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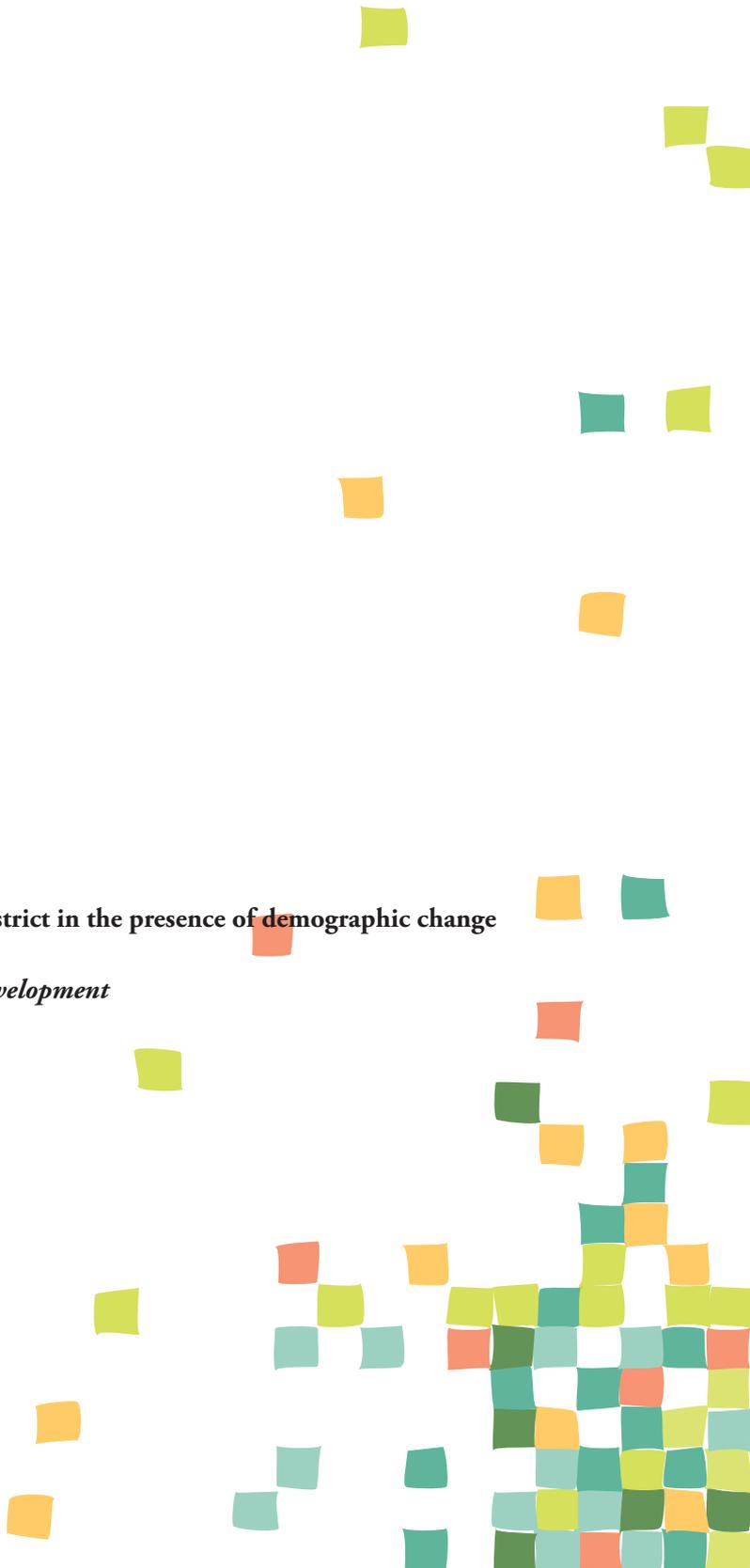
Cultivate Tungendorf

A new chance for sustainability for an inner-city district in the presence of demographic change

Master of Science Thesis, Design for Sustainable Development

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CHALMERS UNIVERSITY OF TECHNOLOGY
Göteborg, Sweden, 2010



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Cover:
Gina Willner, 2010

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ABSTRACT

The traditional approach to city planning has been one based on the assumption of growth- a false perception when considering that numerous cities in all corners of the post-industrialized world have been declining populations in recent decades. The phenomenon of shrinking cities can be traced back to a plethora of causes: from suburbanization, to demographic changes occurring in advanced societies. Additionally, global economic trends have led to intense competition between cities to gain both businesses and residents- a competition often won by cities with better connections to the global economic market.

Planning policy has yet to catch up with these trends and is in need of a complete paradigm shift to deal with cities population declines and vacancy rates rise. Shrinkage being viewed as taboo is no longer acceptable as it represents a new direction in the development of post-industrialized nations. New planning concepts need to be explored to pro-actively handle these developments and ensure the sustainability and livability of these cities for current and future generations.

The specific changes taking place in the city of Neumünster, Germany offer insight into future challenges for many cities in post-industrialized nations. Faced with economic difficulties and demographic changes, the once booming industrial city exhibits both a greying and shrinking population and high vacancy rates in many city districts. The city district of Tungendorf, although relatively stable at present, awaits the effects of these changes. The dated housing stock and high maintenance gardens are in conflict with today's demands for space and convenience. As these homes change hands, vacancy rates are predicted to rise.

This thesis explores local planning measures for shrinkage with the aim to develop a phased strategy for sustainable development in the district of Tungendorf, Neumünster, using shrinkage as a chance to accomplish this. Public participation in the form of interviews and workshops with local residents and experts is used to ensure the final proposal is realistic and reality-based.

This report is written in English.

AREA DELIMITATIONS

Stadtteil Tungendorf, Neumünster, Germany

KEYWORDS

Shrinking cities, Germany, Demographic change, Planning measures, Public participation, Detached housing.

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KURZBESCHREIBUNG

Der traditionelle Ansatz der Stadtplanung basiert auf Wachstum: ein Irrtum angesichts des Bevölkerungsrückgangs, der in fast allen Regionen der post-industriellen Welt zu beobachten ist. In vielen Ländern, wie zum Beispiel Deutschland, lässt sich in Städten ein Bevölkerungsrückgang beobachten. Man bezeichnet diese als „Schrumpfende Städte“. Das Phänomen von Schrumpfung kann auf eine Vielzahl von Ursachen zurückverfolgt werden. Stadtflucht oder der demographische Wandel sind nur zwei Gründe von vielen. Darüber hinaus führen globale wirtschaftliche Trends zu einem intensiveren Wettbewerb zwischen Städten, um neue Einwohner sowie Unternehmer anzuziehen. Als Gewinner aus diesem Wettbewerb gehen meist die Städte hervor, die gute Verbindungen zu etablierten Märkten aufweisen können.

Schrumpfung stellt eine neue Entwicklung in post-industriellen Ländern dar, die von Stadtplanung bis dato noch viel zu wenig berücksichtigt wurde. Um eine Lösung für den starken Bevölkerungsrückgang sowie den hohen Wohnungsleerstand in manchen Regionen zu finden, ist ein Paradigmenwechsel notwendig. Neue Planungskonzepte für Schrumpfung sind erforderlich, um die Bewohnbarkeit in schrumpfenden Städten nachhaltig zu verbessern.

Die spezifischen Veränderungen in der deutschen Stadt Neumünster bieten einen Einblick in die Zukunft post-industrialisierter Länder. Aufgrund wirtschaftlichen Schwierigkeiten und die demografischen Veränderungen ist die einst boomende Industriestadt heute durch eine schrumpfende immer älter werdende Bevölkerung geprägt. Der Stadtteil Tungendorf, an sich derzeit noch relativ stabil, wartet auf die Auswirkungen dieser Veränderungen. Hierzu kommt, dass Tungendorf einen höheren Anteil an kleinen Häusern mit großen Gärten aus der Vorkriegszeit aufweist, die allerdings in Konflikt mit den heutigen Anforderungen an Raum und Komfort stehen. Da ein Besitzerwechsel aus

Altersgründe in der nahen Zukunft zu erwarten ist, ist mit einem Anstieg des Leerstands zu rechnen.

Diese Arbeit untersucht Planungsmaßnahmen zur Schrumpfung mit dem Ziel, eine Strategie für eine nachhaltige Entwicklung im Stadtteil Tungendorf, Neumünster, zu schaffen. Dabei wird Schrumpfung als Chance angesehen, um die sozialen und ökologischen Bedingungen im Stadtteil zu verbessern. Mit Hilfe von Interviews und Workshops mit Anwohnern und Experten wurden die Bürger in die Entwicklung der Strategie eingebunden, um sicherzustellen, dass der finale Vorschlag eine hohe Akzeptanz hat und der Realität entspricht.

Diese Arbeit ist auf Englisch geschrieben.

RÄUMLICHE ABGRENZUNG

Stadtteil Tungendorf, Neumünster, Deutschland

SCHLÜSSELWÖRTER

Shrinking cities, Germany, Demographic change, Planning measures, Public participation, Detached housing.

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01 Introduction

01.1 Point of Departure

01.1.1 Background Information

The future of the old industrialized nations will be one characterized by low-birth rates, a greying demographic structure and a shrinking population. Globalization and increased mobility has led to an intense inter-city competition between cities to win new residents and businesses. Those cities with better connections to the global market are generally the winners, which leaves a good number of cities struggling to keep up. The city of Neumünster (pop. 77,000) in the northern German region of Schleswig-Holstein is one such city, having experienced a steady population decline since the 1990's. By the year 2020, the total population is estimated to reduce by yet another 9%.¹

The urban environment in Neumünster- as in most cities- is hardly prepared for the effects a shrinking and aging population will bring. Although the district of Tungendorf on the periphery of Neumünster appears relatively stable, vacancy rates continue to rise as residents move for reasons of age. The predominantly detached housing stock from the pre-war period is a difficult sell often due to needed renovation, but also to increased demands for living space and convenience. As buildings are abandoned and housing prices sink, the entire district is in danger of embarking on a spiral of decline from which it is difficult to escape.

Tested methods for approaching city shrinkage have been neglected in the field of urban planning. Since the industrial revolution and the rapid population surge it brought with it, city planning has been programmed for growth. New planning concepts need to be explored which pro-actively handle shrinkage and ensure the sustainability and livability of shrinking cities for future generations.

01.1.2 Aim of this Thesis

This thesis explores planning measures for shrinkage at the local level, with the ultimate aim to develop a phased strategy for sustainable development in the city district of Tungendorf, Neumünster.

