed to be created for the middle-segment rent. According to the action plan, this leads to 8,000 dwellings created for the middle-segment rent, which means additionally 4,000 dwellings are created for the middle-segment homeownership before 2030 (Gemeente Rotterdam, 2021). The municipality of Rotterdam has chosen to focus on the middle-segment rent above homeownership due to middle-segment rent being easier to stipulate in an agreement (Personal Communication, 2022). The municipality of Rotterdam has defined middle segment rent as rent in between ξ 763.48 per month and ξ 1,075 - per month (Gemeente Rotterdam, 2022a).

6.2. Land policy and instruments

Rotterdam has a land policy which is in line with most Dutch municipalities. This means they use much less land lease than Amsterdam but instead focus on private agreements with market parties. Therefore, as is expected the municipality mainly focuses on the use of private law anterior agreements and only uses the public law instrument when the private law option is unsuccessful.

The main aim of the passive municipal land policy is described in the action plans for middle-segment rent, and homeownership in the middle-segment. The municipality of Rotterdam works through negotiations and letting as much work as possible to the market. Additionally, the aim of the municipality in developments is to cooperate with the market and be pragmatic in what is requested and what is possible. In the action plan for middle-segment rent, the municipality states it aims to use a number of means to expand the middle-segment. The most important of these are:

- Requiring middle-segment rent negotiations towards development agreements,
- Requiring the middle-segment housing to be kept in its segment (through the development agreements),
- Setting up a doelgroepenverordening (target group ordinance),
- Requiring certain sizes of dwellings (through the development agreements).

The first one of these, requiring it in negotiations, is described in the two cases and is most used by the municipality. It works through the land-use plan and other planning powers of the municipality which help give the municipality some influence in development. Secondly, as part of creating middle-segment rent, the municipality also requires the housing to be kept in the middle-segment for at least 15 years. Moreover, the rent may increase by 1% plus the CPI in the first 15 years (Gemeente Rotterdam, 2021).

Thirdly, the public law option, which can be used by the municipality of Rotterdam if the private law means are not successful, is the 'doelgroepenverordening' which enforces a minimum of 10 percent social housing and 20 percent of middle-segment housing per project. However, the municipality decided not to use it for now and wait until policy objectives are not reached in a certain area (Gemeente Rotterdam, 2019). In addition, part of the doelgroepenverordening is that it is used on selected neighbourhoods or areas that have a higher shortage of middle-segment housing. This is different from Amsterdam which used higher percentages but with the option to focus certain segments on certain plots and where their 40-40-20-policy is used as an area average.

Fourthly, the municipality has made categories in the city, roughly being an inner city, urban neighbourhoods and green urban. In each of these neighbourhoods, an average rent and dwellings size is requested per development. The aim of this is to not only develop very small dwellings in the middle-segment housing and to create bigger dwellings on location further from the city centre.

6.3. Project 1 Rotterdam

The first project in Rotterdam is a redevelopment in the city centre that will also have consequences for the local urban plan. As it is in a redevelopment in the city centre there are also more stakeholders involved than there normally are. Their names and exact functions are simplified to keep the project anonymised. The project itself does not have an anterior agreement yet. However, the project is currently far enough in its process and enough work has been done to state that an anterior agreement will most likely follow in the future. Additionally, the number of dwellings in the middle-segment has been discussed and a preliminary agreement has been reached. Namely, this is 20 percent middle-segment rent and 10 percent homeownership in the middle segment.

6.3.1. Development project 1

In the first project in Rotterdam, the middle-segment housing is not the main issue as the public space of the square adjacent to the building is also redeveloped. However, this building is seen as the most important for this analysis due to its middle-segment housing and it being furthest in the development.

Within the city centre, the municipality aims to make middle-segment rent development with an average of 50 square meters per dwelling and an average rent of \notin 950 per month. The rent may then rise with CPI+1,25% for the first 15 years after the development. After this, the owner is allowed to alter the amount of rent as they please (Gemeente Rotterdam, 2019). Additionally, the municipality does not aim to expand the middle-segment supply in the area from 2017 to 2030 (from 24% to 25%) and the higher segment will grow (from 29% to 38%) at the loss of the social segment (47% to 37%) (Gemeente Rotterdam, 2020).

The project has been visualised through Figure 19 as must remain anonymised. In this, it can be seen that the project takes place on the corner of a busy crossroad with the redevelopment taking place in the right corner. Within the area, the municipality aims to create a better urban connection between the buildings that have been made there since the post-WOII-period. Although, this development was started by one investor in the area, another investor with real estate in the same place is also taken in with the development in the area. However, they have not yet made any commitment to redeveloping their real estate assets. In addition to the other real estate

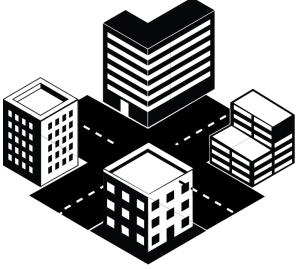


Figure 19: Sketch project 1 Rotterdam old situation.

company owning a portion of the land in the redevelopment project, the land positions in the area are very much divided between multiple actors. The redeveloped project will go from an office building to a mix of housing, offices, commercial and leisure. For this, the existing building will be renovated, and a new tower will be added to the building to accommodate enough space for all functions.

6.3.2. Timeline

The current project was started in 2019 with explorative meetings between the municipality and the developer. Before this, there had been another trajectory for the redevelopment with another developer hired by the investor which did not come to an agreement. The investor had become the owner of the redeveloped building and later in the trajectory of the current project bought two more buildings in the project area. With this, they had ownership of a bigger portion of the area. After the explorative meetings, the first ambition document was set up in 2020 which was then further expanded in a masterplan by a renowned architecture firm. This masterplan led to a note of principles (*nota van uitgangpunten*) which was signed by the developer, the municipality and other parties involved with the project in 2021. In the coming years, the involved parties will likely expand the project in size with public infrastructure and some other landowners in the area will also be involved. However, the main project that kickstarted the redevelopment of the area is taken as an example of the implementation of Rotterdam's passive land policy.

6.3.3. Negotiations

Interviews with two civil servants from the departments of project management and an employee at the developer who was and is heavily involved with the project have been used to describe negotiations, agreement and instrument usage. The negotiations were between a substantial number of actors involved with the project. however, for the negotiations of the project building fewer stakeholders are involved. Namely the developer and the municipality with multiple other stakeholders in the background.

The interviews have led to a list of the involved parties as shown in Table 12. The municipality of Rotterdam was involved through its city development department and the three section that are under this. Furthermore, the local public transport company has started exploratory research on how the public transport hub can be changed. If financially feasible, the transport company will become more involved in the future. After this, the metropole region and province are involved in the background but have not yet had a distinctive influence on the project. In the private party group, the delegated developer has the most interest in the success and is given power through the investor who is involved in the background checks on the progression of the project. Furthermore, the architect made the urban plan that contains the requirements for the redevelopment agreed upon by the developer and the municipality.

At last, the other landowner(s) is mostly the owner of two buildings on the square that would be demolished and rebuilt as a part of the project. Their decision on the project will influence the urban redevelopment part of the project and governance network. However, it will not have much influence on the analysed project.

Public groups	Private groups	Interest groups
Municipality of Rotterdam	Delegated developer	Local interest group
City development	Investor	
Spatial economic development	Architect	
Urban planning	Other advisors	
Project management & engineering	Other landowner(s)	
Municipal council		
Public transport company		
Metropol region		
Province of Zuid-Holland		
Table 12: Actors involved with Project 1 Rotterdam		

The negotiations started after the owner of the existing building hired the delegated developer to manage the redevelopment of the area. Before the developer contacted the municipality, was municipality had determined this location was not fully utilised and had to be altered in the future. However, they did not have much land ownership besides the public space. This made it difficult to redevelop the area but with the owner of some real estate, it would be possible. The municipality had the developer make a new urban plan for the area which was in turn done through an architecture firm that created a masterplan for the to be redeveloped area.

This can be seen as an elaboration of the joint image in which the shared goal is a successful redevelopment of the area. Success in this differs for the municipality and the developer. However, there is overlap in certain parts of success and in other parts success can be traded against each other. Additionally, the master plan also influenced a part of another real estate owner in the area who was thus contacted for an adaptation in their real estate assets. However, as this is a top location in Rotterdam with very lucrative tenants, they were not inclined to go along with the plan to alter their real estate.

So far, the transaction costs of this attempt by the investor to redevelop the area with the current developer are not off. As it is a bigger area redevelopment, there have been more costs surrounding the development, such as the master plan. However, these expenses are not exponentially bigger relative to the size of the project. Although, if the earlier attempt by the investor to redevelop the area is taken into account this would be different. However, not much is known about this, and the project started over with a new developer after it failed.

For the quality of the process, there seem to be ups and downs with each of the projects. An example of this is the middle-segment housing which was a part of the negotiations in this project. This started with the percentages and types of housing. The municipality found it important that the composition of the 20-30-30-20-policy was used, which meant 20% social housing 30%, middle-segment, 30% higher segment and 20% top segment. However, the municipality did allow student housing as social housing which is a much more financially feasible type of housing for the developer. Later on, in the negotiations, the municipality added demand for the middle-segment housing which was that a third (10% of all dwellings) needs to be homeownership instead of rent. As rented dwellings are more valuable than homeownership currently this was a difficult demand for the developer. However, as the demand came from the municipal council, who is needed for a permit, it was agreed upon (for now).

In the previous paragraph, the inclusiveness of the process, democratic accountability and accountability being touched as the trajectory within the municipality gives some democratic legitimacy and accountability to the process.

The network part of the assessment model is built onto the relations between the actors involved in the complex urban redevelopment. As it is a complex redevelopment there are multiple actors involved in the governance network but also within the municipality there are multiple departments and sections at work aiming to gain public needs. This is currently expanded open in a public document called the note of principles (*nota van uitgangpunten*). As expanding the networks has made it more complex it also created support for the success of the project through a larger group of supporters for the redevelopment.

With this, at least one example of all topics of the governance network is shortly described for the assessment in Table 13. This project's governance network as a part of the wicked problem is mostly bigger due to its size. However, the relationship between the developer and the municipality has gone well so far with political influence due to the size of the project and the municipal goals to execute its policy on homeownership in middle-segment housing.

Content		
Joint image building	The joint image created was the redevelopment of the area as a mutual interest for all actors involved.	
Goal intertwinement (win–win situations)	Similarly, to the joint image building, a successful area redevelopment was an intertwined goal. In this, both the municipality and the developer gave and received goals.	
Process		
Transaction costs and duration	The transaction costs for the municipality do not seem out of the ordinary. A renowned architect for the plan will be more expensive. However, the location and expectations require this.	
Quality of the process	The process has had its ups and down. However, generally speaking there is progress and the relationship between the actors is good.	
Inclusiveness of process, democratic legitimacy, and accountability	Similar to the other projects, the decisions are checked by higher- ups, the note of principles was signed by the alderman and the eventual permit is given by the municipal council.	
Network		
The development of relationships, shared perceptions, institutional rules, and a high level of trust	The relationship between the key actors has become better over the length of the project and together with this also the trust.	
Internal and external support for the network (resilience and reliability)	The network of the project has expanded over its duration, causing a more complex situation between actors. However, this has made it possible to gain more support for the project.	

Assessment governance network

Table 13: Governance network assessment project 1 Rotterdam.

6.3.4. Development agreement

The signed agreement was as stated earlier a preagreement and not an anterior agreement which is yet to be made. However, the involved key actors have similar interests in the area albeit it differs in financial or public goals. The agreement so far is described in a pre-agreement including the volume of the new building and the number of dwellings in the development. The planned redevelopment has been visualised in Figure 20 by the new tower shown in the right corner. The size of the dwellings is yet to be discussed and will most likely become a long-running discussion in the negotiations. In addition, due to a planned expansion of the regulated rent by the national government, there is uncertainty about the size of the dwellings in the middle segment.



Figure 20: Sketch project 1 Rotterdam new situation.

the activities and the land-use instrument have also had an influence on the veto criteria which need to be positive for the development agreement. These are the financial feasibility, land acquisition and gaining necessary permits in project 1 in Rotterdam. One of the methods used to

influence the financial feasibility is allowing student housing as social housing. Due to the location of the project, this can be explained as the implementation of existing policies, while also helping the developer create a feasible business case.

Furthermore, on the topic of land acquisition, the municipality is selling some land to the developer to alter the public space. This is sold as a part of the future anterior agreement between the municipality and the developer. Additionally, the investor has bought a second building in the project area. This is not necessary but it both shows the municipality they are interested in the area and is one less stakeholder to take into account (and higher possible revenue). At last, permits are given at the end of the trajectory towards an anterior agreement. However, through the note of principles, the municipality is making clear it is expecting this development to continue towards an anterior agreement. This as the note of principles is a public document and by signing it an actor may no longer quit the process without reason.

6.3.5. Influence on the development

The actors are now placed in a power-interest matrix to better understand the influence of actors within the governance network (see Figure 21). Similar to Amsterdam, the municipality of Rotterdam has a structure in which two civil servants (a project manager and housing policy) negotiate with supervision from a regional/district manager/designer that is in turn checked by the aldermen and the council. The construction with the developer and investor is different as the investor hired a delegated developer for an asset that they wanted to redevelop. Because of this, the developer is placed lower in power and the investor higher.

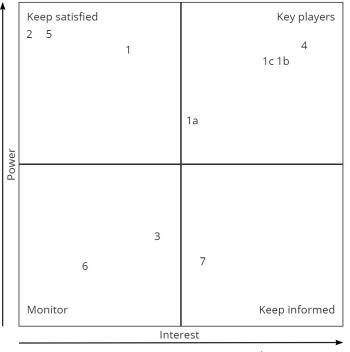


Figure 21: Power-interest matrix project 1 Rotterdam

6.3.6. Instrument usage assessment

With this, the adapted model of performance is used to assess success in Figure 15. This stars on the left with the objective of the municipality to create at least 20 percent social housing and at least 30 percent middle-segment housing. Within the complex context of Rotterdam's city centre, this has created a complex area redevelopment with the goal to, among others, have 30 percent middle-segment housing.

This situation required the use of multiple land-use instruments throughout the ongoing negotiations. Starting in the regulatory typology, the land-use plan is used to influence the necessary permits of the veto criteria. Although it is not an endlessly strong instrument, it can be used to put some pressure on a developer and gain a better position for the municipality in the negotiations. After this, the sermon was used to communicate with stakeholders in the project area and to convey their shared goals. Lastly, and most used, the carrot through financial incentives was used throughout the negotiations between the developer and the municipality. Financial incentives were used to gain policy goals, such as middle-segment housing and to keep the project financially feasible. This is how the social housing requirements are lowered and the middle-segment is made less profitable.

- 1. Rotterdam city development
 - a. Spatial economic development
 - b. Urban planning
 - c. Project management & engineering
- 2. College B&W
- 3. Public transport company
- 4. Developer
- 5. Investor
- 6. Other landowners
- 7. Local interest group

The success in creating middle-segment housing in the development was thus influenced by the landuse instruments in multiple ways. Most important in this were the negotiations which resulted in the agreement with 30 percent middle segment. Furthermore, by directly influencing one of the veto criteria (gaining permits) the alderman forced at least 10 percent of middle-segment homeownership to be placed in the pre-agreement.

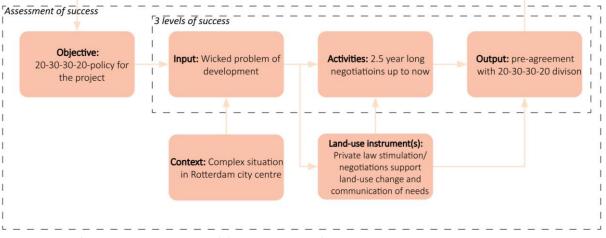


Figure 22: Performance assessment model project 1 Rotterdam

This project shows the influence local politics can have on the agreement made and with this the middlesegment housing created. This is also the most notable influence on the project due to its size and the interest that come with this. It showed also showed that a municipality may lower the requirements for social housing (as part of their policy) and be stricter with middle-segment housing. wo

6.4. Project 2 Rotterdam

The second project in Rotterdam is in an area on the edge of the municipality near a public transport hub which has been renovated by the municipality in the past years. However, this development is not directly linked to this, but it does play into the already ongoing improvements in the area. The anterior agreement of this project was signed in 2022 and currently, some issues which were left out of the anterior agreement are being negotiated . However, these issues do not influence the middle-segment housing in the development and are smaller more detailed parts of the development.

6.4.1. Development project 2

The area of the development is currently a combination of housing and a shopping centre near the public transport hub. The housing supply is currently divided into 68 percent social housing, 24 percent middle-segment housing and 8 percent in the higher segment. However, the municipality aims to change this to 53 percent social housing, 29 percent middle-segment housing and 18 percent higher segment housing in 2030.

The development is one of the new developments in an existing neighbourhood of which the old situation has been sketched in Figure 23. The redevelopment will see the demolition of an old office building (on the right in the figure) and a new building will be created. This requires some changes in the allowed building height. Because of this, the municipality has had a somewhat stronger position in the negotiations as it did not have to cooperate with the change in the land-use plan which wasn't part of the local urban planning. However, through the addition of a large portion of middle-segment rent, the municipality could place it within their housing policy and thus cooperated with the development.

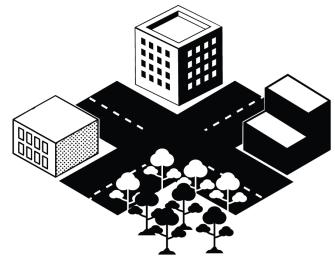


Figure 23: Sketch project 2 Rotterdam old situation.

6.4.2. Timeline

The timeline of the project starts before the current developer in 2017. In 2017 the building was bought by a land speculator and the project was sold in 2019 to the current developer. This is a foreign developer that aims to expand its activities into the Netherlands. Therefore, they bought two development projects in the Netherlands to start with and to further expand from there on. From 2020 until the start of 2022 the developer and the municipality negotiated over the anterior agreement and came to an agreement with the addition of an allonge agreement which stated that some parts of the public space around the building would later be agreed upon. These talks are still happening at the time of writing this but are not expected to give any issues.

6.4.3. Negotiations

Personal communication (2022) by two interviews with a civil servant advising on contracts and the developer was used to describe the project. From this, the involved actors are first described. In the field of public parties, the municipality is involved through a number of sections within the City development department and the municipal council who agreed with the eventual plan. Moreover, the section from City development was involved in the negotiations and the permits needed for the developer.