01.1.3 Delimitation

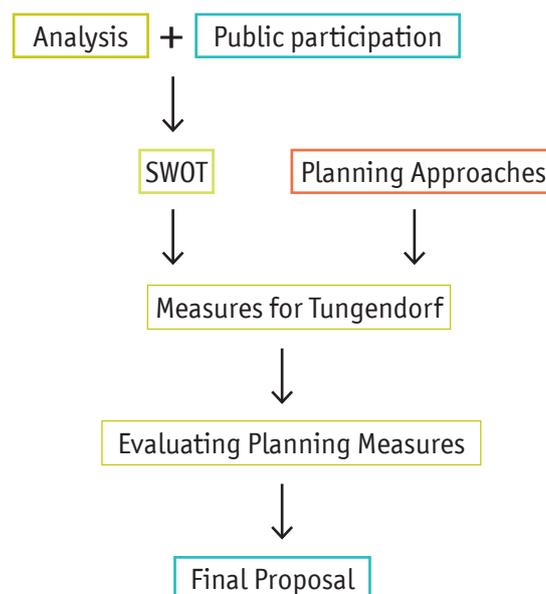
The city district of Tungendorf in Neumünster, Germany.

¹ Einwohnerentwicklung bis 2025 in der kreisfreienstadt Neumünster. *Innenministerium des Landes Schleswig-Holsteins*. p.2.

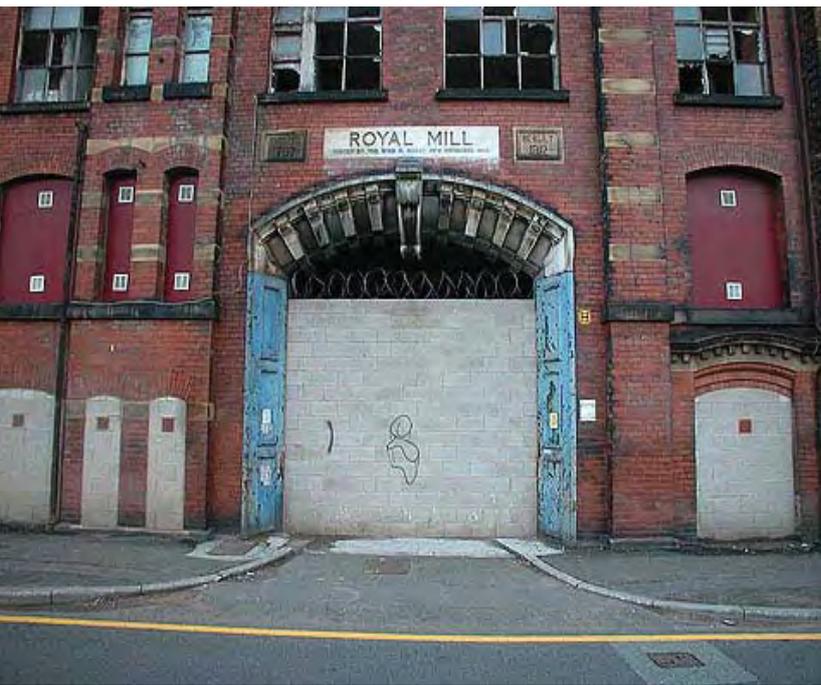
01.1.4 Methods

After an analysis of global and national trends influencing shrinking cities the phenomenon is brought down to a local level, using the example of the city district Tungendorf in Neumünster, Germany. There, a series of public participation exercises in the form of interviews and workshops with local stakeholders are conducted to determine how the district can be improved in a context of shrinkage. Results from the analysis of the broader context and public participation are used to create a SWOT analysis. Conducted in parallel is a review of planning approaches for shrinking cities used elsewhere through which good examples are pursued. Finally, planning measures are identified for the local level, which are discussed and evaluated in workshops with citizens and officials from the local government. Feedback from these workshops is used to further develop the planning measures, which are presented in more detail in the final proposal.

Fig. 1 . Flow chart of methods used leading to final proposal



02 Analysis



6 / Global Context



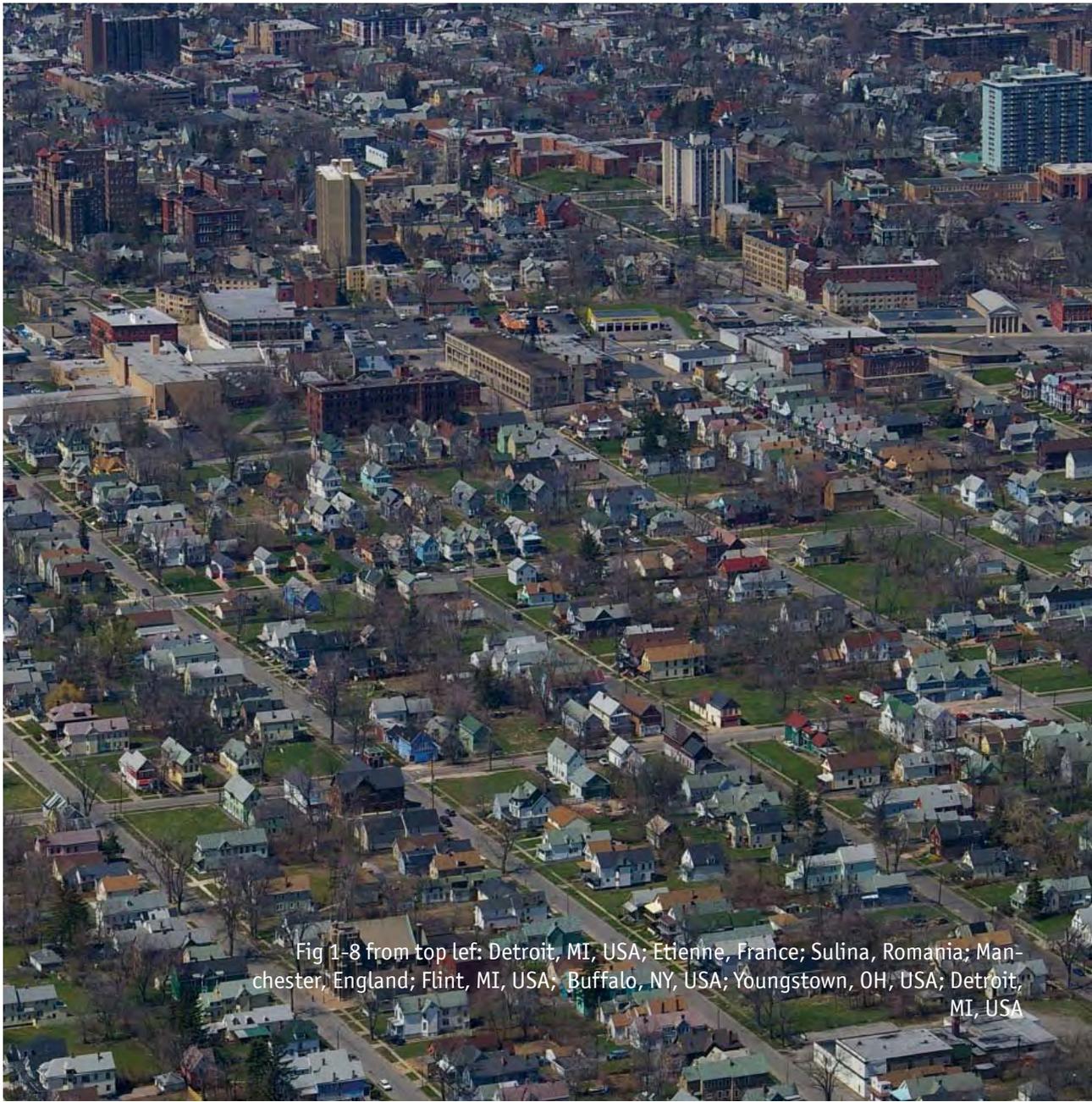
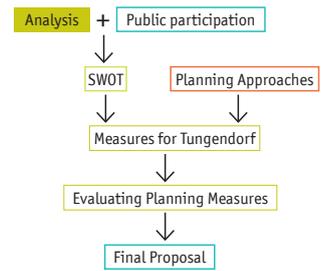


Fig 1-8 from top left: Detroit, MI, USA; Etienne, France; Sulina, Romania; Manchester, England; Flint, MI, USA; Buffalo, NY, USA; Youngstown, OH, USA; Detroit, MI, USA

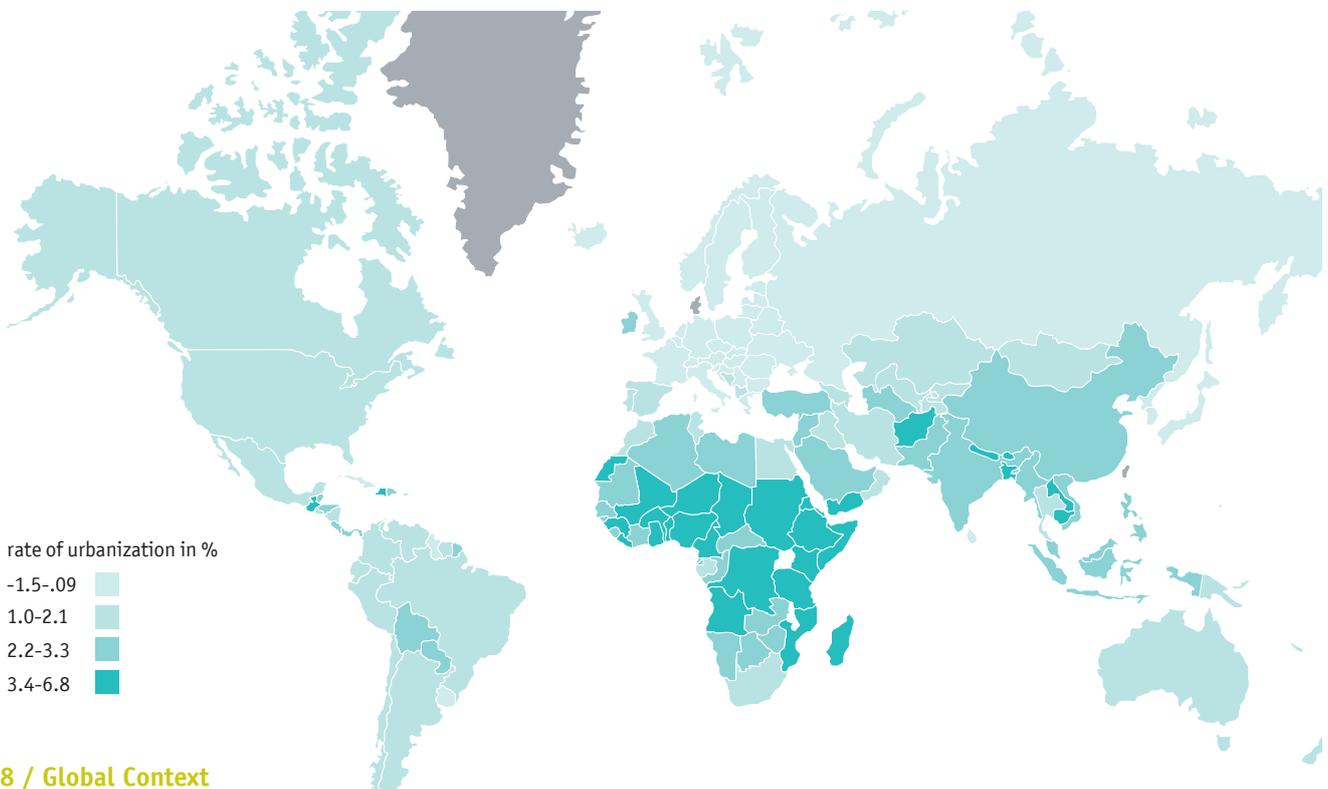
02.1 Global Context



02.1.1 Introduction

All the world is a city. And all the men and women merely citizens. Urban environments in this day and age grow at an almost exponential rate. Half of the world’s 6 billion inhabitants now reside in a city, compared with only 10% of the total population in 1900. Furthermore, this number is expected to increase to 75% by the year 2025, when following urbanization trends.¹(Fig.9) On the other hand it can be observed that the dynamics of cities are changing. Although the first cities to pass the five million inhabitants mark were located in wealthy, industrialized nations, the ‘mega-cities’ of today are primarily to be found in medium and low-income countries. Today, most of the old capitals of the industrialized world can hardly compete with the population records set by cities in South America, China, and India.

Fig. 9 . Rate of urbanization in percentage between 2005-2010 (credit: Population Reference Bureau,2010)



1 R. Burdett, D.Sudjic, *The Endless City*, Phaidon Press, London, 2007.

Urbanization

The movement of people from rural to urban areas with population growth equating to urban migration. (United Nations)

Shrinking Cities

The Shrinking Cities International Research Network (SCIRN) defines a shrinking city as a densely populated urban area with a minimum population of 10,000 residents that has faced population losses in large parts for more than two years and is undergoing economic transformations with some symptoms of a structural crisis. (Pallagst, et. al)

02.1.2 Trends of Shrinkage and Growth

This is however, just one side of the story. Although there is a strong upward tendency worldwide in terms of population, this trend can be almost unanimously attributed to developing countries- more concretely, they account for 95% of the world's population increase. In fact, the highest proportion of population increase is occurring in the poorest of the developing countries.² Growth in many high-income countries in comparison is relatively modest, if existing at all. And within these countries it is even more complicated as some cities prosper while others shrink. Since the middle of last century, a pattern of shrinking cities has established itself, and is predicted to continue. The appearance of a stable population in some cities is often only maintained through a constant flow of immigration. According to the United Nations population division, the population of developed countries would have decreased by 7% by 2050, but will continue to rise due to the inflow of 2.4 million migrants annually.³ Nevertheless, the greatest losses continue to be experienced by weakening economic structures in small communities and rural areas. Cities which throughout history found their niche in the regional economy are increasingly faced with competition at a global level. In order to understand the various influences on shrinking cities as they appear on various scales, it is necessary to approach the phenomenon first at a global level and in consideration of the current stage of development the world is undergoing.

02.1.3 Historic Precedence of Shrinkage

Periods of stagnation and decline have occurred naturally throughout the course of civilization. Whether resulting from societal forces such as economic depression or war, or uncontrollable catastrophes of famine, drought, epidemic or natural disaster. These incidents continue to wreak havoc on the world community today. Coinciding with the Industrial Revolution began an unprecedented phase of growth in the industrialized countries of the west, which led to large-scale city migration and overcrowding, not to mention lack of provisions for many.

With the First World War the economic situation took its first major hit, es-

² P. Oswalt, T. Rieniets. *Atlas der schrumpfende Städte / The Atlas of shrinking cities*. Hatja Cantz Verlag. Ostfilden. 2006.

³ *WORLD POPULATION TO EXCEED 9 BILLION BY 2050*. United Nations Press Release. March 11 2010. http://esa.un.org/unpd/wpp2008/peps_documents.htm

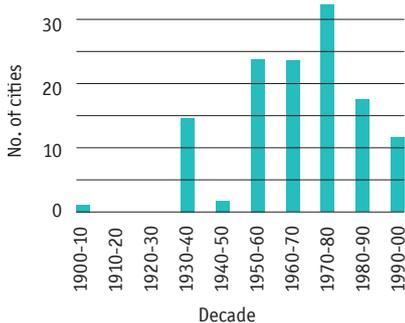


Fig. 10. Cities with declining populations in the United States from the turn of the 20th century (credit: R. Beauregard, 2009)

pecially in Russia as lack of supplies forced many to leave the cities and return to working the land to survive.⁴ The Great Depression in the 1930's caused a periodic dip in population growth all around the industrialized world. The aftermath of the Second World War was for obvious reasons far more severe for the fate of many cities in Europe. The post-war period was the beginning of a phase of continual population decrease in both the United States and Europe, albeit for varying reasons.

Economically speaking, the period after the Second World War was a prosperous one. In the United States the number of decreasing cities however rose in the 1950's from 3 to 38.⁵ This was mainly due to the phenomenon coined "the doughnut effect" as the inner cities began emptying out and suburban sprawl increased at the city's periphery.⁶ In Europe, the effect in the urban environment in the postwar era was rather due to a perceived sense of necessity. To escape threat of further attacks on population nodes as well as secure a stable supply of goods, many Europeans returned to settle in the countryside.

Another lasting agent of shrinkage emerged as a result of the strengthening economies of the Far East. Many cities in advanced industrialized societies which grew wealthy from their focus in manufacturing, began to decline as industrial processes modernized and light manufacturing became outsourced to more competitive export-based nations, the leaders being Hong Kong, Taiwan, S. Korea and Singapore.⁷ The 'Rustbelt' of the United States- or the former manufacturing belt- is an example of this, where cities have experienced acute shrinkage beginning in the 1970's (Fig. 10). Since this time, Chicago, New York, and Detroit have each lost half a million inhabitants.

In addition to human initiated hardship, numerous natural disasters and epidemics continue to take a toll on world population. These catastrophes are not avoidable, although continually repopulating areas in high risk zones could be

4 P. Oswalt op. cit.

5 P. Oswalt op. cit.

6 K. Pallagst, *Shrinking Cities: Planning Challenges from an International Perspective*. Kent State University's Cleveland Urban Design Collaborative, Cleveland, 2008.

7 K. Pallagst, et al, *The Future of Shrinking Cities: Problems, Patterns and Strategies of Urban Transformation in a Global Context*. Center for Global Metropolitan Studies, Institute of Urban and Regional Development, and the Shrinking Cities International Research Network. California, 2009.

questioned. A very relevant human-caused natural destruction is the environmental damage we continue to inflict through misuse of natural resources, as we continue to reduce the amount of habitable and arable land. Mostly occurring in less-developed countries, these disasters include pollution, contamination of water supplies, human caused drought, resource depletion, and the list goes on. This thesis will focus primarily on the factors affecting economic or societal-influenced shrinkage processes found primarily in the developed countries of the western world.

02.1.4 Shrinkage Today

The current phase of shrinkage is in many ways different than historic examples, and is predicted to continue in the long run. Curiously, the initial burst of economic prosperity resulting from the Industrial Revolution has had tremendous lasting effects on the perception of industrialized nations, in that we have become accustomed to continuous growth. Shrinkage implies economic difficulty and depression, and this may not always be the case. It is necessary to understand the various influences leading to the particular type of shrinkage occurring today.

One common agent of dramatic change in cities has been the ongoing process of globalization, continuing to propel deindustrialization and change the economic foundations of old industrialized countries. This predicted transition was described by the economist A.G.B Fisher, who divided the three phases of economic development into agriculture, industry, and then services, the phase advanced countries are currently entering.⁸ The new high-tech, financial, creative and consumer-based services sectors have brought with them a high level of mobility in the workforce, resulting in job-related migration trends. This transformation has resulted in competition between cities to attract both businesses and residents, which naturally “yields winners and losers”⁹ On the international circuit, ‘Global cities’ have emerged, and the more connections to these important nodes, the more success a city is likely to have. A large number of once significant cities however find themselves excluded from this international network.

Generally high standards of living and education levels is both a cause and a

Globalization

An ongoing process by which regional economies, societies, and cultures have become integrated through a globe-spanning network of communication and trade. (Wikipedia)

Global Cities

Today's global cities are (1) command points in the organization of the world economy; (2) key locations and market-places for the leading industries of the current period, which are finance and specialized services for firms; (3) major sites of production for these industries, including the productions of these innovations. (Sassen 1994)

8 P. Oswalt. op. cit. p.122

9 Pallagst.,et. al. op. cit. p.29

Demographic Change

This term is neither positively nor negatively afflicted, and can describe population growth as well as a population loss due to the transformation of the composition of the age structure in a society, as influenced by the three factors of birth rate, life expectancy, and the balance of migration. (Förderland.de)