Within the private groups, multiple actors are involved due to the organisation used by the developer. Starting with the developer that also aimed to get gain know-how on the Dutch market and develop the project with some profit. To this end, they hired a Dutch employee who had the know-how of the Dutch market and came to be involved through the architect. However, this seems to be mostly a networking connection as the architect was further not involved in the negotiations. Additionally, the developer has a business model where a development is started with their own funds and then during the development process an institutional developer is found to acquire the project. Because of this the eventual owner/investor has not much influence in the project. Furthermore, a consultant was used by the municipal contract advisor and the developer support the sales price of land in the anterior agreement (from land lease to ownership). The last involved actor, through the interest groups, were residents who will get a 70-meter-high building close to their homes instead of an (about) 20-meter-high office (empty) building.

Public groups	Private groups	Interest groups
Municipality of Rotterdam	Developer	Residents
City development	Investor	
Spatial economic development	Architect	
Urban planning	Other consultants	
Project management & engineering		
Municipal council		

Table 14: Actors involved with Project 2 Rotterdam.

With the involved actors described the negotiations are summarised. These started differently than the other project as this development had been sold from more of a (land) speculator to a developer. When the sale to the developer took place, they already had a pre-agreement for the plan. Additionally, as the project has already been going on for some time, the action plan for middle-segment rent had not yet been part of the plan. However, after the action plan was approved by the council it was implemented in the ongoing negotiations which cause some annoyance from the developing side. However, agreement on this topic was reached by letting the developer build no social housing and 50 percent middle-segment housing. The developer profits from this due to the higher value of middle-segment rent above social housing. The municipality also agreed to this as the area currently has a relatively high percentage of social housing.

The development project itself is, with more than 300 dwellings, relatively big in size and as one of the first development in the area is more important for the municipality. This helped create the joint image building of one of the first developments in the area which is to be completed in the next 10 years. With middle-segment rent will be regulated for the next 15 years after which the rent level can be freely changed. This also joins in with the goal intertwinement in which the municipality and developer found public goals which were also more financially attractive than other options. Although, most issues seem to have been solved by trading one thing for another.

The process of the project seems to have gone reasonably well with negotiations taking place with a good relation between the key actors.

The inclusiveness of the project was the same as the other projects in that the eventual agreement was agreed upon by the council which also added some of their requirements. During the negotiations, the decision made was checked by higher-ups in the municipal organisation.

Within the network, the development of relations was an important factor for the foreign developer as they are new to the Dutch housing market. As so, it was important for them to show the municipality of Rotterdam they were not a 'hit and run' type of developer but aimed to create a building that fits within its environment.

The development is as stated earlier in the close vicinity of an area redevelopment to which this project has been attached. Through this, the development has municipal support as it helps with the redevelopment. However, as it is a large development (with a height of 70 meters) some residents are against the project as it has a negative impact on their dwellings. Therefore, the municipality weigh out the advantages and disadvantages of a development and concluded that the project could go through.

Assessment governance network

Content	
Joint image building	One of the first developments in the area and relatively large housing development. As the amount of housing in the middle- segment was also important for the municipality the combination of these was the joint image.
Goal intertwinement (win–win situations)	Trade of public goals and give financial support to create agreements. These were sometimes win-win situations and sometimes trading objectives that are part of the wicked problem.
Process	
Transaction costs and duration	The duration was five years in total of which two were with the developer. Furthermore, a consultant was hired to support some parts of the development agreement.
Quality of the process	The negotiations were on a good note which was at least partially due to a high level of trust between the municipality and developer.
Inclusiveness of process, democratic legitimacy, and accountability	Similar to the other projects the eventual plan had to be agreed upon by the municipal council.
Network	
The development of relationships, shared perceptions, institutional rules, and a high level of trust	The key actors involved found a similar interest in the creation of a building which had both public goals and a financially feasible business case.
Internal and external support for the network (resilience and reliability)	Although the development is not part of the target area it can be seen within the broader developments in the area which aim to create a denser urban environment in this location.

Table 15: Governance network assessment project 2 Rotterdam.

Through Table 15 it can be determined that the governance network in the project had some smaller issues that were overcome. Moreover, where there were issues they were resolved by means of the goals intertwinement through which mutually agreeable solutions were found.

6.4.4. Development agreement

The eventual anterior agreement allowed for the development of about 350 dwellings of which half are to be in the middle-segment rent for the next 15 years. Through the activities on the wicked problem the veto criteria have been assessed and have been found agreeable for a successful development for which a new situation has been sketched in Figure 24.

Starting with the financial feasibility, this was influenced by the municipality letting the developer make middle-segment housing instead of social housing. Moreover, the municipal civil servant on the project had a consultant make a report to make some of the



Figure 24: Sketch project 2 Rotterdam new situation

costs possible which in turn positively affected the financial feasibility of the project. However, none of these is direct financial stimuli that for example subsidy would be. These financial incentives lower the funds gained by the anterior agreement, about which the council is informed.

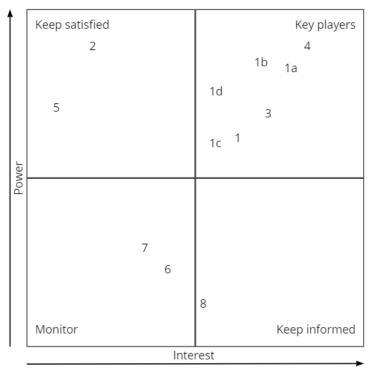
The to be developed land can be split in three types of ownership: private ownership, 75-year land lease and (a small portion of) municipal land. On both the private land and the leased land there is a contract that states what is allowed to be built on the plots. Because of this, the developer needed the municipality to alter these contracts and buy off the land lease and the municipal land. Additionally, the developer wanted to buy the land instead of using land lease. For the acquisition of land, this meant the developer had to buy land from the municipality which gave the municipality influence over a veto criterion. In the negotiations, this seemed to have been mostly used for the revenue that could be gained from sold land.

The last veto criterion, gaining permits, has been greenlighted with the signing of the anterior agreement. With the permits being part of the anterior agreement (which was the output of the negotiations), it is a link between a land-use instrument and a veto criterium. The influence this had on the development cannot be exactly described but the anterior agreement for the development was influenced in better alignment with the municipal housing policy.

6.4.5. Influence on the development

All actors are now placed in a power interest matrix in Figure 25 to further describe which actors had the most influence on the agreement made. This starts with the parties to be monitored, namely the architect and other consultants. The architect was relatively early involved, and the developer found good architecture important which costs more and thus had some effect on the agreement. However, it was not important in the negotiations as only the importance of the architecture was mentioned and not any further tasks. From the other consultants, a consultant was hired to make some of the costs in the anterior agreement possible although this was a task and further had no influence on the agreement. In the next field, the residents are to be kept informed as they were brought views forward in the plan, but these were not conceded.

On the upper half of the matrix, there is some difference from the other projects as the investor was later on in the project found. Because of this, in the field of keeping satisfied the investor is placed lower and more to the left as their influence was mostly on the need to create a financially feasible project with enough profit. The developer in the project is placed on the same level as the municipal council. However, their interest in the project was high as this was one of their first two projects on the Dutch market. After this, the council is the last party to be kept satisfied. Their influence was through agreeing on the eventual agreement which included some public goals. In the field of the key players, the developer is placed in the far corner together with the municipal parties directly involved in the section of spatial economic development and urban planning do the negotiations with the developer.



- 1. Rotterdam city development
 - a. Spatial economic development
 - b. Urban planning
 - c. Project management & engineering
- 2. College B&W
- 3. Municipal land comapny
- 4. Developer
- 5. Investor
- 6. Architect
- 7. Other consultants
- 8. Local interest group

Figure 25: Power-interest matrix Project 2 Rotterdam.

6.4.6. Instrument usage assessment

Throughout the project's lifespan, multiple land-use instruments have been used. Starting with the sermon, this was used by the municipality in the redevelopment of the area in which the first speculator initiated the project. However, the plan in this phase did not yet contain the middle-segment housing which would be added to the project by the action plan (for middle-segment rent). Therefore, the municipality used the stimulus of altering the social housing requirements which were replaced by more profitable middle-segment housing. In this, the municipality also used the needed change in land use and environmental permit to have some regulatory power. However, this is no direct power to enforce anything but more a thread to make redevelopment difficult for a developer if they do not cooperate.

With this, the adapted model is filled in for project 2 in Rotterdam in Figure 26. The objective in the development was not a certain percentage of middle-segment at the start of the project. This changed with new policy documents, and which (for the developer) made the project less profitable as the possible value of the project was lowered by this. However, it was agreed upon that half of the housing would become middle-segment (rent). Therefore, the objective is described as agreement with the local housing policies which was at least 50 percent affordable housing (being social and middle-segment) that became 50 percent middle-segment housing. the context of the development is just outside a densification location in Rotterdam. This helped the municipality in two ways it enabled a large development and due to it being just outside the densification area the land-use plan had to be altered which in turn gave the municipality a better position of power.

With this, the input was a development with the aim of 50 percent affordable in an existing area that was next to a densification area. During these negotiations, the relations seemed to have been well in which the developer was introducing itself to the Dutch market and aimed to show they were a partner for developments. This eventually led to the current anterior agreement in which a 50-50 ratio of middle-segment and free market dwellings is going to be built.

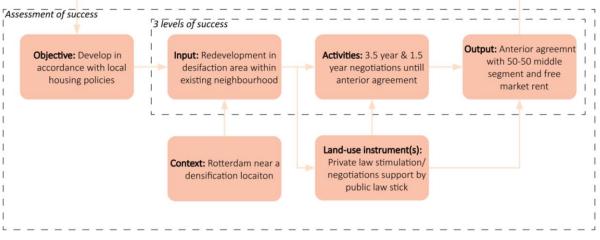


Figure 26: Performance assessment model (project 2) Rotterdam

Notable in this project was the close proximity of a densification area which enabled the development to be made 70 meters high after a change in the land-use plan. Although the municipality did not have to cooperate as the project was outside the densification area.

6.5. Conclusion

This chapter has gone further on the third sub-question: 'How are these instruments used and is success influenced?'. In Rotterdam, the municipality aims to cooperate with the market and is focused on pragmatic solutions in development. Its land policy is much more focussed on the passive method with low or no land ownership then Amsterdam. This can be seen in the passive land-use instruments used which are mostly aimed at determining what is possible through negotiations and communicating the municipal objectives/ policy goals to the market.

The instrument used differ slightly from the instruments described in chapter 4 as a combination of instruments is used to make it attractive for a developer to cooperate with the developer.

In the regulatory field, the land-use plan and condition of the land lease agreement and previous sale are used as an instrument. However, these instruments have no strong regulatory pressure to dictate what will happen. Therefore, the municipality helps the developer in some ways to create a financially feasible business case. This is not done in a direct way of giving funds for certain functions but by lowering or altering certain requirements to higher possible revenue or lowering the development cost. At last, communication is done through policy documents and other public documents that describe the municipal view in certain areas or developments. The influence in negotiations is that the municipality shows on which topics they will give in and on which they will not.

In both projects in Rotterdam, there was success in terms of adding middle-segment housing to the anterior agreement. In both projects, the requirements for social housing were altered by either allowing a more profitable type (student housing) or replacing it with middle-segment rent. This influenced one of the veto criteria, the financial feasibility, of the project which helped create the development. Furthermore, the veto criterium of land acquisition was somewhat used by the municipality, some small plots of land and leased land were sold as part of the anterior agreement. At last, as described in the previous paragraph permits were used as a regulatory means and are also a veto criterium. Therefore, permits are mostly used by the municipality to make it necessary for developers to have negotiations with the municipality.

7. Utrecht

Utrecht is the third case municipality with which the third sub-question is answered: 'How are these instruments used and is success influenced?'.

This is done by first broadly describing the municipal organisation and housing policy. Secondly, the land policy and land-use instruments used according to the policy document is described. Thirdly, a project is used as an example of the implementation of the land policy if the case municipality. With this, the third sub-question addressed the third case municipality in a conclusion.

7.1. Municipal organisation and housing

The municipality of Utrecht is similar to Rotterdam in that it has few land tenures in the city. However, Utrecht has been the first municipality in the Netherlands to make an action plan for middle-segment housing and thus has more experience with this. This sub-chapter will go broadly over the municipal organisation and its housing policy.

7.1.1. Organisation of the municipality

The municipality of Utrecht uses a different kind of organisational chart. The chart is shown in Figure 27 works similar to the other organisational charts starting at the top with the municipal council and executive (in black), supported by the councils' operations (green), secretary (white) and organisations (blue). Below this is the municipal development organisation (red) which is responsible for knowledge, strategy, and policy of the different areas and the execution organisation (orange) which is responsible for activities that are directlv in contact with residents (Gemeente Utrecht, 2022c). The municipal organisation involved with this research are the spatial development organisation (ontwikkelorganisatie ruimte), neighbourhoods (wijken) and maybe the municipal real estate organisation (vastgoedorganisatie).

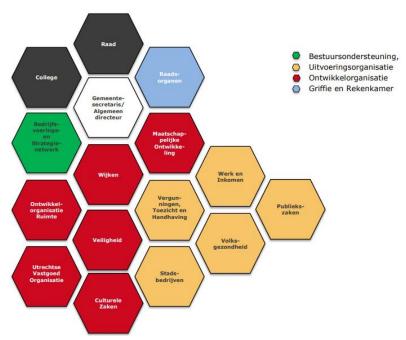


Figure 27: Organisational chart municipality of Utrecht (Gemeente Utrecht, 2022c) .

7.1.2. Housing in Utrecht

Utrecht is the fourth city in the Netherlands with a housing stock of 147,511 in 2015 and 159,671 in 2021. This is divided into the percentages shown in Figure 28 from which it can be seen that the two main categories of housing in Utrecht are social housing and higher segment homeownership. In between this, there is 20 percent of middle-segment housing. the last 11 percent are found in the categories of higher segment rent, lower income homeownership, and unknown (the last 2 percent is missing due to rounding) (Gemeente Utrecht, 2021).

With about 160,000 dwellings, Utrecht is substantially smaller than Amsterdam and Rotterdam. However, the municipality has had more experience with creating middle-segment housing with low municipal landownership. In its housing vision from 2019 the municipality expects a need of 60,000 dwellings until 2040, while there is a planned supply (*planvoorraad*) of 48,000 dwellings. The municipality of Utrecht defines middle segment housing as rent starting at 763.48 per

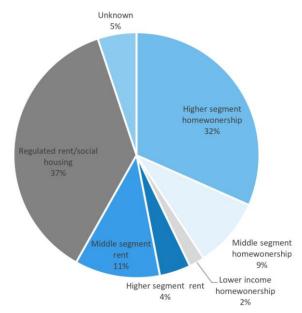


Figure 28: Housing types in Utrecht (Gemeente Utrecht, 2021)

month and up to €1037,30 per month (Gemeente Utrecht, 2022a).

7.2. Land policy and instruments

Already described in section 4.2.2, this section will go further into the use of land-use instrument to create middle-segment housing by the municipality of Utrecht.

The municipality of Utrecht is a municipality with relatively low landownership and thus has more experience with the passive land policy and land-use instruments. Additionally, it also was early (2017) with making an action plan for middle-segment rent. Although, with the types of land-use instruments used, the municipality of Utrecht uses no minimal percentages by public law. However, it does have the necessary documentation and argumentation to use it but has chosen not to use it. in the field of private law, the municipality of Utrecht uses anterior agreement to create middle-segment housing and also defines what middle-segment housing is through its housing vision and action plan (Gemeente Utrecht, 2017).

In steering its housing supply, the municipality of Utrecht does not use minimal percentages per project but steers towards a certain ratio of housing. Therefore, in planning the needed housing stock, the municipality uses a benchmark (*ijkpunt*) to steer towards 35 percent social housing, 25 percent middle-segment and cheap- and affordable homeownership, and 40 percent to the remaining categories. These numbers aim towards a certain division in 2040 and not on certain minimal percentages per development project. The difference with the existing supply is in the middle-segment which is at about 20 percent (Gemeente Utrecht, 2017, 2019).

The municipality requires newly build middle-segment housing to stay in the middle-segment for at least 20 years and that the rent can rise to a maximum of the CPI + 1 percent per year. Additionally, the municipality also has some conditions on the size of middle-segment housing depending on the rent and location. In the inner city and the station area with a rent above the regulated market threshold of at least 40m2 Gross Internal Area (RIA) and if the rent price is above \pounds 950 at least 60m2 GIA. In the other parts of the city the minimum house size, respectively to the rent levels, is 50m2 GIA and 80m2 GIA.

7.3. Project 1 Utrecht

This section describes the project in Utrecht with the aim to understand how Utrecht's passive land policy is implemented on a project and assessing its success. As the project is anonymised there will be no direct mention of the project and no information that would easily identify the project is given. However, the situation is sketched in Figure 29 with a (green) square in between multiple similar multistorey buildings.

The description of the project starts with a general introduction to the neighbourhood. After this, the project itself is described and a timeline of the project's negotiations period is given. This is then followed up by a stakeholder's analysis to determine the most important actors which is then used to describe the negotiations. With this, all factors except for the land-use instruments are described. After this, the influence of the land-use instruments can be assessed. At last, a conclusion on the passive land policy of the municipality of Utrecht is given.



Figure 29: Sketch project 1 Utrecht old situation.

7.3.1. Utrecht development project

The project in Utrecht is a medium-sized area redevelopment in which 80 dwellings and some storage boxes will be demolished and 180 dwellings in the middle-segment will be created. It is a redevelopment as the municipality would like to see it happen due to the cooperation and trust between the parties. However, it is not how it often happens. This is fine for the research as this aims to find success through passive land policy and instruments. It should, however, be taken into account that the negotiations in the governance network were with relatively more cooperation and trust between the parties.

In the development, it is also agreed that the housing corporation will be given a location outside the plan area to build new dwellings for the loss of the 80 dwellings. Moreover, the land is given out in eternal land lease by the municipality and the user will change from a housing association to a developer. The redeveloped area is in a post-WO2 neighbourhood with predominantly social housing. Therefore, the municipality aims to lower the social housing segment and increase the middle-segment rent and affordable homeownership in the area (Gemeente Utrecht, 2019).

As this project is a partnership between the developer, the housing association and the municipality of Utrecht, there are a couple of other developments involved with this project. These developments are either also projects in which social housing is demolished to be replaced other types of housing or projects in which social housing is created to compensate for the demolition of social housing in other parts of the city. According to an interviewee, for the dwellings demolished in the Overvecht at least 1,5 times as many must be developed somewhere else in the city to also compensate for the expected growth in the coming years.

7.3.2. Timeline

This project started with a challenge set out by the province of Utrecht in October 2018 to create a feasible plan for developments with alternatives for social housing. This challenge took place in 100 days and led to an agreement between the developer and the housing association. However, this agreement

was only on the basics of the agreement and had not taken into account all conditions of the context of the area. After this, the developer, housing association and municipality negotiated towards an anterior agreement and a change in the land-use plan. During this period the design had to be altered as residents were against de housing that was planned to be built on the local square/playground area. Because of this, the design was altered to demolish some (85) social housing and a number of storage spaces/garages which in turn influenced the financial feasibility of the project. Because of this, the negotiations took longer as a new financially feasible business case had to be made. Additionally, the middle-segment housing became rented housing instead of having some homeownership.

After the changes in the design had led to a final agreement the project's construction phase will start in October 2022 with the demolition of some older social housing buildings and storage places/garages. The development thus took about four years from the start of the negotiations to the start of the construction.

7.3.3. Negotiations

Personal communication (2022) with a civil servant and a developer active on the project during the negotiations has been used for the description of the projects' negotiations, agreement, influences and instrument usage. This starts with the actors involved with the project in Table 16 which splits actors into the categories of public, -private -and (local) interest groups. In the public groups, the municipality and within these multiple sections are involved (from the same department) and also the alderman and the council.

Public groups	Private groups	Interest groups
Municipality of Utrecht	Developer	Residents
Municipal development organisation	Housing association	
Social developments	Investor/future owner	
Neighbourhoods		
Development organisation/ project management		
Security		
Alderman		
Municipal council		

Table 16: Actors involved with Project 1 Utrecht.

Through interviews with the developer and a civil servant, a description of the negotiations is made to determine what the influences of these were on the success of the project. Starting with the municipality, they were involved as the land-use plan needed to be changed and the type of housing would change on their land given out in land lease. This gave the municipality a position where they did not have to cooperate but were inclined to as the plan was aligned with their vision for the area. However, similar to the other cases the municipality is not one actor, but multiple actors in different departments and sections with unaligned objectives. The important section in this project (all within the municipal of development organisation) were social developments, neighbourhoods, project management, and security.

On the private side, the developer and the housing association had already found each other before going to the municipality. Because of this, the general idea of the plan was already sketched which was to demolish some social housing that could be added somewhere else and to build middle-segment housing in its place. Although, the plan has changed throughout the initiation phase as it was first planned to build middle-segment housing for homeownership on a square/playground in the project area. However, this was changed as the local residents heavily opposed this as it would lower the

amount of green space in the area. Additionally, this was also municipal land that was not given out in land lease causing the municipality to have a much larger say in the development. Eventually, this caused changes which led to the plan that will be realised in which some garages/ storage spaces are demolished to make way for middle-segment housing with rent.

Starting with the content, during this period the joint image in the development started between the developer and the housing association and only later did the municipality got involved. However, according to the interviewees, the negotiations did have some issues. However, these would be delegated to the higher-ups who would come to an agreement on these topics and let the negotiations continue. The reason for this (from the municipal perspective), was that the project was in alignment with a number of municipal policies (middle-segment housing, social housing in other parts and a greener city). This made it important for the municipality to have the project succeed.

Different from other projects is that these higher-ups had a good relationship which helped create a solution for these issues which were then quickly solved. This played an important role in creating an agreement within four years. Additionally, the private parties in the agreement both gave something away in the negotiations to create a financially feasible project. for this, the developer lowered their 'risk and profit' and 'general costs'. The housing association lowered the value of the social housing demolished for the development. Additionally, the municipality nullified the surplus value on the leased land to stimulate the project further financially.

The intertwined goal came forward from the joint image which was to build social and middle-segment housing. Unlike the other projects, from the start, the developer aimed to develop only middle-segment housing and help with the development of social housing. In the other projects, the middle-segment housing was (partially) regulated through permits or financially supported.

The negotiations of the project took four years which is relatively quick. During this period, the negotiations had, similar to the other cases, support from consultants. In this project, a consultant helped an independent party between the three parties to smoothen the process. However, this does not seem to have had excessive costs. Then, the quality of the process was, although it had its ups, and downs experienced as good. According to the interviewees, there were some difficulties to reach an agreement, however, support from within the organisation helped keep the project on track. After this, similar to the other projects the inclusiveness of the process and the democratic legitimacy were supported by the structure of the municipality in which decisions are checked by the municipal executive who might also have additional demands for the plan.

	Assessment governance network	
Content		
Joint image building	The joint image of this project was shaped by the first idea in which land was traded to develop middle-segment housing in a predominantly social housing area.	
Goal intertwinement (win–win situations)	The goal of Intertwinement in this project is found in the same objective to have social and middle-segment housing developed.	
Process		
Transaction costs and duration	The duration of the negotiations was about 4 years and there were no high costs for consultants or other third parties	
Quality of the process	The quality of the process was good with some hiccups that had to be overcome.	
Inclusiveness of process, democratic legitimacy, and accountability	The inclusiveness and democratic legitimacy were again supported by a municipal structure in which the end decision is taken by the municipal executive.	
Network		

The development of relationships, shared perceptions, institutional rules, and a high level of trust	The project started between the developer and the housing association which was later extended with the municipality. There was a high level of trust between these parties are they were also willing to be open about their calculation of development costs and were all willing to give some financial revenue away to make the business case viable.
Internal and external support for the network (resilience and reliability)	Although the development had some issues with the (local) residents, this has turned around by altering the design and letting the residents help design the new square/playground. This might have helped decrease the number of views brought forward to zero.

Table 17: Governance network assessment project 1 Utrecht.

In the network the development of relationships, shared perceptions, institutional rules and level of trust, the governance network has gotten more support over time. This was due to trust being built up along the process in which the use of a third unbiased party helped this further. At last, the internal and external support for the governance network reached a low point with the residents being against the construction of housing on a square/playground. Altering the design helped create more external support, however, internally it expanded the duration of the negotiations as the financial feasibility had to be remade.

The influence of the governance network on the agreement was positive for the success of the development of middle-segment housing. This was due to the good relations and trust between the parties in the governance network which also enabled the financial solution that made the project financially feasible. The influence of land-use instruments on the negotiations was by communicational means, through the action plan for middle-segment rent. Although the municipality did have regulative power over the project this seems to have been mostly unused.

7.3.4. Development agreement

The eventual anterior agreement with accord on the veto criteria contains the construction of 180 dwellings on the project location and 135 dwellings in the social segment. Additionally, the parties in the governance network each gave some value away. The municipality requires no financial compensation for the overvalue of the land after the redevelopment and thus lowers its taxing on the project. The developer has lowered their percentages of risk & profit and general costs on the project. In addition, the developer has a fund for middle-segment housing that will buy the dwellings of which the sales price has been upped as much as possible. Lastly, the housing association has lowered the input value of the social housing that will be demolished and that will be paid by the developer to the housing association.

For the 180 new dwellings being constructed in the future, the development agreement also stipulated the size of the houses. It has been agreed upon that this will be done in accordance with the prescribed sizes in the action plan for middle-segment housing. Therefore, there will be multiple types of dwellings with 2, -3, -or 4 rooms for different types of tenants. Moreover, as shown in Figure 30 the new situation will see the demolish of one building to create the middle segment housing next to the square. Furthermore, the local land-use plan will also be adapted for the new dwellings as these will be one story higher than the existing buildings which currently is not allowed.

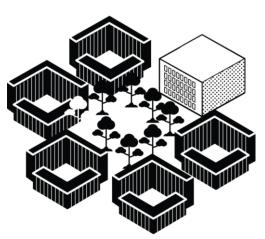


Figure 30: Sketch project 1 Utrecht new situation.

7.3.5. Influence on the development

The negotiations for the development were between three parties, in a relatively flat hierarchy who were also influenced by residents in the surrounding neighbourhood. These actors are placed in a power-interest matrix as is shown in **Fout! Verwijzingsbron niet gevonden**. In the power-interest matrix, the municipal project manager and housing association had the most power and interest in the development and are thus placed in the upper right corner. The municipal project manager is also placed in the key player square but lower than the others this actor is checked within the municipality. Furthermore, within the municipality, multiple sections of the development organisation were also involved in the background of the negotiations. These departments are all placed together in between key players and kept informed as they roughly had the same power and influence on the negotiations.

The municipal alderman is placed in the left corner with power through the anterior agreement and the financial incentives in this. The interest is lower but still somewhat higher due to the importance of the project to succeed and its alignment with municipal policies. Furthermore, the residents were mostly not interested in the development. However, there was heavy opposition against building on a square in the project area which changed the plan. Therefore, the residents, seen as one actor, are placed halfway on the power scale and on a quarter of the interest square. The reason for their lower interest in their neighbourhood was given in an interview as that due to their, often, lower income they had more pressing issues than the development of some housing in the area. However, the loss of this square in the area would damage the area and was thus heavily opposed. After the design was changed to keep the square, there were no views brought forward (*zienswijzen ingediend*) which is rare. At last, below this is the investor a fund which is connected to the development for a price at the end of a calculation, and this is where their power mostly is.

	Keep satisfied 3	Key players 4&5 2 1a	 Utrecht development organisation a. Social developments b. Neighbourhoods c. Development organisation d. Security Municipal project manager Aldermen Developer Housing association Investor Residents
Power	6	1d 1b 1c	
	Monitor	Keep informed	

Interest Figure 31: Power-interest matrix Project 1 Utrecht.

The distribution of power and interest in this project was different from the others due to the involvement of the housing corporation, the different developer to investor method, and the involvement of residents. Starting with the involvement of the housing corporation in the development through a second project caused the lowering of the land price which influences the veto criteria of the financial feasibility. Furthermore, the to be constructed social housing for the corporation also helped

increase the alignment with municipal social housing objectives. Secondly, the different developerinvestor relation seems to have caused a lower influence on the investor. Additionally, the closer relationship between the developer and the investor helped the project to add value to the development project that the investor was willing to pay for. Lastly, the involvement of the residents altered the design and made the negotiations take longer.

7.3.6. Instrument usage assessment

The instrument used in the Utrecht project differs from Amsterdam and Rotterdam. However, an important factor in this seems to have been the developer and housing corporation which required no regulatory pressure to (only) develop middle-segment housing. The success of this project, through land-use instruments, was by financial incentives through lower municipal costs. Furthermore, it was also important for the developer to know which type of housing was requested by the municipality. Therefore, the municipality added a summary of this in their housing vision which was used by the developer.

With this, the adapted production model of performance is again filled in and added in Figure 32. The objective in the general area is to lower the social housing stock and add middle-segment housing. Moreover, the municipality aims to alter the housing stock in 2040 towards a citywide benchmark of 35 percent social housing and 25 percent middle-segment housing of which the relative numbers in the project area are 73 and 19 per cent. The context of the project is thus also a neighbourhood with predominantly social housing but also with the political will to alter the housing stock. Furthermore, the project area is all outdated social housing from a social housing corporation that has eternal land lease on the project area (Gemeente Utrecht, 2022b).

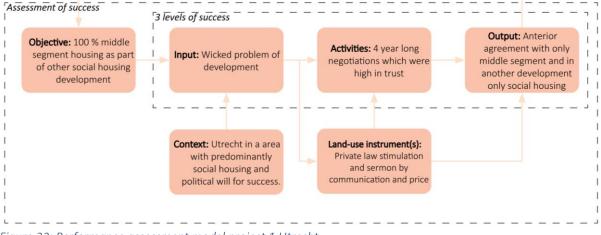


Figure 32: Performance assessment model project 1 Utrecht

Together the objective and context form the input of the project which is the changing of housing types per sub-project by the demolishment of older social housing (and an old office building in another project) the aim here was the only develop middle-segment housing being partially rental and partially homeownership. Additionally, due to the alignment with municipal policies, the municipality did not have to use regulatory pressure to higher the amount of middle-segment housing during the negotiation in the next four years. The land-use instrument(s) mostly used fell in the stimulation typology to positively influence the financial feasibility. Furthermore, the developer used municipal documents to convey their requirements to the market.

7.4. Conclusion

Utrecht was the third case municipality that is being used to answer the third sub-question: 'How are these instruments used and is success influenced?'. The municipality of Utrecht has a similar framework to the municipality of Rotterdam with a combination of land-use instruments made to make an anterior agreement through negotiations in a horizontal hierarchy. In this case/project the developer was important to start the negotiations on a good note as the project was already within the municipal policy. Because of this, the municipality did not have to use their regulatory power to alter the plan and the key players in the negotiations only had to work on the financial feasibility of the plan as all land needed was already owned by the three parties.

However, regulatory instruments would, most likely, have been used if the development project had a more similar start and developer as the projects in Rotterdam. If compared, this project shows in context the most similarities with project 2 in Rotterdam. It thus seems that the governance network played an important role in what instruments are used when the context is similar. Furthermore, this project shows that municipalities and market actors (and housing associations) are very willing to lower profit and revenue to help create a feasible business case if trust is high and objectives are aligned. The influence of the land-use instruments in this development was thus to create middle-segment housing following the action plan for middle-segment and to also financially stimulate the project to make it financially viable.

8. The Hague and Binckhorst

This is the last case chapter with which the third sub-question is answered: 'How are these instruments used and is success influenced?'. After this, in chapter 9, will answer the third sub-question.

In this case, only the district of the Binckhorst is used, as the passive land policy used there is a regulative public law plan on which few exemptions are made by anterior agreements. This district is used as none of the other municipality use this regulatory policy to enforce a certain percentage of middle-segment housing. Moreover, as the passive land policy is only used in one area, only the passive land policy in the Binckhorst is analysed for The Hague.

8.1. Municipal organisation and housing

Before going into the land policy and its implementation in a project the organisation and housing situation in the municipality are described in short.

8.1.1. Organisation of the municipality

As shown in Figure 33 the municipality of The Hague is about the same organisation as the other municipalities at the top is the council checking the mayor and alderman who each run a part of the civil service. The municipality of the Hague has a department for urban development (*Dienst stedelijke ontwikkeling (DSO)*) to do all urban development projects. This department is split into multiple sections which are involved with new developments in the city. These are the section of economy, mobility and space (*Economie, Mobiliteit en Ruimte*), existing city and housing (*Bestaande stad en Wonen*), land company (*Grondbedrijf*) and projects (*Projecten*) (*Gemeente Den Haag, 2022c*).

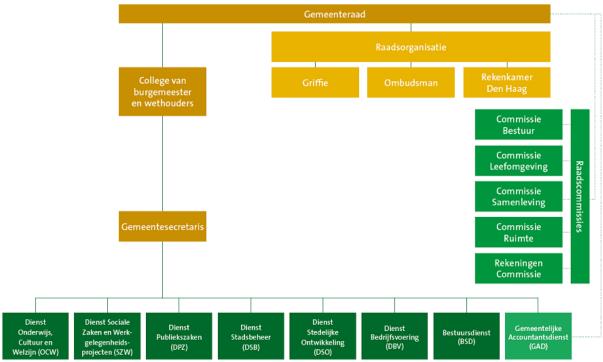
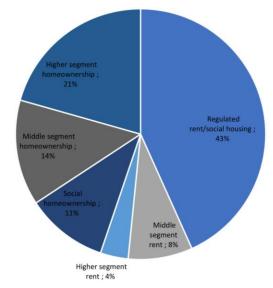


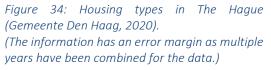
Figure 33: Organisation of the municipality of The Hague (Gemeente Den Haag, 2022a).

8.1.2. Housing in The Hague and the Binckhorst

The housing supply in the Hague is with 43 percent social housing, similar to the other cases, a large portion of social housing (see Figure 34). The middle-segment is a total of 22 percent of the housing stock with 14 percent being homeownership and 8 percent being rented. Moreover, the higher housing segment in the Hague is about a quarter of the total supply of which the majority is homeownership (21 percent of the housing supply). At last, there is about 11 percent of social homeownership in the municipality of The Hague.

In its housing vision, the municipality of The Hague states it aims to citywide create at least 30 percent social housing and 20 percent middle-segment housing in new developments (Gemeente Den Haag, 2020) which may differ per neighbourhood in the city. With this, the municipality thus seems to aim to lower its social housing supply and keep its middle-segment at its current level. This will then lead to growth in the higher segments.





The municipality of The Hague also has a condition on middle-segment housing which are similar to the other municipalities. Rent is allowed to be risen by the CPI + 1% and the housing must stay in this segment for at least 20 years. Additionally, for middle-segment homeownership, there is a requirement of self-residence for 20 years. The municipality defines middle segment housing as rent in between 763.48 per month and \notin 1,015.31 per month (Gemeente Den Haag, 2022b).

8.2. Land policy and instruments in the Binckhorst

The land policy in the Binckhorst is different from that of the rest of The Hague due to it being a test through the (*crisis -en herstelwet*) which was used to shorten the length of the procedure towards the new land-use plan that would also become a more 'open' plan. Therefore, the municipality made a broader urban plan for the area but let the market (developers) define the best place for functions that were thought out for the general area. The municipality allowed for multiple functions: housing, retail, leisure, office space, creative industry and small industry. When a developer has selected a plot of land and a (or more) function(s) to be built there, they may reserve the amount of space in the municipal system. After this, they have about 6 months to further elaborate upon the design up to the building permit. With this, the municipality aimed to make building permits procedures easier and quicker

Currently, the system has been in place for about 3 years and most functions have been fully reserved. The functions which are not fully reserved are: creative industry, office space, small industry, and within the category of retail, conscience stores have no reservation. Also, interesting about the housing in the system is that according to the evaluation all housing was reserved in a matter of minutes.

8.3. Project 1 Binckhorst

For the project in the Binckhorst, a developer was interviewed but no civil servant could be interviewed. However, the municipality has written an evaluation of the land-use plan (TwynstraGudde, 2021) which gives the necessary information to describe the project.

8.3.1. Binckhorst development project

The aim in the Binckhorst is to be in line with the 30 percent social housing and 20 percent middlesegment housing. The area itself is an old industrial area with mostly small industry which is the process of being redeveloped to a mixed neighborhood. Therefore, the first projects have already been finished and others are well underway to this. However, this is not the case in this project as can be seen in the sketch added in Figure 35. The analyzed project in this phase with the environmental permit given (due to the land-use plan no anterior agreement is used) and is soon to start construction.