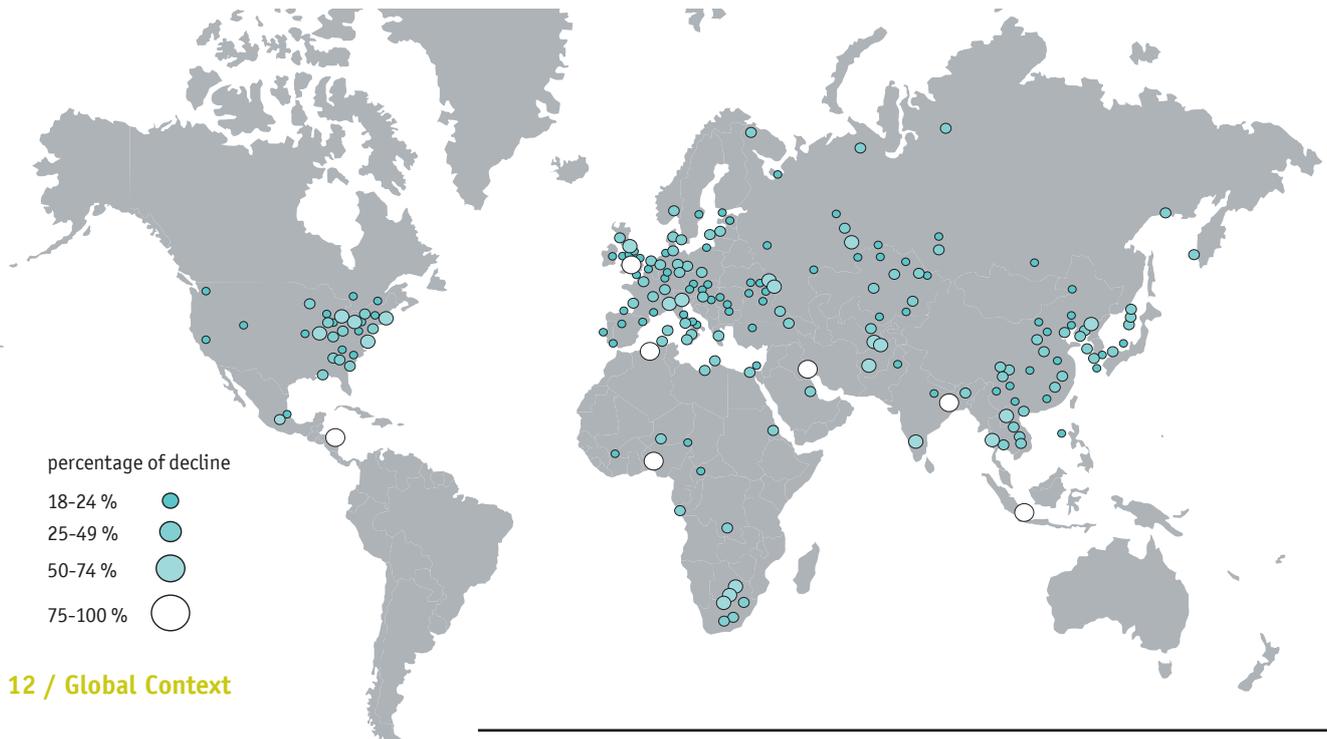
New Economy

An evolution of developed countries from an industrial/manufacturing-based wealth producing economy into a service sector asset-based economy, brought about by globalization and currency manipulation by governments and their central banks. (Wikipedia)

by-product of the ‘New Economy’, and contributes to the demographic change experienced most intensely by the old European powers. In cities hit hardest by economic transition, that is, those formerly heavily reliant on an industrial sector, demographic change can combine to create a cycle of urban decline, where demand is decreased due to out-migration for lack of jobs; a situation exacerbated by low birth rates. (Fig. 11.) Additionally, suburbanization remains a large component and can actually lead to false population numbers as sprawl continues and urban agglomerations merge. The enduring preference for suburban locations for both homes and businesses is mostly apparent in North American, European, and Australian contexts, due to lower property costs and availability of land.¹⁰

In addition to global influences, local conditions also affect the materialization of shrinking cities. Recent spurts of shrinkage especially felt in the United States have been fueled by the ‘Dot Com’ crash and recent financial crisis, due to poorly functioning economic systems. The consequences of climate changes

Fig. 11. Population decline between 1950-2000 in cities with >100,000 inhabitants. (credit: Shrinking Cties, 2006)



10 P. Oswalt. op. cit. p.122

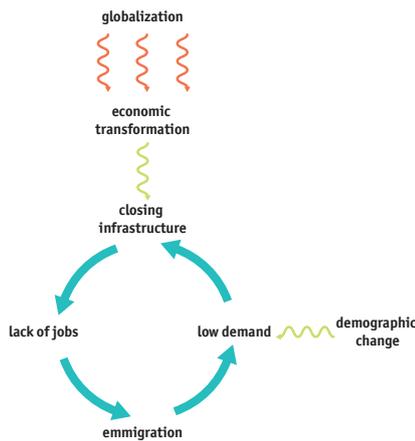


Fig. 12. Cycle of urban decline (credit: G. Willner)

leading to drought can be seen at work in Australia, forcing residents in dryer regions to resettle at the coast. Larger cities in many regions are enveloping smaller ones, in the effort to gain standing against larger city economies and in light of agricultural decline in rural areas. Decline of city neighborhoods in S. America can be traced back to high socioeconomic imbalance and a speculative real-estate market highly dependant on the movements of the elite class. Blue-collar workers are forced to relocate in peripheral neighborhoods due to the inaccessibility of low-income housing.

02.1.5 Shrinkage in Europe

All countries of Europe have been affected by deindustrialization and suburbanization. In France, suffering to a greater extent are the small towns of the hinterland regions as inhabitants leave in search of employment. In contrast, Great Britain is experiencing the most drastic shrinkage in large metropolitan centers, excluding London.¹¹ Within Europe, shrinkage corresponds particularly to sinking birth rates, Italy, Spain and Poland having the lowest.¹² However, the regions hardest hit by shrinkage have been the eastern European countries dealing with the aftermath of the socialist era, as well as former east Germany. More attention will be paid to the internal and external forces at work in Germany in the next section.

The various national planning systems account in part for these differences.¹³ Most countries have implemented policies in the past in attempt to influence population distribution, such as policies for the development of polycentric city networks, or to encourage 'compact cities'. National planning systems themselves may also have an impact on shifting populations, as power over planning is exercised at the national, regional, or local level in different countries.

02.1.6 Conclusion

Shrinking cities are not a new phenomenon and go hand-in-hand with growth in other cities in the world. In light of recent global economic restructuring, some cities emerge as stronger and growing and others slowly recede. Although national and local contexts affect the shrinkage is manifested, all advanced societies are all affected by the global economic competition and better standards of living leading to a shift in demographic structures.

11 Pallagst. op. cit. p.17-25

12 Pallagst. op. cit. p.161

13 M. Bontje. 'Dealing with Deconcentration: Population Deconcentration and Planning Response in Polynucleated Urban Regions in North-west Europe.' *Urban Studies*, Vol. 38, No.4, 2001. 769-785.

02 Analysis



14 / A German Perspective



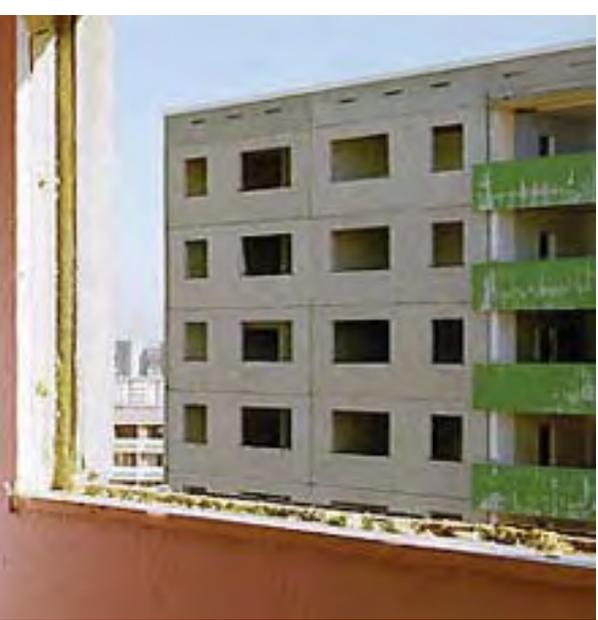
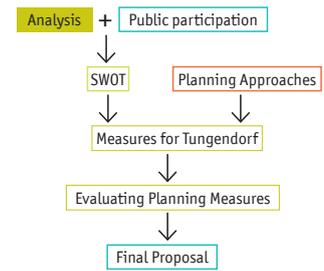


Fig 13-20 from top left: Leipzig, Germany; Werdau, Germany; Unknown City, Germany; Chemnitz, Germany; Leipzig, Germany; Berlin, Germany, Hoyerswerda, Germany; Chemnitz, Germany



02.2 A German Perspective



02.2.1 Introduction

In addition to global trends, it is important to consider the national context in which Neumünster is situated. Germany is located in central Europe between the Netherlands and Poland, with partial access to both the Baltic Sea and the North Sea. (Fig. 21.) It holds an important position in the political, economic and defense structures of Europe. With the largest economy in Europe and the fourth largest in the world, Germany is acclaimed for its expertise in machinery, vehicles, chemicals, and automobiles. It is a populous and dense country, with approximately 82,329,758 (July 2009 est.) inhabitants and a density ratio of 231 people/ square kilometer.¹⁴

Germany can be considered a special case when it comes to shrinking cities. There are three main sources of the shrinkage processes occurring in German cities. Firstly, from the historic perspective of a country once divided still dealing with the challenges of reunification, resulting in regions with unemployment rates as high as 20%. Then in terms of the unique multi-polar network of cities which characterizes the German landscape.



Fig. 21. Germany's location in Europe. (credit: Gina Willner)

¹⁴ CIA Factbook, 19 Jan 2010, 1 Feb 2010, <https://www.cia.gov/library/publications/the-world-factbook/geos/gm.html>

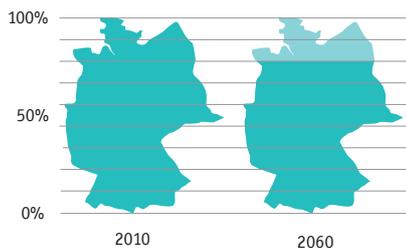


Fig. 22. Germany is predicted to lose approximately 20% of its population by 2060. (credit: G. Willner)

And finally, although not unique within Europe, the demographic change the exemplified by dramatic decline in birth rates and greying population. These factors have led to varying conditions between regions, cities, and even within cities themselves. However, as a whole the country is characterized by a natural population decline, predicted to reduce the total population by 20% in 2060. (Fig.22.)

02.2.2 Economic Transformation

The massive decline occurring in the 1990's in the former regions of East Germany, led to forced rapid deindustrialization and transformation. The formerly state-owned economic structure based heavily on industry was jolted into an post-fordist system based on service oriented sectors. Many companies did not survive privatization, and the consequential closures of many industrial companies led to skyrocketing unemployment rates. Since this transformation, 1.5 million inhabitants of the former eastern regions have left to search for better opportunities elsewhere.¹⁵ Often, instead of rehabilitating inner-city industrial sites, new companies chose to develop on the city's periphery. Rather than occupying often substandard social housing blocks, citizens began developing land on the periphery of the cities, leading to a strong deconcentration at the city core. Both developments resulted in neglect of the inner city environment and infrastructure. As a result of the reunification a strong east-west polarization has evolved within Germany, with higher concentrations of people as well as more prosperous economic activities located in western cities.

02.2.3 Polycentric Urban Structure

Another unique German characteristic involves the even distribution of settlements throughout the country, according to the concept of 'Decentralized concentration'. Many urban centers with different areas of specialization now exist in Germany, all with connections to the global market. In contrast, some countries are served by one central city, such as Paris, France. Advantages of this structure are accessibility and proximity to goods and services for rural communities.¹⁶ On the other hand, the higher the number of small urban centers, the more communities there are struggling to find their footing in the global economy. This is exceptionally true for many medium-sized cities as they lose their former industrial activities and find it difficult to compete with larger

Decentralized concentration

A strategy which follows the concepts of central places and development axes. It implies that population, workplaces and infrastructure facilities are concentrated in agglomerations of different sizes that are spread quite evenly over the whole country. (Universität Karlsruhe)

¹⁵ R. Burdett, op. cit.