Figure 35: Sketch of project 1 Binckhorst old situation.

The project will have about 600 dwellings that are developed in line with the requirement of 30 percent social housing and 20 percent middle-segment housing. Additionally, the project will also have office space, hospitality, and a small public service in it. This project also has a delegated developer that is hired by an investor who aims to sell the lot to a new owner after the redevelopment. The land is currently in full ownership of the investor and will be sold to a new owner who will then also have full ownership of the land. The construction is expected to start at the end of 2022.

8.3.2. Timeline

The current design is the third plan of the developer for the redevelopment of the plot the first to fail on the land-use plan and the second on financial feasibility. The first plan started in 2018 which took about a year. After this, the environmental permit for the current design was requested at the start of 2022 and later given.

8.3.3. Negotiations

Due to the use of the land-use plan in the Binckhorst there were few negotiations between the municipality and the developer. The plan was open and could be filled in within the regulatory framework set up by the municipality. because of this, the influence of the municipality was mostly through the Land-use plan which was set up at the start of area redevelopment. Additionally, the municipality would give advice to the developers active in the area on how their plans could be made agreeable to the land-use plan. This is also where the municipality could leverage a bit (TwynstraGudde, 2021).

This process also involved a local housing association that will operate the social housing after construction is finished. They had a role in the governance network as the social housing had to be delivered to a housing association. In this developer aimed to create (smaller) studios and 2-room apartments and the housing association wanted 2 to 4-room apartments.

Public groups	Private groups	Interest groups
Municipality of The Hague	Delegated developer	-
Department for urban development	Housing association	
Economy, mobility and space	Investor	
Existing city and housing	Buyer/ future owner	
Land company		
Projects		
Alderman?		

Table 18: Actors involved with Project 1 The Hague/Binckhorst.

The parts of the assessment model are now described and summarized in Table 19. Firstly, this governance network was different due to the different land-use plan used which let a developer choose what to do within a much broader framework. However, the boundaries of this framework were regulative which means they were mostly non-negotiable. The aim of this was that it would enable the developer to first have an idea of what they wanted to do. In the phase after this the majority of the cost that comes from developments is then made. However, this has some issues in the implementation as the broad land-use plan was difficult to understand and work with, and communication between the municipality and market actors did not seem to be optimal (TwynstraGudde, 2021).

For the joint image building, this meant that the municipality had described their image for the area in general in the land-use plan. The developer in the case aimed to create a financially viable project within the boundaries of the land-use plan on their already acquired land. In addition to this, the municipality did not have much leverage space which caused less impact on the governance network. However, the joint image created was still the combination of the municipal plan, their support, and the developers' requirements.

Goal intertwinement during the negotiations and the win-win situation can be seen as the eventual design that got an environmental permit. The municipality described their win for the area including the plot of this project in the land-use plan. For the delegated developer this win was getting an environmental permit for the project with a positive financial outcome.

The process costs were higher as described by both the developer and in the municipal evaluation. Moreover, the developer stated that their first plan did not succeed due to regulation on wind and their second plan on financial feasibility. Especially, the first plan was in a stage in which high costs had already been made. However, the duration of the process (including that of the land-use plan) was relatively short (TwynstraGudde, 2021).

The quality of the process of this project is stated to have been less than another project in the area a couple of years prior when the land-use plan had not been finished yet. Although this also had to do with a different economy it was also different due to the new land-use plan and its regulation.

The inclusiveness of the process and the democratic legitimacy, and accountability were similar. How in the evaluation it is also stated that in the initial phases towards a new land-use plan (after the crisis - and herstelwet was allowed to be used), only a small team of legal -and management consultants was involved with the new land-use plan. Later on, this was tried to be expanded but this had its difficulties due to a low sense of urgency and high turnover of employees (TwynstraGudde, 2021).

The network and within this, the development of relationships, shared perception, and shared perceptions started at e previous project of the developer in the area. However, the relationship and network lowered during the second project while these were relatively good during the second project. It would be interesting to see if the relationship will be better during future projects in The Hague, both inside and outside the Binckhorst. Furthermore, due to the land-use plans method of general prerequisites and with the municipality mostly checking the plans there also was less contact between the developer and the municipality.

Including the first project in the area mentioned above, this project seems to have lowered the internal support for the network. This as, the relationship, trust, and similar goals have been lowered and the municipality had more demands for affordable housing (social and middle-segment) and also more interest in the area from the market.

	Assessment governance network
Content	
Joint image building	The joint image was shaped from the municipal side by the open land-use plan that was shaped by their policies. The developer's image was shaped within these boundaries. The eventual resulting design was the joint image created.
Goal intertwinement (win–win situations)	The municipality described their goal in the land-use plan which was used to gain a building permit. However, there was a difference between what the municipality wanted and what could be placed in the land-use plan.
Process	
Transaction costs and duration	The transaction costs were described as high by the developer due to the first two concepts being unsuccessful.
Quality of the process	The relationship between the municipality was described as less than good. Interesting is that the quality of the process in another development in the area with a different land-use plan (and economy) was described as much better.
Inclusiveness of process, democratic legitimacy, and accountability	The municipal evaluation described that the first phases of the process toward a new land-use plan were mostly done by legal - and management consultants. Progress in this was reported to the alderman every two weeks, but in the initial phase, there was not much other involvement.
Network	
The development of relationships, shared perceptions, institutional rules, and a high level of trust	This started during a previous project in the area where it rose while this project caused a decrease in this. In addition, the land- use plan required less contact between the municipality and the developer in a more regulative manner which might have also lowered the trust.
Internal and external support for the network (resilience and reliability) Table 19: Governance network assessme	The internal trust seems to have lowered during the project. The external trust is not mentioned as the area previously was mostly small industry and empty buildings.

Table 19: Governance network assessment project 1 The Hague.

With the parts of the governance network described for the negotiations, it seems this project had, due to the land-use plan, much less of a governance network as the municipality and the developer interacted much less with each other than in the other projects. As the majority of the land-use plan was stipulated regulatory there was also no reason to negotiate. It even seems the internal network support seems to have been lowered because of this.

8.3.4. Development agreement

The development agreement, in this project not an anterior agreement but an environmental permit, enabled a large development with about 650 dwellings. Additionally, it will also have retail, leisure, office space, creative industry and small industry. The housing in the building has been divided into 30 percent social housing, 20 percent middle-segment housing, and 50 percent in the higher segment. the sketch in Figure 36 show how the situation will be altered. Lastly, the middle-segment housing has to stay in the middle-segment for at least 20 years with the condition that rent is allowed the rise with the CPI+1%.



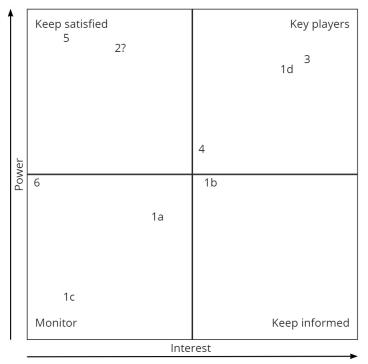
Figure 36: Sketch for project 1 Binckhorst new situation.

The influence of the veto criteria on the development starts with the permits as this had the biggest role in the development. Although it was an open land-use plan, it did not allow for the first design which would have been higher and had more floorspace in it. Moreover, the land-use plan directly stipulated the amount of middle-segment housing to gain a permit. After this, the second veto criterium was the financial feasibility which made the developer aim for smaller housing while the housing association was only interested in bigger (family housing). This caused somewhat longer negotiations between the developer, the housing association and the municipality. At last, the land acquisition was not an issue as it was already owned by the investor without land lease or any other conditions on the land.

8.3.5. Influence on the development

The influence in the development was in the Binckhorst mostly through the developer and municipality through the land-use plan. However, more actors were involved and place in the power interest matrix in Figure 37. Starting with the to be monitored parties the buyer/future owner was found later on in the trajectory towards a permit which means they had not much power during the negotiations and not being there also means they had no interest. After this, the municipal land company, a section of the municipal department of urban development, had low power or involvement as the municipality did not have any land ownership on the lot. However, there are still included as the surrounding land is owned by the municipality which might have given them some influence. Thereafter, the section of the economy, mobility and space is the last actor to be monitored as they are responsible for the municipal economic activities throughout the Binckhorst and the public space around the buildings. After this, the municipal section for the existing city and housing is placed in the to be kept informed part of the matrix as they prescribe the municipal housing policy which, in the Binckhorst meant 30 percent social housing and 20 percent middle-segment housing.

After this, two actors have been placed in the keep satisfied quarter of which the investor is most important to greenlight the project. However, the interest in the project does not go much further than financing and progress. Also, to be kept satisfied is this alderman who checks the eventual agreement. This is also an actor who periodically checks the progress and public goals implemented in the project.



- 1. Municpality department of urban development
 - a. Economy, mobility, and space
 - b. Existing city and hosuing
 - c. Land company
 - d. Projects
- 2. Alderman
- 3. Delegated developer
- 4. Housing association
- 5. Investor
- 6. Buyer/future owner

Figure 37: Power interest matrix Binckhorst.

At last, the key players are the delegated developer, the municipal project manager(/section) and the housing association. The last of these, the housing association is placed lowest as they only influenced the size of the housing social housing. however, they had to agree to operate the social housing that was enforced through the land-use plan. Secondly, the municipal project manager from the project section did the negotiations. It is placed lower than the other projects as the land-use plan required less municipal influence throughout the trajectory towards a building permit. At last, the delegated developer is placed both high in interest and power as they did most of the decisions making for the investor. Moreover, they also coordinated the process toward the building permit.

The influence in this development differed from the other projects due to the different land-use plan. because of this, the municipality had a lower influence during the negotiation, while they prescribed more through regulation. The other actors did not have a much different role and the municipal organisation for urban development did also not differ much from the other municipalities.

8.3.6. Instrument usage assessment

The instrument usage in the Binckhorst is characterized by its land-use plan which gives a different landuse instrument to be used. In the Binckhorst the most used instrument was thus the regulatory public law method. In addition, the municipality communicated with market parties and developers who had a reservation in the system (towards a building permit) to help convey information on the land-use plan. Furthermore, the municipality did not seem to have used any financial incentives in the Binckhorst. Although, the land-use plan had a system in which each function must give some funds to the municipality which is used by the municipality to finance the urban redevelopment. In this system, the more expensive housing has to pay more while the social housing is free of charge and the cost of middle-segment housing is in between the other two.

The adapted performance assessment model is not filled in Figure 38 for the Binckhorst project to describe what caused success by instrument usage. Firstly, the municipal objective in the area was to have developed housing attain a ratio of 30 percent social housing 20 percent middle-segment housing and 50 percent higher segment housing for which there did not seem to have been a demand on minimal space. Secondly, the context of the project was in The Hague with the land-use plan as the most exceptional part of the area. In addition, the Binckhorst is also an area that goes from a small industry area to a mixed area like the Project in Amsterdam. Furthermore, this project is the first one in which there no small amount of land needs to be bought, with land lease or conditions on the land. This has caused an input of a wicked problem in a redeveloped area which when connected to the fourth part of the adapted model, the activities, saw some difference from the other projects. In the activities, the role of the municipality was much smaller than in the other projects due to the land-use plan. The negotiations in the governance network also included a local housing association that required bigger social housing for their cooperation. The municipality's influence was regulatory through the land-use instrument which meant there were few negotiations on these parts. However, the municipality did help the developer by informing them of the land-use plan throughout the trajectory towards the building permit. This led to the eventual output, an environmental permit instead of an anterior agreement that includes 20 percent middle-segment housing.

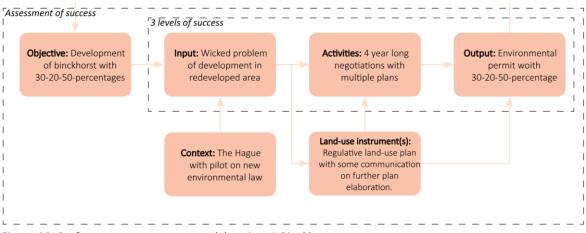


Figure 38: Performance assessment model project 1 Binckhorst

In this case, the success is the development of 20 percent middle-segment housing (and 30 percent social housing outside the scope of the thesis) for the next 20 years with an average price per square meter. The usage of the land use instrument influenced the success by stipulating the requirements. However, these regulatory requirements do not contain any article on minimum dwellings size which will most likely have an influence on the average dwelling size in the eventual building. The instrument usage has also cost more in activities for developers through research (TwynstraGudde, 2021).

8.4. Conclusion

This was the last chapter that is used to describe success in creating middle-segment housing through developments by sub-question 3: '*How are these instruments used and is success influenced*?'. The Binckhorst has a different legal framework than the other cases with a heavy influence through regulation. The governance network differed due to a small municipal role during the negotiations and a role for the housing association that will operate the social housing in the plan.

In this, the delegated developer played an important role in starting the project and the municipal landuse plan in creating middle-segment housing. because of the smaller role of the municipality, there also was less of a governance network and more of a checklist from the municipality that checked the landuse plan. Moreover, due to the investor already having acquired the land, the only two veto criteria were the financial feasibility and gaining permits. Therefore, the task of the developer was mostly to make a plan that fits the land-use plan and is financially viable.

However, the regulations in the land-use plan were described as difficult to work with due to its complexity. This made it difficult to make a design that was both possible within the boundaries of the land-use plan and financially feasible. Although, the strict percentage of middle-segment housing did assure the minimum of 20 percent middles segment housing. It thus seems that the land-use plan was the reason that the middle-segment housing will be created. However, the land-use plan is also designed for this.

With this, the cases are now compared in more detail in the next chapter to answer the third subquestion and to determine what success the different land-use instruments and methods of using them has.

9. Cross case analysis & recommendations

This chapter combines the data from the cases in chapters 5, 6, 7, and 8 to assess the success of different land-use instruments. With this, the third sub-question: 'How are these instruments used and is success influenced?' is answered. However, the instruments as described in 4.2 are more often not used in themselves but combined with other land-use instruments. Therefore, the cases are placed in multiple typologies. However, as all municipalities had success in creating middle-segment housing there will first be made a comparison of their relative objectives and outputs as these differed considerable per municipality. These objectives and outputs will also be assessed through the 3 levels of success and what factors played a role in the output. After this, the cases and their typologies are described with the used land-use instruments.

After this, the fourth sub-question 'What recommendations can be made on creating middle segment housing?' is answered.

This chapter will describe the success of different land-use instruments in the opposite order of the case studies. It will start with a description of the output and objectives in the cases. After this, 3 levels of success in the cases are described, and important factors in the projects are given. This is followed by placing the instruments usage in the cases in the typologies found in chapter 4. With this, the other factors can be weighted in for success and the fourth sub-question is answered.

After this, the context is used to describe what objective might require what land-use instrument typology. In addition, as some projects have more in common, they will be compared more to each other. These are Amsterdam and The Hague/Binckhorst and Rotterdam and Utrecht described in this order from most to least regulative. At last, a discussion is given on the research findings.

9.1. Middle-segment housing in cases

This chapter will go into the success of creating middle-segment housing in each of the case studies and compare the success through instruments.

9.1.1. Output and objective

In each of the cases, the municipalities all had success with the (future) creation of middle-segment housing. However, each of the cases had different objectives for middle-segment housing which also leads to a different output. Moreover, in all cases, the percentages, size and minimal years of the middle-segment were discussed during the negotiations. Often social housing was also seen as a part of the negotiations on the middle-segment as this is not as profitable as unregulated rent. This had a different influence on the created middle-segment housing which must be described. Additionally, three other factors which were important in the negotiations are also described, as lowering demands on these made it easier to create middle-segment housing. These are the amount of social housing, the size of the dwellings (in the middle segment), and the number of years the dwelling will stay in the middle segment. This is shown in Table 20 and will now be further elaborated upon.

	Objective (%)	Output (%)	Social (%)	Size (m2)	Years remain
Amsterdam	40	40	40	30-40	25
The Hague	20	20	30	-	20
Rotterdam	30	30-50	20*-0	40-60	15
Utrecht	30	50	50	50-80	20
* laura due minera ante an acciella accient					

*= lowered requirements on social housing.

Table 20: Objective, output and other conditions in cases.

In alphabetical order, Amsterdam had the highest objective in percentages which is also executed. The social housing developed was the same at 40 percent which is the second highest of the cases. The size of the middle-segment dwellings is mostly 2 -and 3-room apartments around 30 to 40 square meters.

With a 25-year period for which it must remain in the middle-segment which is the longest of the four municipalities. Additionally, it was also stated in the interviews that smaller dwellings were allowed as this was not enforceable and it was the first development in the area.

The Hague uses 20 percent middle-segment housing and 30 percent social housing, the same percentages that are used citywide and were also successful in making these percentages through the land-use plan. Although the size of the dwellings is not enforced, only a square meter price, might lead to smaller dwellings. At last, the dwellings stay in the middle-segment for an average period of 20 years (together with Utrecht).

The municipality of Rotterdam had two different outcomes in their projects with the same objective of 30 percent middle-segment housing. One project had 30 percent middle-segment housing and 20 percent social housing (for students), while the other project had no social housing and 50 percent middle-segment housing. The average size of the dwellings has been determined by municipal policy (40m2 average in the city centre and 60m2 in the 'green' parts) and is with 40 and 60 square meters average about the same as Utrecht. However, Rotterdam has a relatively short period of 15 years during which the housing has to remain in the middle segment.

Lastly, Utrecht has an objective to alter the housing supply towards an average of 35 percent middlesegment housing and 35 percent social housing in the municipality. The project in Utrecht is 100 percent middle-segment but 50-50 has been filled in as there is a switch in the land to bring social housing to another part of the city. The reason for this deal is part of the initial plan from the developer and a housing association. Moreover, the middle-segment dwellings are going to be created according to municipal policy in this area. These are dwellings with a minimum of 50 or 80 square meters depending on the rent that will stay in the middle-segment for at least 20 years.

The output was thus often the same or otherwise related to the municipal objective. Rotterdam used its land-use plan and different policies to negotiate certain requirements which could then be altered or lowered in the favour of the developer or municipality. This has been successful in creating middle-segment housing but lowered other public objectives (such as social housing). Additionally, in Utrecht there was no need to lower other public objectives as the plan presented to the municipality already. This will be further described in the three levels of success bellow.