¹⁶ K. Pallagst, et. al. op. cit. p. 163

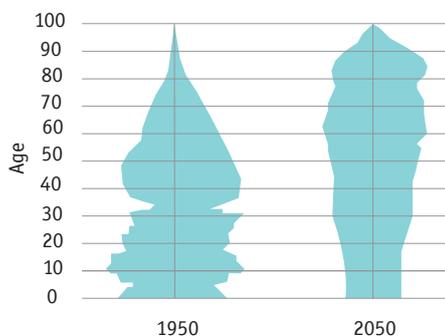


Fig. 23. Demographic makeup in Germany in 1950 compared with prognosis for 2050 (credit: Stati-stisches Bundesamt 2006) Left side: men, Right side: Women.

nearby urban agglomerates. The range of cities affected by shrinkage in Germany is highly visible in Fig.8.

02.2.3 A Greying Population

Demographic change has worsened the effects of the above mentioned causes of shrinking cities in Germany. Reducing numbers of working aged people and higher demands on education to meet the demands of the New Economy require a large percentage of the workforce to resettle in globally competitive cities. Economic instability due to deindustrialization and low job opportunities further exacerbate the financial situation. It is due to this chain reaction it is said that “urban dereliction is like a cancer”.¹⁷ Although the unemployment rate in Germany reached an all-time low in 2008 of 7.8%, it quickly rose again as the financial crisis hit.¹⁸ Additionally, Germany has one of the most rapidly growing elderly populations.¹⁹ Thanks to high standards of living and advanced medicine, people are able to live longer. This is coupled with a decreasing birth rate, as women claim their position in the workforce. However, as observable in Fig. 6. this leaves a smaller number of working people financially responsible for the care of a larger group of pensioners on social benefits.

This transition of course also has an impact on the demands on the built environment, in the form of smaller households and consequently, less living space required per household. Although these trends are awaited in the near future, the current situation still experiences a demand for large living units, based on the habits of earlier generations.

02.2.4 Conclusion

The traces of globalization in Germany can be seen in punctual economic decline, increased competition between cities, and a new elderly-dominated society. In the face of these challenges, efficiency- a concept for which Germany is famous- will need to be applied through city planning to maximize resources in shrinking cities. Additionally, shrinkage should be seen for the opportunities it offers in a country with so little elbowroom as it is. It could lead to the creation of more qualitative living environments, when accepted for what it is and handled in a timely manner.

17 W. Rybczynski. op. cit.

18 CIA Factbook, op. cit.

19 S. Föbker, R. Grotz. *Everyday mobility of Elderly People in Different Urban Settings: The Example of the City of Bonn, Germany*. Urban Studies, Vol.43, No.1, 99-118. 2006. p.99.

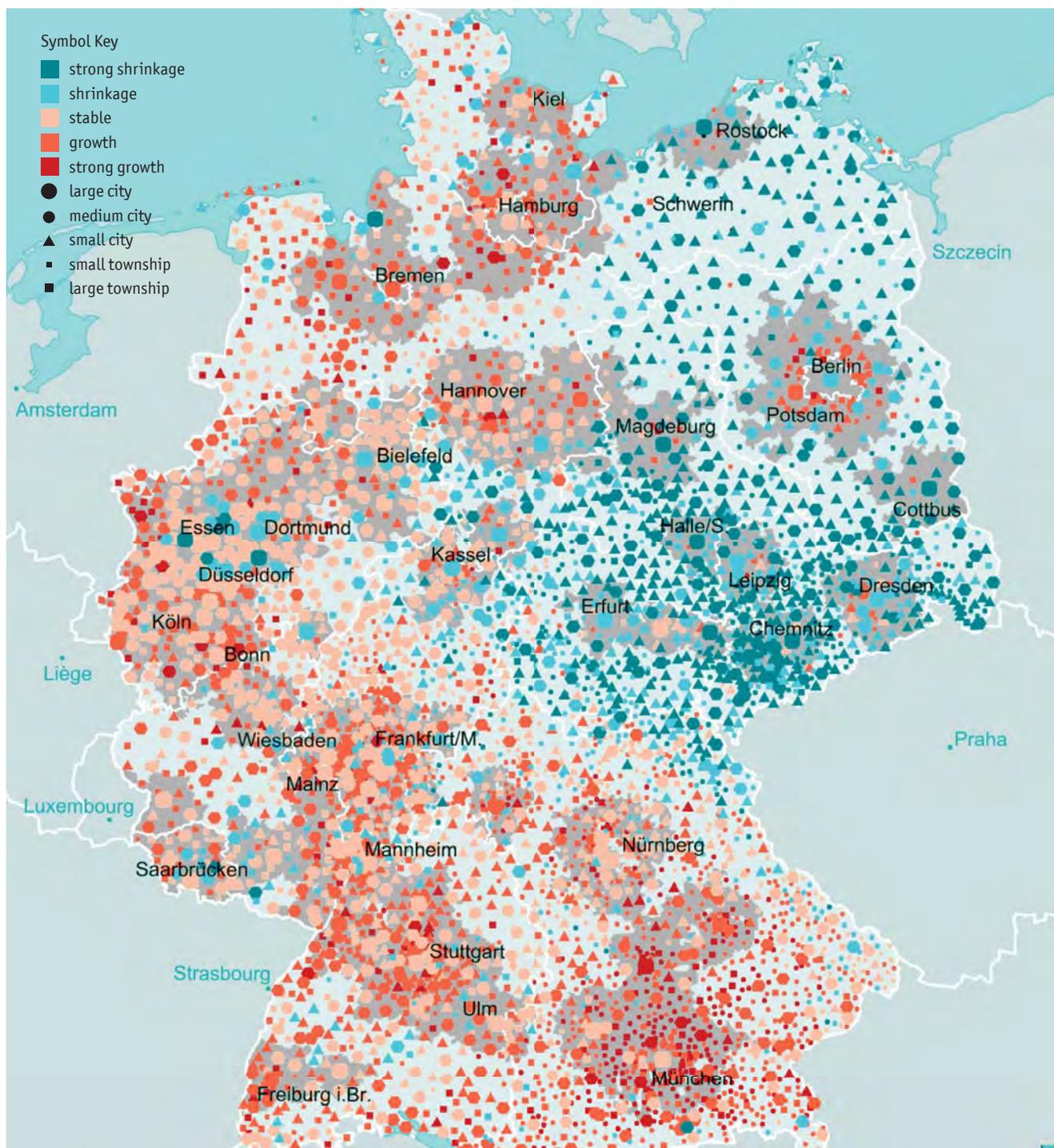


Fig. 24. Shrinking and Growing Cities and Townships in Germany
 According to six indicators; Population development (1997-2004), unemployment rates (2003/4) migration (2002/4), tax income (2003/4), # of new jobs created (2003/4) and purchasing power (2004), credit: BBR Bonn 2007)

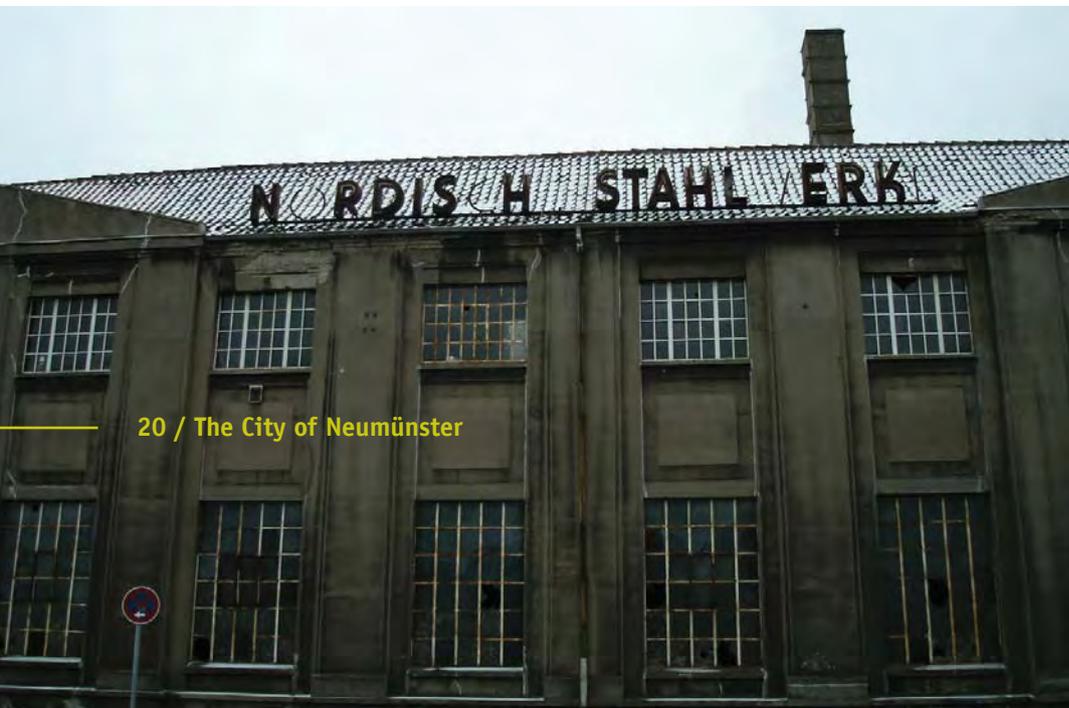




Fig 25-31 from top left: Lakeside cafe in Neumünster's center; Vacancy in inner-city districts; Decay of historic housing; Old city character remains in some areas; Traces of former industry in abandoned factory buildings; The railway is an important asset for Neumünster; Some industrial buildings like this paper factory have found a new use.



02.3 The City of Neumünster

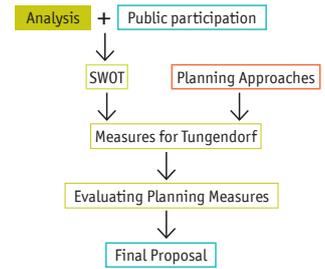


Fig. 32. Map of Neumünster, Germany. (credit: G. Willner)



Fig. 33. Neumünster's location at the heart of Schleswig-Holstein. (credit: G. Willner)

02.3.1 Introduction

The city of Neumünster is used as an example to understand a contemporary model of a shrinking city. The development of the city throughout history up to the present day conditions will be examined. Attention is then focused on one neighborhood- Tungendorf- to examine how shrinkage is occurring on site.

02.3.2 Location

The city of Neumünster is an independent city in the northern German county of Schleswig-Holstein, and the fourth largest in the state after Kiel, Lübeck, and Flensburg.²⁰ Neumünster lies in the heart of the region and is circumscribed by the river Schwale, which forms an artificial pond in the city center before it continues on its way west.²¹

02.3.3 History

Neumünster has a long and colorful past. It was first founded as a Christian stronghold in the 12th century through the construction of a parish church. In the 16th century the town became an important point of trade, due to the location of the settlement at a traffic node in center of an agricultural landscape. The beginnings of a textile handicraft business began in the 17th century, a sector which continued to expand and helped strengthen Neumünster's industrial image as the 'Manchester' of the region in subsequent centuries.²²

Big changes for Neumünster came in the 19th century. The first real textile factory was founded, and shortly led to the settlement of new textile, cotton, and paper factories as well as tanneries. Metal industries were established which supplied the necessary machines. The population growth was tremendous at this time; the city was well-known as a place where people could pursue their fortune.²³ With the development of the railroad connecting Hamburg to Kiel in the same century, Neumünster's position as traffic node and important supplier was secured. Further additions allowed Neumünster to connect to rural villages the south, east and west. To service the large flow of trains now passing through the city, a train repair station was erected. In the last half of the 19th century

20 *Neumünster*. Wikipedia. 04 Feb 2010.

<http://de.wikipedia.org/wiki/Neum%C3%BCnster>

21 K. Barlach, H. Hingst, H. Lütjohan, K. Schlabow. *Stadt ältester Traditionen Neumünster*. Karl Wachholtz Verlag. Neumünster, 1966

22 A. Eichler. *Neumünster im 19. Jahrhundert: Projektarbeit des Leistungskurses Geschichte an der IGS Neumünster*. IGS Neumünster. Neumünster, 2006. p.15

23 K. Barlach. p.17

the town saw its first gas and plumbing lines installed, and with its new wealth and modern amenities, it was finally granted city status.

Within the forty years between 1870 and 1910, the city's population jumped from 7,000 to 35,000 inhabitants. Under these circumstances, the city's limits proportionately expanded, until they began to encroach on the surrounding villages. As the city swelled, many workers longed for a home in the country, with fresh air and green surroundings. Therefore, many began settling in apartments or homes in the small surrounding communities, made possible by the building collectives founded at this time to build affordable housing for the city's workers. Initially, these communities came together and formed a comprehensive plan to guide the rapid construction activities.²⁴ However, the continuous growth finally gave way to the annexation of the communities of Brachenfeld, Wittorf, and parts of Gadeland and Tungendorf in 1938.

The city district today known as Tungendorf was the preferred location for railway families at the turn of the 20th century due to its proximity to the railway repair station in the Kielerstraße. Consistent with 'garden-city' ideals of the age, these working-class families could escape crowded city life and fulfill their dream of a home with a garden. Most homes were duplexes or detached houses, with large backyards and stables, allowing the families to grow their own food and keep animals. As much of the development occurred between the two world wars, the security to provide for your family was a high priority. Tungendorf in Neumünster stands out as an example of considerably high living standards provided for working-class families in the early part of the century.

After continual growth and expansion, the arrival of World War two left its mark on the city through repeated air raids, resulting in over a thousand deaths and a third of the city in ruin.²⁵ The architectural heritage of the city was especially affected, as were many of the industrial factories and buildings.

The post-war period resulted in a baby-boom and an additional surge due to the large migration of war refugees raising the population to 70,000 in 1946. After annexation of the rest of the neighboring villages of Einfeld, Tungendorf

²⁴ H. Moller. *Zilles Miljö gab es auch in Neumünster, Siedlungswesen: Mit Handarbeit zum Eigenheim*. 875 Jahre Neumünster - Geschichte und Geschichten
Verlag der Buchhandlung C. Rathje, Neumünster 2002

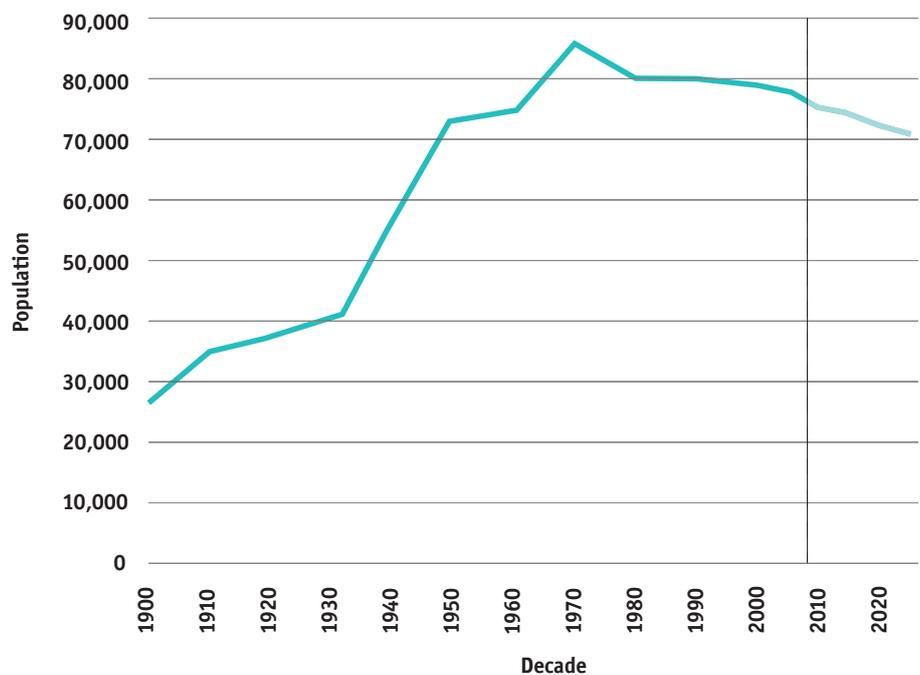
²⁵ K. Barlach. op. cit. p. 21.

and Gadeland, Neumünster reached its all-time high population of 87,000 residents, in 1970. However, the industry was already failing. The 1960's brought with them the closure of many of the historic textile and leather factories, and the image of the city began to change. The classic story of deindustrialization in face of overseas competition began to come true in Neumünster as in the rest of Germany.²⁶ A transformation of the urban fabric was required to facilitate the high amounts of traffic moving through the city, and the remaining industrial monuments were either adaptively reused or torn down. As a result, few traces of the industrial character remain today.

02.3.4 Neumünster Today

The constant loss of population beginning in the last few centuries continues today, as Neumünster deals with the effects of globalization. Economic competition on the global front has caused an ongoing transformation of Neumünster's economy. Signs of demographic change have appeared, showing a natural

Fig.34 Population development in Neumünster, as prognosed to 2025. (credit: Wikipedia and Innenministerium des Landes Schleswig-Holstein.)



26 A. Eichler. op. cit. p. 19

decline in the balance of births and deaths. Finally, a variant of suburbanization through migration to the periphery and countryside surrounding Neumünster is occurring. Population decline is predicted to continue and in 2025 reach approximately 71,500. (Fig.34.) This is a population loss of around 9% in the next fifteen years.

02.3.5 Economy and Employment

The economic transformation of Neumünster has succeeded to a certain degree over the past forty years. The city has established businesses in the manufacturing of metal and machines, logistics, telecommunications and more. However, according to the Wirtschaftsagentur, a partnership formed by the city and local businesses to promote economic development, dependence in the building sector and production industries may prove unsustainable in the long-term.²⁷ In the sectors necessary to secure the local economy -namely those in service and knowledge industries- Neumünster lacks a strong footing.

Coinciding with economic transformation, unemployment rates have been creeping steadily up, from 5% in 1975 to 10% in 1990.²⁸ During this transition, many former leather and textile employees migrated south, where industrial jobs for the time being were still to be found. In recent years, many jobs at the postal service and railway have also been cut, and the headquarters of the armed forces was slated to completely close down this year.²⁹ The new jobs which have been created are often for highly skilled workers, leaving the lower-skilled workers unemployed.³⁰ As a result, compared to the rest of Germany and even the former eastern bloc, unemployment numbers are bleak. In 2007, it was recorded at the high and relatively constant level of 16,7%.³¹

02.3.6 Social Structure

The social makeup of the Neumünster currently differs little from the regional average. A slightly higher than average number of young people below 20 are found here, and a slightly lower number of working aged adults between 20-65

27 Wirtschaftsagentur Neumünster GMBH. 04 Feb 2010. http://www.wa-nms.de/data_de/wirtschaftsstandort/fakten_zum_standort.php?navid=18&fontgroesse=11px

28 A. Eichler. op. cit. p. 20

29 *Neumünster Wohnraumversorgungskonzept Bericht*. GEWOS Institut für Stadt-, Regional und Wohnforschung GmbH. GEWOS. Hamburg, Juli 2006. p.13

30 *Neumünster Wohnraumversorgungskonzept Bericht*. op.cit. p.14

31 *Indikatoren des Politikfeldes "Soziale Lage" für Neumünster 2007*. Bundesagentur für Arbeit, Statistische Ämter der Länder, eigene Berechnungen. 05 March 2010. <http://www.wegweiser-kommune.de/datenprognosen/kommunaledaten/KommunaleDaten.action>

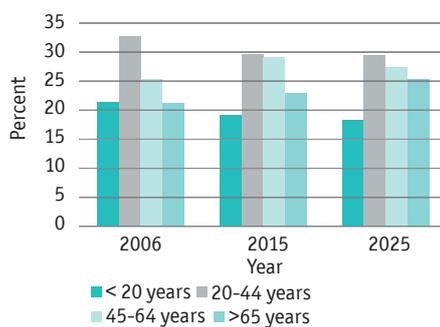


Fig.35. Age structure development predicted to 2025. (credit: Innenministerium des Landes Schleswig-Holstein)

years of age. The number of elderly people is also slightly higher than in the rest of the region. These statistics reflect the family-friendly small town atmosphere Neumünster provides, which lured many families to settle here in the post-war years. However, as their offspring reach adulthood, the lack of education and job opportunities within Neumünster forces them to leave. This trend is clearly observable in the demographic developments within the last ten years, as the number of 25-30 has dropped dramatically.³² As well, the middle aged group is also shrinking: a report published from the county statistic office predicts a drop of 3% in the age group 20-44 by 2015, while the percentage of seniors gains steadily. (Fig.35) Some of the reasons for this development are low birth rates from former generations and out-migration to the countryside.³³ As the next section will suggest, the lack of modern and suitable housing in Neumünster city has likely been the cause of this.

These demographic changes will only become more extreme in the future. As across the rest of the nation, a higher life expectancy than previous generations leads to more elderly, which in 2020 is already predicted to make up approximately one quarter of the population. The currently low numbers of in-migration additionally result less residents of working and child-bearing age in the coming years. The current birth rates already insufficient to maintain population will then fall even more.