The housing size also differed per case municipality which is mainly due to there being no definition of middle-segment housing by the national government. In this, the municipalities of Utrecht and Rotterdam have the highest average minimum. Although, Amsterdam had lowered its demands in the project due to it being the first project in the area and not being a way to enforce it. The Hague only uses an average price per square meter in rent. Meaning a developer can choose to make bigger dwellings with more rent or smaller dwellings with less rent.

The results and concessions for a certain output were the consequence of the factors which are described by the three levels of success.

9.1.2. Three levels of success

The three levels of success have been described in the cases through the context, governance network and veto criteria. This section will go into the 3 levels of success as the reason for the output. This is done by describing why the middle-segment is made in the cases and what the most important cause(s) were for this. Moreover, the instrument used and its influences on the eventual success are also taken into account. Starting in Amsterdam, municipal instrument usage was focused on the regulatory and stimulating fields. Therefore, the municipality used partial ownership of the plot to gain more influence over the development. Additionally, the land-use plan was used to make the financially unwise to oppose the municipal requests. In this, the land acquisition from the veto criteria played an important role together with the permits. Moreover, the municipality influenced the financial feasibility by giving financial incentives to the developer which was agreed upon due to the political will for this. Furthermore, the relatively small sizes of the lots in the area made it unattractive for the municipality to enforce certain percentages on each lot. This resulted in some developments having more or less middle-segment and social housing. However, due to the importance of the project in the area and it being the first development, the municipality found it important that this building would be aligned with the 40-40-20-policy.

Moving onto The Hague, here the land-use plan had the most influence on the middle segment. In the context here, a land-use plan pilot created the land-use instrument used and had an important role in the input. Among other reasons, the municipality used this land-use plan to speed up the process of urban redevelopment, lower research costs, and bundle regulations (TwynstraGudde, 2021). The developer had already acquired all the needed land for the development. Therefore, only the permits and the financial feasibility were addressed as veto criteria during the negotiations. Because of this, the land-use plan made the development itself a puzzle between gaining a permit and getting an optimal financial return on the to-be-developed project. However, the success of the middle-segment housing was there due to the regulations in the land-use plan.

In Rotterdam, the municipality mostly uses stimuli and regulations to obtain success in creating middlesegment housing. Within the veto criteria, the financial feasibility was stimulated by lowering the requirements for social housing. This is possible due to the municipal policy and political backing to develop less social housing if middle-segment housing is made. Additionally, it also helps if a project is in a neighbourhood with predominantly social housing.

At last, Utrecht had a different kind of project due to the good relation between the three key-actors involved. Because of this, the governance network played an important role in making a financially feasible business case. In addition, it also helped that the goals of the three key-actors were aligned, the housing corporation got new and more housing, the developer got new middle-segment housing and the municipality had several policy objectives succeed. The land was owned by the involved actors and could be traded with the municipality's approval for the new function. Besides the high amount of trust, political will was also seen as important. Lastly, the high amount of social housing in the area was part of the reason why there was more political will to create an agreement.

This leads to the table shown in Table 21 which shows what influenced the eventual output. This starts with the influence of the veto criteria which had a big influence on the development through the land acquisition, financial feasibility, and the permits. Although, only in Amsterdam land acquisition was used as a veto criterium in creating an agreement. However, this was done through land-use instruments which made it difficult to not buy municipal land for the development. With this, municipal landownership is also seen as a part of the context. however, the use of land-use instruments made it part of the veto criteria. In the other cases, the permits were used to require middle-segment housing in the development. This then clashed with the financial feasibility of the project which required the municipality to give some kind of financial incentive as a stimulus.

	Veto criteria	Relations in the governance network	Context
Amsterdam	Land acquisition & Permits	A strained relationship, but it had a low influence on the project	Political will, Policy & Land position
The Hague	Finance vs. Permits	A deficient relationship, but it had a low influence on the project	Land-use plan
Rotterdam	Finance, Permits/instruments	An adequate relationship, but it had a low influence on the project	Political will & Social housing
Utrecht	Financial feasibility	Excellent, with a high influence on the project outcome	Political will & Social housing

Table 21: Influence levels of success in cases.

The governance network was only important in one project which was in Utrecht. However, if there would not have been a lot of trust in the Utrecht project, it would have been more similar to Rotterdam. Furthermore, in the other projects, the governance network relied on the relation between the developer and the municipal civil servant(s) in which there seems to be a difference in how consultants were used. In the projects with a better relation, they were used in an agreement between both parties, while in projects with a more strained relation, consultants were used to prove an argument for an actor.

The influential parts of the context have been placed in the contours of a PESTEL-analysis in Table 22. With this it can be seen what important factors in the context of a project can be when trying to create middle segment housing this starts with the influence of political will in developments in the political field. After this, the high demand in middle-segment housing is placed in the economical part. This is important for the investor and developer due to the lowering of the risk on vacant dwellings. This is followed by the social field in which an abundance of social housing was a factor that made the municipality more positive on more middle-segment housing. No factors in the technological field were found. After this, in the environmental field a low land value a consequence of predominantly social housing area or small industry area impacted the financial feasibility of a project positively. Lastly, in the legal field the land-use plan and land positions can influence the success in creating middle-segment housing. Moreover, these factors also had influence on the actors in the governance network.

	Political	Economical	Social	Technological	Legal	Environment	tal
Influence	Political will	High demand for housing	Predominantly social housing area	-	Land-use plan, land positions, policies		value social

Table 22: Context factors in PESTLE-analysis.

The factors in the context could influence the project positively in different ways. Moreover, the context was often influential through the political will to make a project succeed. Except for the case in The Hague in which the land-use plan was important in the context. This gives some overlap with the veto criteria and the governance network. This should be seen as the (different) land-use plan being part of the input which influenced the negotiation in the activities which in turn influenced the veto criteria in the output. Furthermore, an abundance of social housing in the area makes the creation of middle-segment housing align with a municipal policy which helps in the development process. At last, in Amsterdam a partial landownership position and the land-use plan were used to influence the development.

With this the project in the cases are described and only the instrument usage has to be described before the cases can be compared.

9.1.3. Instrument usage and typologies

The three typologies from the literature are the sermon, carrot, and stick (Bemelmans-Videc et al., 1998). These are also described as the communication means, stimuli and regulations which played a role in the developments, and some played a more important role in certain developments than others.

The development which was mostly focused on the typology of communication was Utrecht. This development kickstarted through a pitch for a competition. The plan already contained the necessary amount of middle-segment which meant there was no need to use regulatory pressure. However, this project also had support from financial stimuli by lowering certain costs for each of the parties. Although, this is not a direct subsidy, but it lowers revenue.

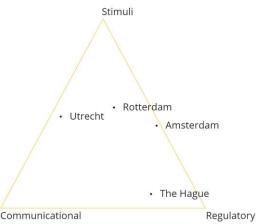
In the next case, Rotterdam, the land-use instrument used focused most on the stimulating typology. This was also done indirectly, by lowering the requirements for social housing or taking the social housing out of the requirements completely, to have success in creating middle-segment housing. Additionally, the other two typologies were also used. An action plan for the middle-segment is used to communicate to the market (Utrecht also has one). At last permits, eternal land lease and conditions earlier sold land are used in the regulatory typology to have a small stick.

The first case in Amsterdam was more focused on the regulatory and stimulating typologies. This started with the use of pre-emptive right to make the sale of land to third parties not possible. When the municipality found that the project plot had already been sold to a developer, regulations in the land-use plan were used to make it financially unwise not to cooperate with the municipality. This is then also the carrot the municipality used in which it was willing to give direct funds to successfully create middles segment housing. The last typology, communication, was less used as a new land-use plan for the area was being made during the negotiations.

The last case, The Binckhorst in the Hague, used the most regulatory land policy. This was done through a land-use plan that prescribed an amount of middle-segment housing to attain a building permit. In the communicative typology explanation of the land-use plan was given, by written documents and orally, by guidance during the trajectory towards a permit. Lastly, in the stimulating typology lower cost for the middle-segment housing was used. However, this is not seen as stimulation as the regulatory framework was the sole reason for middle-segment housing.

In the last case, municipal land-use instruments in the case of municipalities and their relative focus in each of the typologies have been placed in Figure 39. From this, it can be learned that The Hague and Amsterdam have a similar approach to regulation but differ in communication means and stimuli. Furthermore, Rotterdam is roughly in between Amsterdam and Utrecht with a bit more of a focus on stimulating the project. At, last Utrecht is placed in between communication and stimuli as very low regulatory pressure was needed.

The implementation of housing policy through passive land policy thus differed per municipality. Moreover, even the usage of passive land-use instruments differed per municipality which also had different consequences on the output and during the negotiations.





9.1.4. Compare cases on instrument usage

The cases and the instrument used in the cases are now done by matching the cases and describing the result of different approaches. The more similar cases are The Hague and Amsterdam due to the context and typology of instrument usage. And Rotterdam and Utrecht are also more similar due to context and instrument usage.

Amsterdam and The Hague use different methods to regulate new development in areas that are being redeveloped (from small industry to mixed neighbourhoods). Interesting might be that both cases had more friction during the negotiations. Although both projects reached their respective objectives, Amsterdam had a higher objective of 40 percent middle-segment over The Hague's 20 percent.

In implementing the municipal land policy, Amsterdam uses an almost active land policy by pre-emptive rights to gain influence in developments in the area. However, some land had already been bought by developers who aimed to develop it outside the jurisdiction of the pre-emptive rights. Because of this, the municipality uses the combination of stimuli with the tread to use an exploitation plan if no agreement was reached. This required more municipal stimuli than The Hague as the municipality here only used exploitation plans to give permits through a pilot on the new regulation. The method used here also placed most exploratory research for a development in the developer responsibilities which also helped lower the municipal cost during the negotiations and for the output.

Rotterdam and Utrecht had a similar context and use similar instruments in implementing housing policy. Both used stimuli by indirect means through lowering municipal taxation or by lowering other requirements. However, Rotterdam made more use of the option to deny a permit in the regulative typology, while Utrecht could focus more on communication due to a developer already complying with municipal policy by public policy documents.

9.1.5. Conclusion success of instruments

This chapter firstly aims to answer the third sub-question: 'How are these instruments used and is success influenced?' Each of the passive land-use instruments had success creating middle-segment housing. However, it can also be stated that the success differed per case as each of the cases used different methods to create some percentage of middle-segment housing. As shown in Figure 39 the case municipalities used multiple and different typologies for developments.

In the regulatory typology, the municipality of The Hague used the Binckhorst as a pilot for new regulation in which it only used the public law option for developments. This made it so that the development needed at least 20 percent of middle-segment housing, or no permit could be given. After this, in between the regulatory and the stimulating typologies in Amsterdam with the use of the regulatory (public) thread and the anterior agreement negotiations to stimulate the middle-segment housing. Here the 40 percent middle-segment housing was created through a combination of regulatory pressure and financial incentives. This is followed by the municipality of Rotterdam which mainly uses regulation and stimuli but also has policy documents in the communicational typology. In the implementation of their housing policy, the municipality stimulates middles segment housing by lowering other requirements. At last, Utrecht had a project in which there was a good relation between the municipality and the developer which lowered the need to use the regulatory land-use instruments. This caused for unused regulatory instruments and a focus on communicational means and stimuli. Due to the plan of the developer and the housing association to only make social- and middle-segment housing there was high trust from the municipality. This later led to an agreement in which each of the parties gave some revenue away to create a feasible development.

The more regulative policies thus have the same amount of middle-segment housing as demanded, while less regulative means give the possibility to have more middle-segment housing. The most

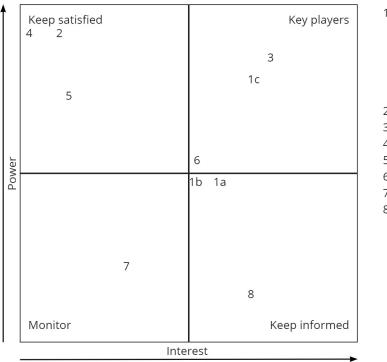
regulative approach, however, had the advantage that most research costs went to the market parties while these costs seem to have been shared in projects done more by stimuli. Additionally, there also seems to be a connection between more strict regulative instruments and lower levels of trust. Moreover, from the cross-case analysis, it is learned that the context was a crucial in each of the cases through a number of reasons. Therefore, the next chapter and the last sub-question, on recommendations, will look into what context and instruments are most suitable to create middle segment housing.

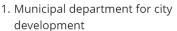
9.2. Context and successful middle-segment housing

This sub-chapter aims to answer the fourth and last sub-question:" What recommendations can be made on creating middle segment housing?" This is a follow-up from the previous sub-question in which it was asked what influenced success. This sub-chapter aims to describe the usage of instruments in the context of the cases. In this, similar projects are compared. Therefore, two types of contexts have been distinguished in which the municipalities used different approaches. Moreover, there exist more contexts that were absent in the cases. However, these contexts discussed below were found in the projects. Therefore, the adapted model of Dooren et al. (2015) is used to match a housing objective and context to a certain land-use instrument combination.

9.2.1. Influence in governance network

Additionally, for the governance network, the general power interest matrix (from chapter 2) has been updated in Figure 40. This has been made through the experience with the case studies and is still a general model as the cases did have differences. However, the power interest matrix shown still gives an idea of who are more powerful and interested actors in governance networks for developments. This starts with the key players in the upper right corner. In this are the delegated developer and municipal section of project management who are most prominently part of the negotiations. In this, the developer can also be the owner of the land (instead of being delegated) and the investor is later found, in which case the developer has more power. Furthermore, the housing associations have been added to this square as they had a role in the governance network in two of the projects by being involved with the negotiations.





- a. Economic affairs
- b. Spatial planning
- c. Project management
- d. Land company
- 2. Alderman
- 3. (Delegated) Developer
- 4. Investor
- 5. (Landwoners)
- 6. Housing associations
- 7. Consultants
- 8. Local interest group

Figure 40: Power interest matrix in general updated

After this, in the left upper quarter, the actors who are to be kept satisfied are the alderman (that ultimately agrees to the permit), the investor, and a possible landowner. From these, the alderman is mostly aimed at alignment with municipal policy and is not much involved in the negotiations themselves. This is similar to the investor who is mostly interested in gaining a building with which a minimum return can be made. Lastly, the landowner(s) differed per project but had more influence through land ownership. The bottom half of the matrix contains the parties that had to be monitored or kept informed. In this, consultants were involved by supporting certain decisions or being in between parties. The municipal section for economic affairs, spatial planning, and land company were part of the decision-making process within the municipality but were not directly involved with the negotiations. At last, some local interest groups were involved who had some influence but were mostly to be kept informed.

9.2.2. Instrument and context

Two types of contexts have been found in the case studies. These have been determined through the influence the context had and the instrument usage that came with this. From sub-chapter 9.1, it is determined that important factors in the context are the political will, land position, land-use plan, and an abundance of social housing in the area. Moreover, what also played a role was that two municipalities (Amsterdam and The Hague) had a more regulative approach than the other two (Rotterdam and Utrecht). One of the reasons the municipalities chose this in these projects was that these were redeveloped areas going from predominantly small industry to mixed neighbourhoods. This resulted in the use of the land-use plan, land positions, and the political will to implement the municipal objective in the area, which meant middle segment housing.

In the other cases (Rotterdam and Utrecht) the developments were in existing (residential) area in which a single plot was altered instead of the whole neighbourhood. Because of this, the municipality did not have a strict vision for the development and more general policy document were used to determine the municipal objectives. In the implementation this meant that the municipality was less aimed at the regulative typology and more at what objectives could be achieved in the development. Therefore, two types of contexts have been identified, a development as a part of a area redevelopment and a development in an existing (residential) area.

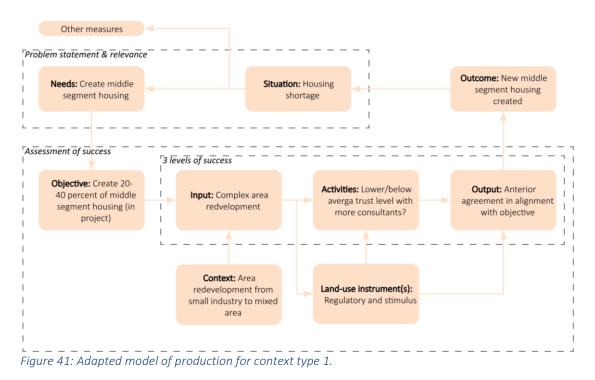
These were the area redevelopment from small industry to mixed neighbourhoods and the redevelopment of plots with to be demolished buildings which would be replaced by a new project. The Hague and Amsterdam are the first type and Rotterdam and Utrecht have the second type of context. Although, the cases still show similarities due to the used selection criteria and how these projects seem to kickstart. Moreover, besides different context types and instrument usage, the projects also had different relations in the governance network seemingly due to the instrument usage.

Context 1: Development in small redevelopment area

Figure 41 shows the adapted model of production with the first context, areas that are redeveloped from predominantly small industry to mixed urban areas with housing and other functions. In this, the objective for middle-segment housing differed from 20 percent to 40 percent. However, in both cases the output and the objective are the same. Within the three levels of success, the governance network, in the activities, was below-average amounts of trust or even bad. The instrument usage was focused on the regulatory typology with some stimulus to higher the financial feasibility.

It is not possible to state that one policy is better however the approach used in Amsterdam had higher results but was more expensive for the municipality. This, while the approach in The Hague was less expensive but had a much lower result in the form of created middle-segment housing. Additionally, the land-use plan in the Hague required most municipal work up front to let the market do all work after the land-use plan was finished. This most likely helped lower the municipal costs. Therefore, the passive land policy used in The Hague seems to be more useful when a municipality has a lower budget and

does not want to actively participate in each development, while in Amsterdam the municipality was more active in each of the development. Moreover, the passive land policy used in Amsterdam also requires a plan to be set up by the municipality which is actively pursued in development with few exemptions.



Context 2: Development in existing environment

The second type of context is found in the project in Rotterdam and Utrecht, where a building was demolished for a new project which would also include (middle-segment) housing. These cases had a passive land policy with less regulative power and more stimuli and communicational means. In the three levels of success, this seems to have given an above-average level of trust. Moreover, the amount of middle-segment housing was also higher than the municipal policy required. However, this did not always have to do with land policies.

This has been added to the adapted model of production in Figure 42. Here the similarity between the cases is shown through the context and the usage of the land-use instruments. In this, the municipalities had a similar objective in the amount of middle-segment housing to be created (30% & 35%). The context was also similar to redevelopments by demolishing older buildings, political will for the projects and an abundance of social housing in the area (only 1 of the projects in Rotterdam). This led to negotiations that were on relatively good terms compared to the other contexts. The result of the negotiations and the instrument used was a success in creating the same amount or more middle-segment housing than required by municipal policy.

Between Utrecht and Rotterdam, the main difference in instrument usage was the usage of few regulatory pressures by Utrecht due to the plan already aligning with municipal policy. However, the approach used in Rotterdam is more aimed at finding agreement with the market by lowering municipal objectives that are pressing on the financial feasibility of a project. This while, Utrecht is more focused on mirroring municipal policies in projects for which it is willing to give financial incentives as long as a market party does this too.

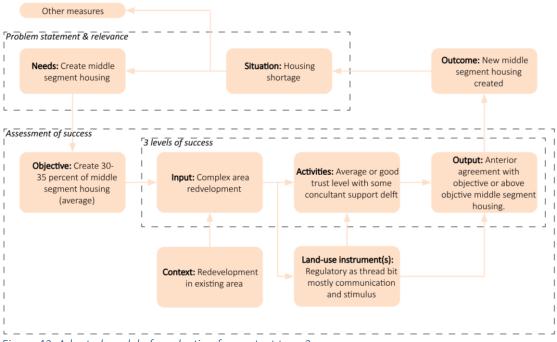


Figure 42: Adapted model of production for context type 2.

Conclusions

Two types of contexts have been used in the cases that still shared similarities due to the demolishing of an old building for the creation of a new building with middle-segment housing. These mostly differed in the type of area, instrument usage and the level of trust in the governance network. The municipalities seemed to use more regulative measures in area redevelopment, while more stimuli were used in redevelopments of single plots. Interestingly, as earlier described there seems to be a similarity between levels of trust and regulative land-use instruments. Therefore, it might be concluded that less regulative measures give, on average, more trust between actors in the governance network. However, this does not give more success, but it might give more incentives for the parties to find a response to the wicked problem which is most profitable for the key actors. Moreover, in the context itself, the will of different parties to come to an agreement mattered a lot as without it the negotiations would have simply stopped.

9.3. Discussion

This discussion reflects on the result of the case by describing the contributions of the research, the limitations of the contributions and advice on further research.

9.3.1. Contributions

The academic relevance of the findings is mostly related to the combination and usage of three model from the literature to assess the success of municipal land policy. Therefore, the production model of Dooren et al. (2015) is altered to measure success in a development through the three levels of success by Franzen et al. (2011). These are the context variables that are part of the project, veto criteria/ necessary condition that are needed for a project to start and the critical success factors which are the soft conditions in relations, trust, and leadership. as these are difficult to measures, they are described in the theory of governance networks and wicked problems by Klijn and Koppenjan (2016). This has led to a model that allows the assessment of the success of Dutch land-use instrument to create middle segment housing in developments.

The adapted model is tested by describing four case municipalities in which the municipalities had success in creating middle segment housing. This had led to a number of factors that play role in the instrument usage and the effects of the instruments themselves. Moreover, 2 types of contexts are compared with the instruments used and the output while taking in account the contexts.

The adapted and assessed model may be used by municipal policymakers to describe and assess the implementation of their housing policy through their land policy. This may be used to give rise to the production of middle segment housing which, in turn, lowers the housing shortage in the Netherlands. Furthermore, with more contexts described the model can also be used to analyze what contribution certain land-use instruments give. However, as the model is mostly descriptive it is difficult to assess the performance of different policies up against each other. Although, it can still be used to compare the context, activities an output of land policies.

For those involved with municipal policies and land policies this research has introduced an adapted model with which the implementation of a policy can be assessed. This can help other research in assessing similar land policies and describing the differences between different places. With this it expanded altered the model of Dooren et al. (2015) to describe and assess a combination of land-use instruments used by municipalities to implement a policy. Moreover, it also combines three parts from the used literature to elaborate on success in developments and describing the complex relations in a governance network and a wicked problem. With this, the research can further be used to determine what factors can create success in developments.

9.3.2. Limitations

This research tried to assess the usage of land-use instruments used by Dutch municipalities. Specifically, on creating middle-segment housing in development with low municipal ownership and in a network of public and private actors acting on a wicked problem. In this, it was found that Dutch municipalities through communication, stimulus and regulation are able to higher the amount of middle-segment housing built in developments. Although, the instrument usage was mostly different than expected due to the combination of the different instruments during a negotiation period between a developer and a municipality. However, one case did focus on only the regulatory typology which gave a different but still successful process. In the other cases, the combination of instruments also leads to the creation of middle-segment housing. Here, the municipalities used a combination of land-use instruments to create middle-segment housing. This was often the combination of regulatory pressure together with incentives to enable the financial viability of the projects.

The assessment was partially successful as the research question can be answered. However, there are some limitations to be made due to the research methods used and the number of used cases.

Due to the usage of the qualitative research method, a framework for the assessment of land-use instruments is made which is then assessed. Because of this, the research made for the situation is predetermined by the made framework. This has been lowered by using literature and by testing the model in four cases and five projects. From this, it can be stated that although the model has some issues it can be used. The experienced issue was mostly that it is difficult to place certain parts directly in one it the boxes. For example, land ownership or acquisition is placed in context as a given but is also part of the veto criteria.

As part of the qualitative research, several case studies have been done. However, during the research few projects could be found, and one project fell off which resulted in fewer projects than desired. Because of this the research findings cannot be seen as a certain description for every project. Although, to give the research a stronger foundation it was also discussed with the interviewees whether this was a more standard project or that they stood out. Additionally, the context described as a part of the framework also showed what the differences between the projects were. From this, it can be concluded that the project all had some similarities with the other projects and had a similar context with at least one.

It should also be taken in account that most Dutch municipalities have not been using the passive land policy to create middle segment housing for a very long time. Because of this, most municipalities do not have a very strict policy on this, and often new methods are tried out in cases. Therefore, the further research might see some difference in the instrument usage by Dutch municipalities.

9.3.3. Further research

As described above there are some issues with the research. However, these might be solved with future research on land-use instruments. The four described issues are: the used research method, few cases in general, few cases in the municipalities, and municipalities are still making and tweaking their passive land policy. Because of this there is a need for further research on some the implementation of land-use instruments. This starts with simply analyzing and assessing more cases to better understand what actors and factors play a role in land policy implementation. Moreover, it would also help to assess the imperfection of the qualitative research in which a new model is tested on described categories. This would also help to further define the contents of each of the boxes in the framework, lowering the uncertainty of what belongs were. Moreover, it would also be possible to do more cases in the same municipalities and over time which would increase the workability of the model. Most important, is thus to do more case research on the adapted framework to further expand the workability and certainty of the model.

When this is achieved it might be possible to make performance indicators for the assessment of landuse instrument that would allow for quantitative research of land-use instruments. However, this is far from possible with the current model.

9.4. Conclusion

This chapter uses the case studies done in chapter 5, 6, 7, and 8 to answer the third and fourth subquestions. These are: 'How are these instruments used and is success influenced?' and 'What recommendations can be made on creating middle segment housing?'. This has been done using the empirical research from chapters 5 to 8 which has been compared in a cross-case analysis. After this, a recommendation is given on instrument usage in context. At last, a discussion on the findings is given through the contributions, limitations, and further research.

Although the case cities use their respective passive land policies in different contexts and projects, some conclusions on the use of the used land-use instruments can be drawn. Through the adapted model of performance, the success of the land-use instruments is assessed in case municipalities.

To answer the third sub-question, all the land-use instruments are successful in creating middlesegment housing. However, success can differ due to differences in the municipal requirements in a land policy. Moreover, the usage of more regulatory land-use instruments seems to influence the relations and level of trust in the governance network. Furthermore, the success seems to be higher or above the objective when the municipal land-use instruments that focus on stimulating are used. However, the downside here is that the municipality has to give something to stimulate the project.

For the fourth sub-question, two types of contexts found in the cases have been coupled to the used instruments. The found context were determined through the influential factors in the context (see Table 21 and Table 22). The first of these is a development in an area with small industry which is turned in a mixed area in which the municipality has a more thoroughly set up plan for the redevelopment through land-use plan and area visions. After this, the second type is a redevelopment of a lot in an existing area where a municipality does not have a specific plan for the area. This gives the municipality more incentive to use objectives from more broad policy documents which may increase the chance of shared interest in the governance network.

The first context type are projects that were part of an area redevelopment in which there was a stricter use of regulation to (almost) enforce the municipal housing policy. This was effective in one case due to the research cost being placed in the hands of the market. However, the other project did not have this and required higher costs for the middle-segment housing. The difference here was to use a land-use plan entirely focused on regulation. Although, the amount of middle-segment housing created was much lower.

In the second context type, the projects were redevelopments in existing areas which had instrument usage which was more focused on creating a financially viable option by a stimulus. Stimulating was here also easier possible due to the high amount of social housing in the area, which allowed for the lowering of social housing requirements to stimulate the projects. Additionally, political support for these changes was required. Although, it should also be noted that the municipalities had the option to refuse to cooperate with a building permit which the developer needs. Therefore, the developers were more inclined to cooperate.

The last part of the chapter discussed the findings of the research and the cross-case analysis. The research contributes to the academic and societal fields. For the academic field, the research makes a contribution by making and testing a framework for the assessment of the implementation of municipal policies through land-use instruments. Then in the societal field it gives a method to compare different passive land policies on creating middle segment housing. Moreover, a short conclusion on instrument usage is given and what factors and actors are important in the success of land-use instruments.

However, the research also has it shortcomings of which the limitations should be taken in account. In this research, this is because of three reasons. Firstly, the quantitative research method has the research makes a framework but everything outside this in not visible. Secondly, the few cases have been used which lowers the certainty that these cases are the average or a very different than average type of cases. Lastly, the policy for middle segment housing is still a work in progress that might change in most municipalities.

Therefore, further research should focus on doing more case study analyses to expand the knowledge on both the model and in what influences the success of land-use instruments in different conditions

10. Conclusions & recommendation

This conclusion starts by answering the sub-questions asked to then answer the research question. After this, a recommendation is given on creating middle-segment housing by passive land policy and the use of the adapted production model of production of Dooren et al. (2015).

Sub-questions

Starting with the first sub-question:

1) How can the success of land-use instruments as part of a passive land policy to create middlesegment housing be assessed?

The success of passive land-use instruments is assessed by the adapted performance model of production added in Figure 43. The adapted model combines three theories from the literature starting with the model of Dooren et al. (2015) to assess a public policy. Added to this, are the theory of governance networks in wicked problems (Klijn & Koppenjan, 2016) and the three levels of success in urban development (Franzen et al., 2011). Additionally, also the used land-use instrument and its influence on the policy implementation area were added.

The adapted model can be used to assess the implementation of a policy in quantitative research. it thus mostly describes the consequences of certain land-use instruments and makes them comparable to other instruments in similar contexts.

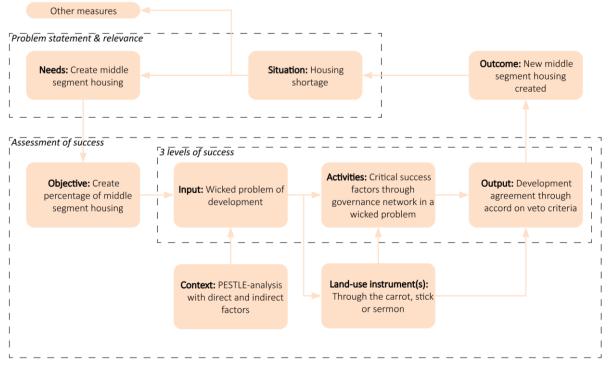


Figure 43: Adapted production model by Dooren et al, (2015) for success of instrument usage.

The model starts at the situation which in the case of the research is the housing shortage. After this, the needs that are needed for the research topic is more middle segment housing. These first two boxes form the problem statement and relevance of the topic. After this the needs are translated to the objective in the first step of the implementation of a policy. In Dutch municipalities the objective is a certain percentage of middle segment housing. Then on the right below the objective is the context of the project. In this research the context is described by a PESTLE-analysis on issues by the project is different. The context and the objective form the input, the first part of the three levels of success, that is a wicked problem of a development. After this, the land-use instrument used are determined through the input. The land-use instruments can be the carrot, stick, and sermon which then influence the

activities that are done through negotiations on a best reaction to the wicked problem. This then (hopefully) leads to a development agreement in the output. This requires a solution for the veto criteria being the financial feasibility, land acquisition, and gaining permits. An agreement on this should eventually lead to the creatin of more middle segment housing a decrease in the housing shortage.

2) What land-use instruments are used by Dutch municipalities as part of the passive land policy to create middle-segment housing?

This question is answered by a combination of literature and municipal documents on land policy. First, the literature different typologies of land-use instruments are made out. These are the stick, the carrot, and the sermon or otherwise called regulation, stimulation and communication. After this, an analysis of municipal land policies leads to several use instruments within the three typologies. In the communicational field, the usage of quotas and area vision by policy documents. These policy documents communicate the amount of requested middle-segment housing (and often also the size) to be created. Stimulus is achieved through the often (most) used anterior agreement in which the developer and municipality negotiate over the amount of middle-segment housing in a development. At last, within the regulatory means, there are two types of passive land-use instruments found. Through minimal percentages and by means of eternal land lease. From these the minimal percentages enforce a certain percentage of middle-segment housing in development. The eternal land lease is used to have some power over developments as municipalities do not have to cooperate with the alteration of this. Because of this, the municipality uses it as part of the negotiations.

In what is called the activities in Figure 43, negotiations between the key-actors in the governance network take place. These are used by the municipality to use multiple land-use instruments. For example, land lease is used as a thread to halt the project, while the municipality states they will cooperate with certain policy objectives created in the development.

3) How are these instruments used and is success influenced?

Firstly, all instruments had success in creating middle-segment housing. However, some instruments had more success than others in quantity while others had more success requiring fewer resources. The typologies described in sub-question 2 were coupled to the municipal approaches shown in Figure 39. Together with the description through the adapted model of production, some statements can be made. Furthermore, besides the effects of the instruments, some also had more or less costs in usage. For example, the municipality of Rotterdam lowered other public objectives to make more middle-segment housing while the municipality of Amsterdam used direct financial stimuli to create middle-segment housing. Moreover, the approach used by the municipality of The Hague let almost all research work be done by the market which lowered the municipal costs. Lastly, in the municipality of Utrecht, a project was used that was more of an example of how the municipality wants it to happen instead of how it always happens. However, the project is still useful as it shows how much the municipal framework can be adapted to a situation that has excellent relations between the actors in the governance network. In this project, the communication and stimulus focused instruments used helped create a financially feasible development which would not have been possible without the high level of trust between the parties.

With a more regulatory approach, the same amount of middle-segment housing was created as was required, while a less regulative approach sometimes created more middle segment housing than was required. Additionally, there also seems to be a connection between the more regulative approach and a more strained relationship between the actors in the governance network.

The passive land-use instruments are differently used by Dutch municipalities. However, there are similarities in its usage. The instrument usage is analysed in five projects and in four cases in which passive land-use instruments had success in creating middle-segment housing. In the cases, the instruments were, except for the regulative percentages, used in combination with other instruments.

Therefore, municipalities used policy documents to communicate their requirements to the market. When a developer started a project, they could already anticipate what the municipality would want in the negotiations towards an anterior agreement. The regulatory means through the land lease and permits would then be a thread if the negotiations lead to nothing. In this scenario, the municipality could refuse to alter the necessary regulative documentation which would cause the failure of the project.

The governance network, in which public and private parties work together in a horizontal hierarchy to determine what action(s) are undertaken on a wicked problem, always at least consisted of the municipality and the developer. Moreover, in some projects housing associations were also part of the key-actors in the governance network and helped start a development but were not directly involved with the middle-segment housing.

The instrument usage influenced the success in creating middle-segment in all cases in some way. This was often, as earlier described, through the combination of multiple land-use instruments which influenced the veto criteria to make the project financially feasible and give permits for a development. The success was thus created by a combination of multiple instruments.

4) What recommendations can be made on creating middle segment housing?

The last sub-question before the research question is answered tries to couple the project contexts to success in creating middle-segment housing. However, as the case study pool is relatively small and thus only two types of contexts are described through the cases which are also relatively broad.

The first type of context is in an area redevelopment with a more regulative land policy. In this, the municipality of Amsterdam had more success in the amount of middle-segment housing while The Hague had fewer costs. The Difference in land-use instruments that caused this is that The Hague solely focused on regulation while Amsterdam used a combination of regulation and stimulus. Secondly, the other context contained projects in existing areas which had instrument usage less focused on regulation and more on stimulus and communication. Therefore, the municipalities of Utrecht and Rotterdam used the negotiation to find a win-win solution for both key actors. In this, the municipalities did not use direct stimulation but by lowering costs for the developer or by lowering other requirements. For this, political support was important in the context and

Conclusion

The research question asked at the start of this thesis was:

What land-use instruments exist in the Dutch context of passive land policies to create more middle-segment housing, and how does the use of these passive land-use instruments influence the success in creating middle-segment housing in (urban) developments?

The land-use instrument used by Dutch municipalities has been categorised into three typologies, regulatory, stimuli and communicational. The regulatory instruments are the minimum percentages through public law, and the use of eternal land use (or conditions on the land use). After this, the anterior agreement uses stimulus in which a municipality can give funds or lower costs for a developer to influence the design. At last, communicational means are done through different policy documents in which a municipality prescribes certain prerequisites for their cooperation in developments.

These instruments are then used to implement municipal housing policies and influence the amount of middle-segment housing created. Therefore, the instruments are just a part of a development in which there are other factors which also influence the success of creating middle-segment housing. However, the usage of the different land-use instruments still has a primary role in the creation of middle segment housing. Moreover, during the empirical research, it was also found that the land-use instruments are mostly used in cooperation with each other.

Influence by the land-use instrument to have success in creating middle-segment housing was found but differed per case. Although there were still similarities in instrument usage and the consequence they seemed to have had on the eventual agreement. Starting with The Hague as the most regulatory typology with the sole usage of regulatory instruments which influenced the development by adding more required middle-segment housing. After this, Amsterdam used land ownership and regulation through the land-use plan to near force the developer to cooperate. Stimulus was used together with this, to get municipal objectives placed in the project. A bit further is Rotterdam which had a strong focus on cooperating with the market. This translated into lower regulatory pressure and exchange of requirements and options to create a case attractive for both the municipality and the developer. Lastly, Utrecht had the advantage of being a developer that had come up with a plan that was already aligned with municipal housing policy. Therefore, there was no need to use regulatory pressure and only use stimulus and some communicational means.