The sizes of households are also affected by these demographic changes. With increased life expectancy, it is likely that many elderly people will end up spending their last years living alone. On the other hand, the trend among young adults to wait on marriage and children continues. Both of these tendencies result in a higher proportion of one and two-person households than have been seen in the past and a consequent reduction in larger household sizes. (Fig. 14.)

02.3.7 Living Conditions

The declining number of households results in increasing rates of vacancy on the Neumünster real estate market. To determine the actual market conditions, the city of Neumünster commissioned an external firm in 2006 to conduct a report, called the ‘Wohnraumversorgungskonzept’. According to this document, the estimated number of vacant living units in 2004 was 5% of the market, or

32 Neumünster Wohnraumversorgungskonzept Bericht. op.cit. p.26

33 Neumünster Wohnraumversorgungskonzept Bericht. op.cit. p.26

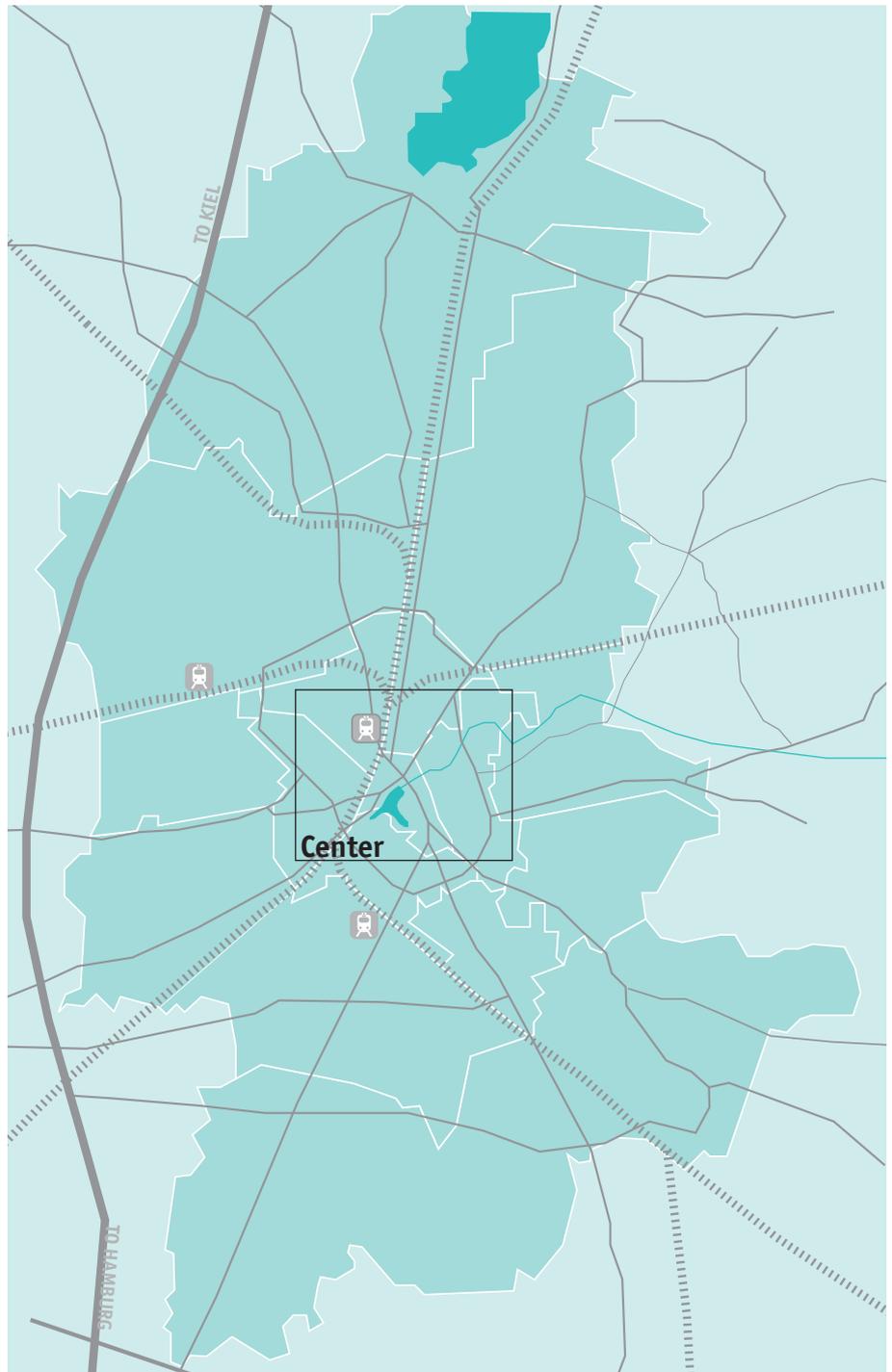


Fig.36. The city districts of Neumünster

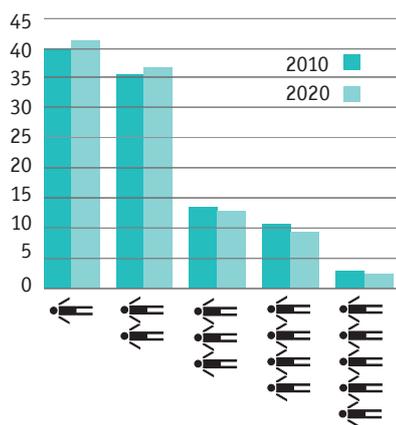


Fig.37. Prognosed development of household size to 2020. (Credit: GEWOS GmbH)

1,900 units.³⁴ As the population decreases, this will continue to rise, although not proportionately to the population loss due to the increase in single-family households. Without taking into consideration neither demolition practices nor new construction activities, the surplus of units will reach 4,100 in 2020. This is approximately 10% of the market, although numbers will likely differ between neighborhoods.³⁵(Fig.37.) Already, vacancy rates vary greatly from neighborhood to neighborhood, creating the so-called ‘perforated’ structure of the built environment which displays pockets of emptiness and decline. Signs of shrinkage are highly noticeable in inner city neighborhoods characterized by denser living units, but not yet so in single-family districts. Even though, almost all neighborhoods reflect a population decline between 1995-2004; construction activities still continuing in two of the peripheral neighborhoods has shown a slight increase in these districts.³⁶

The most affected districts are those located in the inner city, likely attributed to the poor conditions of the apartment housing found here. The district Nordost, containing apartment housing originally used by railway employees, is experiencing vacancy rates of 16%. Other problematic districts are West, Böcklersiedlung, Ost, Kern, and Süd. Most of the apartment units in these districts are in dire need of restoration as well as require utility upgrades. Especially in the central districts, high rates of residential vacancy lead to reduced profit for small businesses, many of which have now closed down as well.

The high vacancy rates not only reflect the surplus of housing on the market but also signify an inventory insufficient to demand.³⁷ The predominate building stock in the inner city districts is made up of rental apartments from the early 20th century, which do not meet today’s demands for space. The market demand actually speaks for more detached housing, (estimated in 2005) despite the fact that this typology already makes up 40% of the market.³⁸ In contrast to other cities of comparable size in the region, this proportion is quite high. Kiel has only 20%, detached housing- Flensburg 24% , and Lübeck 31%.

34 Neumünster Wohnraumversorgungskonzept Bericht. op. cit. p. 55

35 Neumünster Wohnraumversorgungskonzept Bericht. op. cit. p. 55

36 Neumünster Wohnraumversorgungskonzept Bericht. op. cit. p. 43

37 Neumünster Wohnraumversorgungskonzept Bericht. op. cit. p. 55

38 Neumünster Wohnraumversorgungskonzept Bericht. op. cit. p. 57

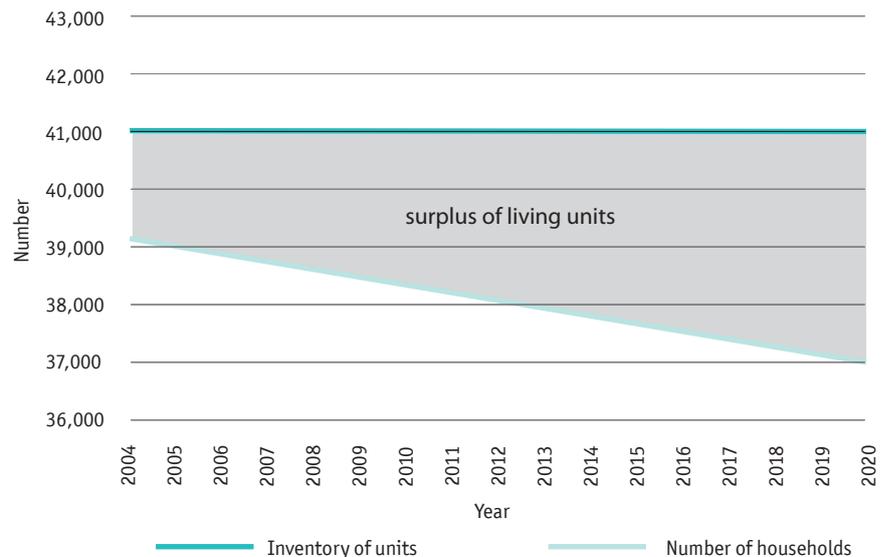


Fig.38. Graph showing predicted development of the number of households compared to existing inventory of living units available for purchase or rent. (Credit: GEWOS GmbH)

02.3.8 City Planning

Many of these challenges are being pro-actively approached by the city of Neumünster. However, at least in the short term, plans are highly concentrated on inner-city revitalization schemes. In 2006, in cooperation with an external city planning firm, an informal planning instrument called the 'Integriertes Stadtentwicklungskonzept' was created to guide the city's development in the next 15 years. As stated in the document, 'The previous goals and approaches created under the prefix of growth are only partially applicable and need to be revised.'³⁹ This document encompasses an overall spatial strategy for the city, and highlights focus areas in need of attention. Thematic areas mentioned include economic development, education, family, and the city's image. Spatial areas suggested for focus are the downtown and city ring districts, the trade fair area, sites slated for reuse, and the further development and networking of green areas.

In the proposed spatial development concept (Fig.38.), the city occupies largely the same area as it does at present, although locations for new construction for both residential and commercial purposes are highlighted. These are mostly at

³⁹ *Integriertes Stadtentwicklungskonzept Neumünster*. Planungsgruppe4/ BPW-Hamburg. Sachstandsbericht April 2006. p. 3

the periphery of the city and require an expansion of the existing infrastructure. This is unfortunate when considering the predicted surplus of 4,100 living units by 2020 as well as numerous vacant factories and barracks awaiting reuse.