The use of the passive land-use instrument thus influenced the success in multiple ways. The relations and trust in the governance network were lower or higher with a seeming connection with more or less regulatory pressure. However, this only seemed to influence the projects through a different usage of consultants which might cause higher costs. Although, this is uncertain due to the smaller number of cases. Moreover, most of the influence was in the more important veto criteria. Within this, the municipalities used, as described in the section above, a combination of instruments to influence the projects. from the three veto criteria, permits, financial feasibility, and land acquisition, the financial feasibility was most influenced through the negotiations towards an anterior agreement. This was then supported by regulatory pressure to make it difficult not to work together with the municipality in the governance network. Lastly, communication played a role in conveying municipal requirements and requests to the market before the negotiations started.

The adapted model has been used to analyse the developments on five projects from which information on the success of land-use instruments is derived. In further research, it is advised to further distinguish the three levels of success that have been placed in the adapted model. Although, the three levels of success helped define what caused the success in a development, they also had some overlap that have made it difficult to pinpoint what lead to success besides a number of factors and actors combined. Moreover, it is also recommended that the model is used for more case study research to find more data to compare. This would also help to further determine how to categorise the loose parts of the adapted model. However, as is the existing model can be used by public parties to determine how their policy is implemented.

Discussion & recommendation

This thesis described, through qualitative research, the process of a development and the influence a municipality may have in this to create middle-segment housing. Therefore, the main task of this thesis was to find a method to describe this process and to describe this process. Although, some comments have been made on the connection between the context of a project and the instrument usage, the main aim of this thesis remains the framework and the testing of the framework by analysing several cases.

However, there are some issues with the research methods and concluded findings. These are: the qualitative research methods, few project in general and in the same municipalities, and the early use of this policy. The qualitative research analyses a project with predetermined conditions on what to research. After this, the few cases make it uncertain if the described cases are representative for the average case. Also, as most municipalities are still finding out what is effective, the passive land policies are prone to change. For all of these issues it is recommended to do more case studies in Dutch passive land policy. moreover, for the issue of qualitative research its advise to compare the results of the

adapted mode to other models for the assessment of policy implementation with a different perspective.

The recommendation will mostly advise on the further use of the adapted model of Dooren et al. (2015). In advising the use of instruments in certain contexts it is found that due to the small sample size it would be difficult to give good advice. Moreover, only two types of contexts have been found in the cases which are projects in area redevelopments with more regulative measures and redevelopments in existing areas with more use of stimulating land-use instruments. It was found that in the first context, the typology that solely focused on regulation created less middle-segment housing for relatively low costs, while the option that combined regulation and stimulus was more expensive but had more success.

In the second context, the municipal communication played an important role through the use of area vision (*gebiedsvisie*), action plans for the middle-segment (*actieplannen voor het middensegment*), and housing visions (*woonvisies*) as these policy documents convey the municipal requests to the market. Additionally, they can also be used in the regulatory typology by countering developments that do not align with the policy by refusing permits. Furthermore, within the second context, there also seemed to be more indirect stimulation of the project by lowering taxes or social housing requirements.

References

- Adams, D., & Tiesdell, S. (2013). *Shaping places : urban planning, design and development*. London ; New York: Routledge.
- BBV. (2019). *Notitie Grondexploitaties*. vng.nl: VNG Retrieved from <u>https://vng.nl/nieuws/vernieuwde-notitie-grondbeleid-bbv-gepubliceerd</u>
- Bemelmans-Videc, M.-L., Rist, R. C., & Vedung, E. (1998). *Carrots, sticks & sermons : policy instruments and their evaluation*. New Brunswick, N.J., U.S.A.: Transaction Publishers.
- Blaikie, N., & Priest, J. (2019). Designing social research: The logic of anticipation. : John Wiley & Sons.
- Boelhouwer, P. (2020). The housing market in The Netherlands as a driver for social inequalities: proposals for reform. *International Journal of Housing Policy, 20*(3), 447-456. doi:10.1080/19491247.2019.1663056
- Buitelaar, E. (2010). Window on the Netherlands: Cracks in the myth: Challenges to land policy in the Netherlands. *Tijdschrift voor Economische en Sociale Geografie, 101*(3), 349-356.
- CBS. (2021). Woningvoorraad gemeente, wijk, buurt en PC5, 2020. CBS: CBS Retrieved from https://www.cbs.nl/nl-nl/maatwerk/2020/27/woningvoorraad-gemeente-wijk-buurt-en-pc5-2020
- Debrunner, G., & Hartmann, T. (2020). Strategic use of land policy instruments for affordable housing– Coping with social challenges under scarce land conditions in Swiss cities. *Land Use Policy, 99*. doi:104993
- Dooren, W. v., Bouckaert, G., & Halligan, J. (2015). *Performance management in the public sector* (Second edition. ed.). London ; New York: Routledge.
- Eerenbeemt, M. v. d., Uffelen, X. v., & Albers, M. (2021). Steeds meer gemeenten weren beleggers van de woningmarkt met woonplicht koper. *Volkskrant*. Retrieved from <u>https://www.volkskrant.nl/nieuws-achtergrond/steeds-meer-gemeenten-weren-beleggers-</u> <u>van-de-woningmarkt-met-woonplicht-koper~bc30414f/</u>
- Franzen, A., Hobma, F., Jonge, H. d., & Wigmans, G. (2011). *Management of Urban Development Processes*. Amsterdam: Techne Press.
- Gemeente Amsterdam. (2017a). Actieplen meer middeldure huur 2017-2025. officieleoverheidspublicaties: Gemeente Amsterdam Retrieved from <u>https://repository.officiele-</u> overheidspublicaties.nl/externebijlagen/exb-2017-26771/1/bijlage/exb-2017-26771.pdf
- Gemeente Amsterdam. (2017b). *Woonagenda 2025*. amsterdam.nl: Gemeente Amsterdam Retrieved from <u>https://www.amsterdam.nl/bestuur-en-organisatie/volg-beleid/stedelijke-ontwikkeling/documenten/?PagClsIdt=14375955#PagCls_14375955</u>
- Gemeente Amsterdam. (2020a). *Herijkte voorwaarden voor middeldure huur (25 jaar) en beleidsuitgangspunten voor eeuwigdurende middeldure huur (Vervolg actieplan Meer Middeldure Huur 2020*). Overheid.nl: Gemeenteblad van amsterdam Retrieved from https://zoek.officielebekendmakingen.nl/gmb-2020-144761.html
- Gemeente Amsterdam. (2020b). *Nieuwbouw koopwoningen voor eigenaar-bewoners*. assets.amsterdam.nl: Gemeente Amsterdam Retrieved from <u>https://assets.amsterdam.nl/publish/pages/881646/beleidsregels-nieuwbouw-koopwoningen-</u> <u>eigenaar-bewoners-juli2020 1.pdf</u>
- Gemeente Amsterdam. (2022a). Policy document. Gemeente Amsterdam
- Gemeente Amsterdam. (2022b). Welke inkomenseisen gelden er voor huurwoningen? Retrieved from <u>https://www.amsterdam.nl/veelgevraagd/?caseid=%7B0D72C70E-6107-4A3E-AD2D-</u>D479ACE95C2A%7D
- Gemeente Den Haag. (2020). Woonagenda 2020-2023: Haaqs wonen. samen denhaag.raadsinformatie.nl: Gemeente from Den Haag Retrieved https://denhaag.raadsinformatie.nl/modules/13/overige_bestuurlijke_stukken/592842?paren t event=650301
- Gemeente Den Haag. (2021). Voorstel van het college inzake Actualisatie Nota voorraadbeleid Den Haag. den haag.raadsinformatie: Gemeente Den Haag Retrieved from

https://denhaag.raadsinformatie.nl/document/10956314/2/RIS311091%20Voorstel%20van% 20het%20college%20inzake%20Actualisatie%20Nota%20voorraadbeleid%20Den%20Haag

- Gemeente Den Haag. (2022a). De Gemeentelijke Organisatie Retrieved from <u>https://www.denhaag.nl/nl/bestuur-en-organisatie/gemeentelijke-organisatie/de-</u>gemeentelijke-organisatie.htm
- Gemeente Den Haag. (2022b). Huisvestingvergunning aanvragen. Retrieved from <u>https://www.denhaag.nl/nl/vergunningen-en-</u>

ontheffingen/woonvergunningen/huisvestingsvergunning-aanvragen.htm

Gemeente Den Haag. (2022c). Overzicht nevenwerkzaamheden directeuren.

- Gemeente Eindhoven. (2020). *Woon programma Eindhoven 2021 2025*. eindhoven.nl: Gemeente Eindhoven Retrieved from <u>https://www.eindhoven.nl/bestuur-en-beleid/beleid/visies-plannen-en-verordeningen</u>
- Gemeente Groningen. (2020a). *Verordening doelgroepen woningbouw Groningen 2020*. lokaleregelgeving.nl Retrieved from <u>https://lokaleregelgeving.overheid.nl/CVDR643572/1</u>
- Gemeente Groningen. (2020b). *Woonvisie gemeente Groningen*. Gemeente.groningen.nl: Gemeente.groningen.nl Retrieved from https://gemeente.groningen.nl/sites/default/files/Woonvisie-Groningen.pdf

Gemeente Rotterdam. (2016). *Woonvisie Rotterdam koers naar 2030 agenda tot 2020*. rotterdam.nl: rotterdam.nl Retrieved from <u>https://www.rotterdam.nl/wonen-leven/woonvisie/</u>

Gemeente Rotterdam. (2019). *Actieplan Middenhuur*. Rotteram.raadsinformatie.nl: Gemeente Rotterdam Retrieved from

https://rotterdam.raadsinformatie.nl/document/7525676/1/19bb13503

Gemeente Rotterdam. (2020). Gebiedsatlsa 2.0, ontwikkeling woonvoorraad, uitwerking 2030.

Gemeente Rotterdam. (2021). Voortgangsnota 2021. Retrieved from <u>https://www.watdoetdegemeente.rotterdam.nl/voorjaarsnota2021/programmas/stedelijke-inrichting-en-/wonen-en-bouwen/</u>

Gemeente Rotterdam. (2022a). Huur van 763 tot 1.075 euro per maand. Retrieved from <u>https://www.rotterdam.nl/wonen-</u>leven/middenhuur/#:~:text=Meer%20nieuwbouw%20in%20de%20categorie,per%20maand%

leven/middenhuur/#:~:text=Meer%20nieuwbouw%20in%20de%20categorie,per%20maand% 20(prijspeil%202022).

- Gemeente Rotterdam. (2022b). Orgonogram gemeente Rotterdam. Retrieved from <u>https://slideum.com/doc/9629191/organogram-gemeente-rotterdam</u>
- Gemeente Utrecht. (2017). *Actieplan middenhuur (actualisatie 2017)*. omgevingsvisie.utrecht.nl: omgevingsvisie.utrecht.nl
- Gemeente Utrecht. (2019). *Woonvisie: Utrecht beter in Balans*. Gemeente Utrecht Retrieved from <u>https://omgevingsvisie.utrecht.nl/fileadmin/uploads/documenten/zz-</u> <u>omgevingsvisie/thematisch-beleid/wonen/2019-07-</u>

Woonvisie Utrecht beter in Balans incl amendementen - schoon.pdf

- Gemeente Utrecht. (2021). Woningen naar eigendom en prijs 2021 Utrecht. Retrieved from <u>https://utrecht.incijfers.nl/jive?cat_open=wonen</u>
- Gemeente Utrecht. (2022a). Aangepaste voorwaarden middenhuur april 2022. Retrieved from https://utrecht.bestuurlijkeinformatie.nl/Document/View/51f18c9d-f449-4f72-adf7-e88f087d6935#:~:text=Als%20bovengrens%20van%20het%20middensegment,%2C%20artikel%2010%20lid%203'
- Gemeente Utrecht. (2022b). Omvang Woningvoorraad. Retrieved from <u>https://utrecht.incijfers.nl/dashboard/monitor-wonen/woningvoorraad</u>

Gemeente Utrecht. (2022c). Organisatieonderdelen. Retrieved from <u>https://www.werkenbijutrecht.nl/over-ons/onze-organisatie/organisatieonderdelen/</u>

- Gielen, M. (2014). Uitnodigingsplanologie en organische gebiedsontwikkeling versus het kostenverhaal in de Omgevingswet. *Tijdschrift voor Bouwrecht*
- Groenemeijer, L., Gopal, K., Stuart-Fox, M., Leeuwen, G. v., & Omtzigt, D. (2021). Vooruitzichten bevolking, huishoudens en woningmarkt, Prognose en Scenario's 2021-2035. ABF Research

- Hartmann, T., & Hengstermann, A. (2018). *Instruments of land policy : dealing with scarcity of land*. London ; New York: Routledge, Taylor & Francis Group.
- Hobma, F. A. M., & Jong, P. (2016). *Planning and development law in the Netherlands : an introduction* (Eerste druk. ed.). 's-Gravenhage: Instituut voor Bouwrecht.
- ICESCR. (1966). Assembly resolution 2200A (XXI). Retrieved from International Covenant on Economic, Social and Cultural Rights
- Klijn, E.-H., & Koppenjan, J. F. M. (2016). *Governance networks in the public sector*. London ; New York: Routledge.
- Kranenborg, P., & Damen, M. (2021). *Grote woningmarktbeleggers in Amsterdam; Activiteiten en effecten*. Rigo.nl: Rigo Retrieved from <u>https://www.rigo.nl/wp-content/uploads/2022/01/20211203-Rapport-Onderzoek-Grote-beleggers-in-Amsterdam-RIGO.pdf</u>
- Kraniotis, L., & Jong, W. d. (2021). Sociale huurwoning? In zeker een kwart van de gemeenten wacht je meer dan 7 jaar. Retrieved from <u>https://nos.nl/op3/artikel/2377995-sociale-huurwoning-in-</u> <u>zeker-een-kwart-van-de-gemeenten-wacht-je-meer-dan-7-jaar</u>
- Lascoumes, P., & Gales, P. L. (2007). Introduction: understanding public policy through its instrumentsfrom the nature of instruments to the sociology of public policy instrumentation. *Governance*, 20(1), 1-21.
- Leve, E. d., & Geuting, E. (2021). Benchmark Gemeentelijke Grondprijzen 2020-2021. In: Stec Groep.
- Maaskant, F. (2016). Betrokken in Zuid: Een kwalitatief onderzoek naar het gebiedsgericht werken in de gemeente Amsterdam stadsdeel Zuid. (Master). Utrecht University, docplayer. Retrieved from <u>https://docplayer.nl/49422662-Betrokken-in-zuid-een-kwalitatief-onderzoek-naar-het-gebiedsgericht-werken-in-de-gemeente-amsterdam-stadsdeel-zuid.html</u>
- Ministerie van BZK. (2021a). Staat van de Woningmarkt: Jaarrapportage 2021. Overheid.nl
- Ministerie van BZK. (2021b). Wet van 24 maart 2021 tot wijziging van Boek 7 van het Burgerlijk Wetboek, van de Uitvoeringswet huurprijzen woonruimte en van de Woningwet (wijziging huurverhogingsmogelijkheden en inkomensgrenzen Woningwet). Staatsblad: Staatsblad Retrieved from <u>https://zoek.officielebekendmakingen.nl/stb-2021-167.html</u>
- Ministerie VROM. (2021). *Wet Ruimtelijke Ordening*. Wetten.overheid.nl: Wettenbank Retrieved from <u>https://wetten.overheid.nl/BWBR0020449/2021-07-01/</u>
- Mullins, D., & Rhodes, M. L. (2007). Special issue on network theory and social housing. *Housing, Theory and Society, 24*(1), 1-13.
- NUL20. (2022). Hoofdstedelijk optimisme over nieuwbouw: 30.000 woningen in vier jaar. Retrieved from <u>https://www.nul20.nl/hoofdstedelijk-optimisme-over-nieuwbouw-30000-woningen-vier-jaar</u>
- Personal Communication (2022). [Interview beleid middensegemnt Rotterdam].
- Ploeger, H. D., & Groetelaers, D. A. (2007). The importance of the fundamental right to property for the practice of planning: An introduction to the case law of the European Court of Human Rights on Article 1, Protocol 1. . *European Planning Studies, 15*(10), 1423-1438.
- Rijksoverheid. (2021). Kom ik in aanmerking voor een sociale huurwoning van een woningcorporatie? Retrieved from <u>https://www.rijksoverheid.nl/onderwerpen/huurwoning-zoeken/vraag-en-antwoord/wanneer-kom-ik-in-aanmerking-voor-een-sociale-huurwoning</u>
- Thiele, B. (2002). The human right to adequate housing: a tool for promoting and protecting individual and community health. *American Journal of Public Health, 92*(5), 712-715.
- TwynstraGudde. (2021). Evaluatie Pilot Omgevingsplan Binckhorst. (10175072). denhaag.raadsinformatie.nl: Gemeente Den Haag Retrieved from <u>https://denhaag.raadsinformatie.nl/document/10848533/1/Bijlage 2021-</u> 0203 Rapport Evaluatie Pilot Omgevingsplan Binckhorst pdf
- Van der Krabben, E., & Jacobs, H. M. (2013). Public land development as a strategic tool for redevelopment: Reflections on the Dutch experience. *Land Use Policy, 30*(1), 774-783.
- Verheul, W. J., Daamen, T., Heurkens, E., & Hobma, F. (2018). Meervoudig sturen in gebiedstransformaties: op zoek naar rollen en instrumenten. Retrieved from

https://www.stedelijketransformatie.nl/uploads/media_item/media_item/114/54/Meervoudi g_sturen_TU_Delft-1539775090.pdf

- VNG. (2017). *Gemeentelijk instrumentarium middenhuur*. VNG.nl Retrieved from <u>https://vng.nl/publicaties/gemeentelijk-instrumentarium-middenhuur</u>
- Voogt, S. d. (2021). Wat heeft het woningbouwbeleid van Ollongren opgeleverd? *NRC Handelsblad*. Retrieved from <u>https://www.nrc.nl/nieuws/2021/01/11/wat-heeft-het-woningbouwbeleid-van-ollongren-opgeleverd-a4027097</u>

Appendix I: Glossary

Definitions

<u>Active housing policy</u>: An housing policy in which a municipality (co-) owns the pooled land at some point in the development process (Hartmann & Hengstermann, 2018).

<u>Anterior agreement</u>: A private agreement between a municipality and a private development party in which obligations of both parties are stipulated.

<u>Governance network:</u> is a network in which there is a high interdependency between actors with different objectives, that are shaped around a policy and its implementation. The network governance can, for the understanding of the actors involved with developments, be applied to understand the co-production of housing (Mullins & Rhodes, 2007).

<u>Passive housing policy</u>: A housing policy in which a municipality does not (co-) own all land at any point in the development process (Hartmann & Hengstermann, 2018).

<u>Typology (of land use instrument)</u>: the three typologies, communication (sermon), stimulus (carrot) & regulation (stick) used to implement a (land) policy (Hartmann & Hengstermann, 2018).

<u>Wicked problem</u>: is a problem for which there is no unambiguous solution due to the unavailability of objectifiable information and there being no consensus on the applied standers to solve the problem (Franzen et al., 2011).

Translations

Action plan middle-segment rent Accommodation act Anterior agreement Buy to let regulation Eternal land lease Gross Internal Area (GIA) Housing vision Municipal executive Land development Land development plan Land-use plan Land-lease Land-lease conditions Performance agreements Property value Self-residence requirement Site development plan Spatial planning act Spatial planning decree Target group ordinance Views (bring forward views)

Actieplan middenhuur Huisvestingswet 2014 Anterieure overeenkomst Opkoopbescherming Eeuwige erfpacht Gebruiksoppervlak (GBO) Woonvisie College van B&W Grondexploitatie Exploitatieplan Bestemmingsplan Erfpacht Erfpachtvoorwaarden Prestatieafspraken WOZ-Waarde Zelfwoonplicht Grondexploitatie Wet ruimtelijke bepaling Besluit Ruimtelijke Ordening (BRO) Doelgroepenverordening Zienswijzen (indienen)

Appendix II: Reflection

This document reflects on the thesis produced by describing its place within the master track, scientific methods. After this, the scientific relevance & data collection goes into the relevance and application of the results and how the data for this was collected. After this, the social and scientific application of the framework. The reflection ends by describing the ethical considerations that occurred during the research which had to be addressed.

Relation between MBE and master programme

The MBE master track focuses on 'solutions for developing and managing buildings, portfolios and urban areas and educating the next generation of managers in the built environment.'. The thesis is part of this by describing how a housing policy is implemented through land policy which falls under the solutions for developing buildings and urban areas. Moreover, within the Master of Architecture, the thesis is part of the development of the future city by reducing inequality in housing supply. The relationship in the MSc programme is also that the subject of the thesis is connected to how the built environment can be influenced by a public actor when there is no direct power over the land. The subject helps to determine what policy instruments there are for municipalities to create more middle-segment housing when using a facilitating land policy.

Scientific relevance & data collection

The scientific relevance and credibility of the research are influenced by the methodology used. The research described the implementation of a policy in a complex environment as a part of a wicked problem. The thesis uses the problem of the current housing shortage to describe how a policy is implemented from an objective through context, input, activities and output. Additionally, a framework for assessing a policy was proposed and tested in four cases.

For the thesis, it was necessary to make a framework in which the land-use instrument could be measured and to determine what land-use instrument could be assessed. Therefore, the thesis starts with a literature review on assessing housing policies in urban developments. After this, the land policies are described within the Dutch context and the land-use instruments assessed are found by a document analysis. The document analysis was done by using the housing vision of the seven biggest Dutch municipalities to determine what instruments they used. Furthermore, some literature was used to describe what is possible with each of the instruments.

Before and during the literature review it was expected that the empirical research would be quantitative as this would make it possible to give a certain advice which was preferred. However, this turned out to be impossible due to the many factors in these projects and the unavailability of a lot of data. Moreover, also most research is on the qualitative assessment of policies. Therefore, at the end of the literature review and at the start of the case studies it became clear that quantitative research would not be possible and instead qualitative research would be used. The result of this in the thesis is that no clear advice can be given on what land-use instrument perform better. However, it is possible to understand how an agreement came to play and whether the land-use instruments had influence on the result.

After this, the case study research started by finding projects which could be used to assess the case municipalities. This turned out to be more difficult than expected as the combination of passive land policy and middle-segment housing is still new and not much used. Therefore, the projects found were often the only, or one of the few possible projects. The selection criteria for the projects were: the objective to create middle-segment housing, projects of which the development agreement is finished, no or low municipal landownership, relatively new and a land-use instrument from the second sub-question is used. Additionally, the cases were mostly found with the help of civil servants and simply asking for a project that met the criteria. However, 2 of the projects were by found by through either

the same developer as in another project or by comparing maps of municipal landownership to find a suitable projects. These were coincidentally also the two projects with less average levels of trust.

After the case and project selection, each case study was done through the qualitative research method which uses a set-up framework which is filled by interviews and public documents in this research. The research is thus influenced by the opinion of the interviewees. Therefore, multiple cases and projects are used, and multiple (2) actors were interviewed, to understand the perspectives of the key actors in the wicked problem of a development.

Additionally, during the thesis process, some projects were dropped when contact was lost, resulting in fewer projects than desired. Although, this lowers the credibility of the research, during the interviews it was asked how the project differed from the majority of the projects which gives some image of how the cases should be seen in a broader view.

Wider social -and scientific framework and application

The thesis describes and assesses municipal success in creating middle-segment housing. In light of the wider social framework and application, this helps municipalities in selecting land-use instruments of a passive land policy to create middle-segment housing.

The framework set-up can be used to assess other land-use instruments in the implementation of a municipal policy. In the thesis, there is a focus on the housing policy regarding middle-segment housing. However, the model could for example also be used to describe the implementation of a municipal policy for low-energy buildings through its land policy.

The research will be transferable in similar cases in which municipalities have some policies that described their requirements on housing types and particularly on middle-segment housing. Furthermore, the four biggest municipalities in the Netherlands have been used as cases which will give some inconsistencies with other smaller municipalities in the Netherlands that might have a different policy for middle-segment housing due to the difference in organisation.

Through the given advice some utilisation of the research is possible. A municipality may assess the use of their land policy and make some policy documents or aim to change the context of a project to create middle-segment housing.

Ethical issues and dilemmas

An ethical issue in the thesis is the usage of interviewees which requested that the projects analysed have been anonymised which was also agreed upon through an informed consent form. However, the cases also need some description for the research and to make the thesis more readable and to recreate the research. This caused the ethical issue in which the cases are somewhat described but giving too much information would go in against the will of the interviewees. Therefore, some information has been given in the cases, but the information has been kept reasonably cryptic to make it very difficult to determine what project is being described with certainty.

Appendix III: Informed Consent & interview protocol

Unstructured interviews were held with municipal employees in advance structured interviews for the case studies. The goal of these interviews is to determine whether the framework set up corresponds with the instrument used in the municipality and to bridge the information gap between the policy documents about the municipal objectives and instruments used towards the projects. For this, the interview protocol will describe the information that needs to be acquired and the question asked to get to this information. As the interviewees are Dutch civil servants the interviews are held in Dutch.

Geïnformeerde toestemming

Er is op het moment een woningtekort op de Nederlandse woningmarkt. Mede door de veranderingen doorgevoerd in het Nederlandse grondbeleid sinds de laatste nota ruimtelijke ordening (VINEX) hebben gemeenten minder grondbezit. Hierdoor zijn er andere beleidsinstrumenten van gemeenten nodig om invloeden in de nieuwbouw van woningen te verkrijgen. Dit onderzoek is gericht op welke manieren gemeenten invloed hebben op de nieuwbouw van het middensegment woningen en hoe deze woningen dan ook in dit segment kunnen blijven wanneer zij weinig of geen grondbezit hebben. Ontwikkelingen worden hiervoor gezien als de uitkomst van onderhandelingen over 'complexe' problemen. Daartoe worden verschillende beleidsinstrumenten gebruikt waarvan deze van verschillende gemeenten met elkaar worden vergeleken. Dit onderzoek wordt gedaan door verschillende beleidsinstrumenten te categoriseren en daarna op projectbasis te bepalen wat de voor - en nadelen van deze instrumenten waren.

Vanuit de universiteit is het verplicht om apart te vragen of het toegestaan is het interview op te nemen en te gebruiken voor onderzoek. U kunt tevens aangeven dat u liever niet meedoet, uw deelname later intrekken of aangeven dat bepaalde delen niet gebruikt kunnen worden/verwijderd.

Als u vraagt heeft over het onderzoek, kunt u contact opnemen via het onderstaande mailadres en nummer:

d.f.weulenkranenberg@student.tudelft.nl dirk.kranenberg@gmail.com

Met vriendelijke groet, Dirk Weulen Kranenberg

Zou u de onderstaande verklaring willen invullen en ondertekenen als u mee wilt doen aan dit interview?

Ik verklaar op een voor mij duidelijke wijze te zijn ingelicht over de aard, methode, doel en belasting van het onderzoek.

Mijn vragen zijn naar tevredenheid beantwoord.

Ik begrijp dat het geluids- en/of beeldmateriaal (of de bewerking daarvan) en de overige verzamelde gegevens uitsluitend voor analyse en wetenschappelijke presentatie en publicaties zal worden gebruikt.

Ik behoud me daarbij het recht voor om op elk moment zonder opgaaf van redenen mijn deelname aan dit onderzoek te beëindigen.

Ik heb dit formulier gelezen of het formulier is mij voorgelezen en ik stem in met deelname aan het onderzoek.

□ Graag ontvang ik aan het eind van het onderzoek een korte samenvatting van de resultaten van het onderzoek. Om deze reden verleen ik toestemming om mijn naam- en adresgegevens tot het eind van het onderzoek te bewaren.

Plaats:

Datum:	
Volledige naam:	
Handtekening deelnemer:	

Hierbij wordt aangegeven dat er toelichting is gegeven op het onderzoek dat de geïnterviewde vragen over het onderzoek kan stellen en dat dezen naar vermogen worden beantwoord.

Dirk

Protocol

Interviews met betrekking tot de werking van instrumenten in specifieke gemeenten en de overgang tussen beleidsdocumenten en stedelijke ontwikkelingsprojecten.

Inleiding

Bij openen Teams meeting → Dag bedankt voor de mogelijkheid. Kan het interview worden opgenomen en kan ik dat nogmaals vragen nadat de opname is gestart? [Begin opname] Dag, Mag het interview worden opgenomen?

Onderzoek [Zie vragen]

Concluderend

Afsluitend Dat was de laatste vraag dank voor het interview [stop opname] Spoedig uitwerking Fijne dag etc.

Interview strategie casegemeenten

Het doel van het interview met betrekking tot de gemeentelijke methode voor middensegment bij passief grondbeleid is om te achterhalen halen hoe de gemeentelijke regelgeving in werkelijkheid wordt gebruikt. Gemeenten hebben hiervoor vaak een tal aan beleidsdocumenten over hoe doelen met betrekking tot de woningproductie en voorraad worden bepaald. Helaas mist hier vaak nog een slag naar het praktische gebruik van beleidsinstrumenten voor middensegment. Het doel van dit type interview is verdere invulling te geven aan de methode(n) benoemd in verschillende beleidsinstrumenten. Hierbij er tevens wordt gezocht naar geschikte casestudies om als voorbeeldprojecten te gebruiken.

Dit wordt gedaan door te vragen naar de werking van bepaalde ambtelijke documenten:

- Woonvisie
- Actieplannen middenhuur -en middenkoop
- Omgevingsvisie
- Stedenbouwkundig plan

De vragen betrekken zich tot hoe bepaalde genoemde worden gebruikt en of dezen ook worden gebruikt.

- Wat is uw functie en wat houdt dit in?

Stedelijk

- Welke privaatrechtelijke middelen gebruikt de gemeente?
- Welke publiekrechtelijke middelen gebruikt de gemeente Rotterdam om de privaatrechtelijke overeenkomsten te ondersteunen?
- Waarom maakt de gemeente gebruik van instrument XXX?
- Hoe gebruikt het dit instrument?
- Waarom gebruikt de gemeente dit zo?
- Wat is het faciliterend grondbeleid (met anterieure overeenkomst) in het geval van eeuwige erfpacht?
- Wat is het faciliterend grondbeleid (met anterieure overeenkomst) in het geval van particulier grondbezit?
- Hoe verschilt de aanpak van de gemeente per deelgebied?
- Waarom gebruikt de gemeente in deze gebieden andere methoden?

Projecten

- Hoe wordt er bij publiekrechtelijke projecten gekozen voor bepaalde beleidsinstrumenten voor grondgebruik?
- Welke projecten heeft de gemeente waarbij er geprobeerd is middensegment woningen te maken, zonder of met weinig grondbezit en die redelijk recent zijn?

Regelgeving

- Hoe werkt de doelgroepenverordening

Vragen

Wat was uw functie tijdens [casus] en wat hield dit in?

- Waar heeft u zich tijdens het project mee bezig gehouden?
- Tijdens welke fasen was u betrokken?

Wat is er voor uw komst bij [casus] al gebeurd?

Veto criteria

Wat had de gemeente als doel op het gebied van middensegment woningen bij het begin van de onderhandelingen van [casus] en hoe veel verschilde dit van andere actoren?

Hoe veel middensegment woningen zijn er uiteindelijk afgesproken in de anterieure overeenkomst?

Welke instrumenten voor het promoten van middensegment zijn er gebruikt bij [casus]?

- Bij publiek/ percentages:
 - o Welke publiekrechtelijke verplichtingen heeft de gemeente gesteld?
 - Was de ontwikkelende partij hiervan op de hoogte en wat was hun reactie hierop?
 - Zijn er met betrekking tot de publiekrechtelijke verplichtingen, afspraken gemaakt of toezeggingen gemaakt op andere onderdelen?
 - Wat zorgde voor het uiteindelijke akkoord?
- Bij privaat/anterieur:
 - Welke privaatrechtelijke middelen heeft de gemeente gebruikt om het project te stimuleren?
 - Hebben onderhandelingen met de ontwikkelaar veel veranderingen in het project gebracht en in wiens voordeel?
 - Wat heeft de gemeente uiteindelijk in de (anterieure) overeenkomst voor eisen op het gebied van middensegment woningen gekregen?
 - Wat zorgde voor het uiteindelijke akkoord?
 - o Zijn hier bepaalde andere eisen afgewogen?

Wat was de invloed van het gebruik van [publiek of privaatrechtelijk instrument] op de [onderdeel] van de ontwikkeling?

- Financiële haalbaarheid
- Projectscope
- Projectplanning
- Grondeigendomssituatie
- Go/no go momenten
- Opzetten van contracten/anterieure overeenkomsten
 - Was dit volgens uw verwachtingen?
 - Verwacht u dat [instrument] andere gevolgen zou hebben?

Context variabelen:

De context variabelen worden alleen bevraagd wanneer deze worden benoemd of wanneer er van tevoren een specifieke interesse voor is. De volgende vragen zijn er als voorbeelden voor tijdens de interviews:

- P. Wat zijn de politieke invloeden op het gebied van projectontwikkeling middensegment woningen bij geen gemeentelijke grondeigendom?
- P. Waren er directe politieke invloeden op het projecten, zo ja, welke?
- E. Wat zijn de economische invloeden van het realiseren van middensegment woningen in het algemeen?
- E. Wat waren de economische/financiële invloeden op de ontwikkeling van [casus]
- S. Wat zijn de sociaaleconomische factoren bij gebiedsontwikkelingen met middensegment woningen bij geen gemeentelijke grondeigendom?
- S. Welke sociaaleconomische factoren waren er voor de ontwikkeling van middensegment bij [casus]?

- T. Met welke technische aspecten wordt er rekening gehouden bij gebiedsontwikkelingen net middensegment woningen met geen gemeentelijke grondeigendom?
- T. Met welke technische factoren is er rekening gehouden bij [casus]?
- L. Wat zijn de juridische factoren die een rol spelen bij gebiedsontwikkelingen met middensegment woningen bij geen gemeentelijke grondeigendom?
- L. Met welke juridische factoren is er rekening gehouden bij [casus]?
- L. Is er meer gebruik gemaakt van publiek of privaatrecht?
- E. Met welke lokale actoren/organisaties wordt er bij gebiedsontwikkelingen met middensegment woningen bij geen gemeentelijke grondeigendom rekeningen gehouden?
- E. Met welke belangenorganisaties is er rekening gehouden bij [casus]?
- E. Met welke factoren vanuit de omgeving (en duurzaamheid) is er rekening gehouden bij [casus]?

Critical succes factoren dmv governance network

- Welke partijen heeft u tijdens de onderhandelingen vooral contact mee gehad? En wie hiervan beschouwde u als de meest belangrijke actoren hierbij?
- Welke invloeden hebben deze partijen op het middensegment woningen gehad?
- Hoe heeft u de onderhandelingen ervaren en waarom heeft u deze zo ervaren?
- Hoe heeft u de onderhandelingen met [instrument] ervaren?
 - Wat waren de gevolgen van druk uitvoeren door middel van publiekrecht
 - o Ontstonden er problemen tijdens de onderhandelingen? Zo ja, tussen wie en waarom?
 - Hoe is dit opgelost en zijn hierbij andere instrumenten voor grondgebruik bij gebruikt?
 - o Was dit anders gegaan met andere instrumenten?
 - o Welke partijen waren hierbij betrokkenen wat deden zij?
 - Wat heeft ervoor gezorgd dat de partijen uiteindelijk akkoord gingen?
 - Hoe is er overeenkomst tussen verschillende betrokkenen gecreëerd?
- Hoe wordt er rekening gehouden met partijen die niet meedoen aan de onderhandelingen?
- Welke onderhandelingsmethoden zijn er gebruikt?
- Hoe was het [critical succes factor] tijdens de onderhandelingen en tussen de verschillende partijen?
 - o Vertrouwen en openheid
 - o Leiderschap (welke partij nam het meest initiatief)
 - Imago van het project
- Hoe was houding van de [partij/actor] tijdens de onderhandelingen? (Was deze positief of negatief over de ontwikkeling, wat was belangrijk voor de gemeente en was er bijvoorbeeld haast vanuit de gemeente?)
- Bent u tevreden met de gesloten overeenkomst?

Wat kunnen beleidsinstrumenten voor landgebruik (nog meer) beïnvloeden aan de haalbaarheid van ontwikkelingsprojecten?