Overall, this guiding document offers an interesting approach for improving the economic, social and environmental qualities of the city. However, the development plans approach the predictions for shrinkage unrealistically- they are rather based a stable or growing population. The shrinkage expected to occur in Neumünster is highly due to demographic changes, the same changes affecting the entire country. What's more, the specific absence of young people can be traced to the lack of opportunities for education and work. That the city lacks an institute of higher education is a decisive factor.

02.3.9 Conclusion

What would be beneficial is an overall plan for the development of Neumünster, accepting the prognosis for shrinkage which not only applies county-wide, but nationwide in the decades to come. An proactive plan of action can preserve the qualities the existing residents value, and halt the progression of migration to the surrounding countryside. Focusing efforts of inner city revitalization is in itself a good way to ensure a cohesive and compact city- but it cannot be denied that any inner city revitalization plan leaves the other city districts unaffected, and this should be planned for in advance.





Fig 39-46 from top left: Schulstraße heading west; Rowhousing on Oberjörn; Vacant lot in Jungmannstraße; Road narrowed on Rüschedal with plantings to slow traffic; Apartment housing in Oberjörn, Demolished housing site for redevelopment; Typical early 20th century single-family housing in Ulmenallee; Original duplex housing on Hürsland.



02.4 Challenges for Tungendorf

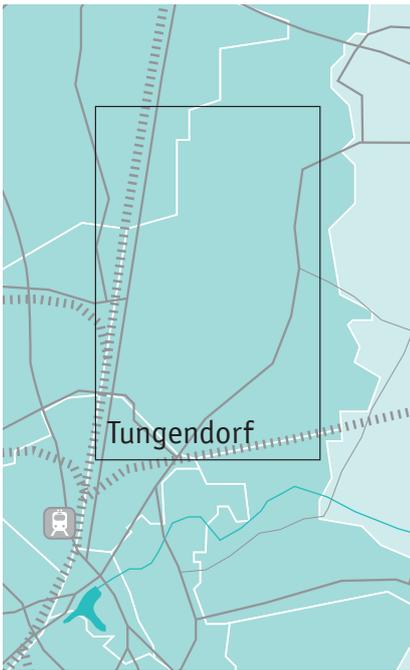
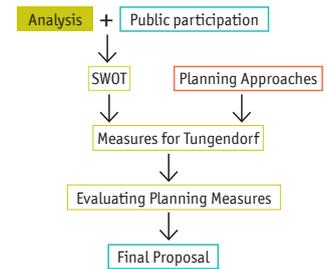


Fig.47. Location of the city district of Tungendorf in Neumünster (Credit: G. Willner)

02.4.1 Introduction

The former working-class neighborhood of Tungendorf has been the site of constant change since it was first settled by the workers of the railway station almost a hundred years ago. It is still characterized predominantly by detached and duplex-style housing, but over the years many of the oversized back gardens have been consolidated and developed in an attempt to densify the area. The neighborhood exudes a quite suburban atmosphere, despite its relatively close proximity to the downtown. Many homes converted into small businesses such as doctors offices or driving schools are scattered throughout the area. Grocery stores are satisfactory, although mostly located along the peripheral thoroughfares on the way into central Neumünster. Although the last years have seen a steady decline in population, the district remains the most populous in the city with 8,298 residents, 10,5% of Neumünster's total population.⁴⁰ Regarding decline, a total loss of 9,1% was calculated between 1995-2004, and recent numbers have shown a further descent of 3% until 2008. The prognosis for 2020 is even more grim, as the numbers are predicted to fall by approximately 10-15%. (Fig. 18.) Due to an increase in small households, the household number is predicted to reduce less drastically, by 5-10% (estimated in 2004).

In addition to other city districts with similar building typology- such as Wirtorf, Faldera, and Brachenfeld- population loss in Tungendorf in recent years has been increasingly affected by inner-city migration trends.⁴¹ This could be attributed to a generational circumstances, as many young adults move from their parent's home to districts with more affordable rental housing. However, this migration could also be traced to reasons of age. This will be discussed in further detail in the next sections.

02.4.2 Location

Tungendorf is located in the northeast extents of the city, bordered to the north and east by farmland. The west border is formed by the Kielerstraße, a rather large thoroughfare lined with large-scale commercial activity. Parallel to this street is the railway heading north to Kiel. The Tungendorferstraße creates a partial barrier in the southern part of the district, across this thoroughfare is a large industrial district. The rest of the south is bordered by the Nordost city district, one characterized by high levels of vacancy and neglected buildings. In general, it can be concluded that even with its close proximity to the city, Tun-

⁴⁰ City of Neumünster Soziale Amt 2009, *Soziale Daten*, unpublished.

⁴¹ *Neumünster Wohnraumversorgungskonzept Bericht*. op. cit. p.31

Fig.48. Diagrams of spatial structures in Tungendorf. (Credit G. Willner)



Built structure- Housing



Paths- Cars



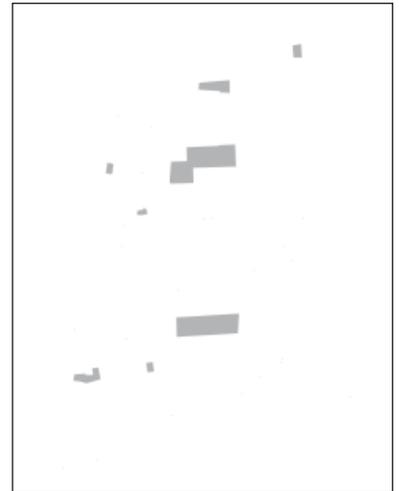
Green Infrastructure- Private



Built structure- Industry, Services, Institutions



Paths- Bicycle and Walking



Green Infrastructure- Public

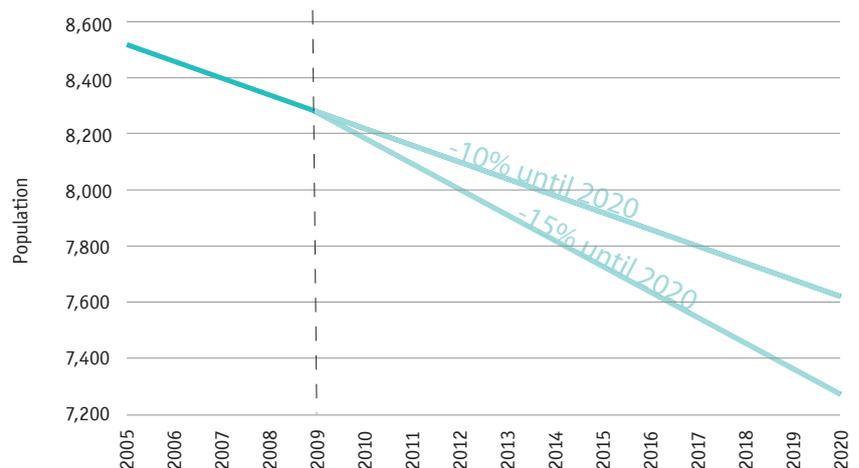


Fig.49. Diagram of current and predicted population decline in Tungendorf (Credit: G. Willner)

gendorf is quite disconnected, through the large thoroughfares and industrial districts separating it from the downtown.

02.4.3 Social Conditions

The social makeup of Tungendorf can be described as relatively stable and homogenous, due likely in part the fact that this district contains a high proportion of owner-occupied housing and is the only district in the city with absolutely no social housing. The population of Tungendorf also shows a lower than average unemployment rate- lying currently at 4.3%, compared with the aforementioned city-wide average of 16.7%. Less residents of immigrant background are also found in this district, with 2,5% of the population compared with 6,1% in Neumünster.⁴²

Lower numbers of young adults aged 18-30 years are recorded in Tungendorf, likely due to the homogenous housing type found here. As expected, Tungendorf is home to many families; current numbers for children and people of working and child-bearing age are higher than the rest of Neumünster. This portion of the population will likely remain in Tungendorf at least in the short- and immediate-term future.

42 City of Neumünster Soziale Amt 2009, *Soziale Daten*, unpublished.

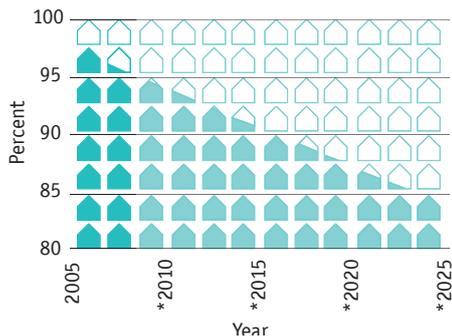


Fig.50. Diagram of current and predicted housing surplus in Tungendorf, in percent. (Credit: G. Willner)

The neighborhood is home to the highest number of senior citizens in the city, most still occupying their family home purchased in post-war years. As these households move for reasons of age, a so-called generation change is expected to occur. Many houses as a result may be passed down to relatives, but in the long run will likely end up on the market. As many of these homes are below standard in terms of space and amenities as well as in need of renovation, this process is expected to be ridden with challenges. Many homes are anticipated to fall vacant as a result.

02.4.4 Building Stock

Along the main thoroughfares, much of the original detached and duplex housing from the early 20th century is found. The highest majority of housing stems from the years before and directly following the second world war, both for single family housing and apartment buildings. Although once very similar in form and style, most homes have been carefully personalized and adapted over the years. What is so obvious today is the complete change in living standards the society has undergone since these homes were first built. When the original stucco exterior seemed outdated, the latest trend in facade treatment was applied. As the families in this district grew and expanded, so did the houses, most of which feature numerous dormers, additions and alterations.

Most houses today call back to the stylistic disposition of former generations, reflecting the fifties or the seventies, depending on when remodeling activities took place. While most renovation happened piece by piece and over time, it hasn't been sufficient to bring the building stock to meet twenty-first century standards: In a survey conducted by the city, 25% of the residents expressed a dissatisfaction with the outdated condition of the housing they lived in.⁴³ The limited building typology additionally predisposes the area for families, as only 27 % of the housing stock is found in apartment buildings. As families are increasingly few and far between, many homes may need to be adapted to house other household forms as well, especially the growing population of seniors.

02.4.5 Services and Infrastructure

The area is reached best by car, bus, or bike from one of the two large roads leaving the downtown. Buses run pretty regularly along the main thoroughfares to and from the downtown. All roads are car-accessible, with occasional pedestrian

43 *Neumünster Wohnraumversorgungskonzept Bericht*. op. cit. p.188



Fig.51-54 from top left: Rudolf-Tonner Schule, Tungendorf; Pestalozzi Schule, Tungendorf; Helmut-Loose Platz, Tungendorf; The Mehrgenerationenhaus in the former Volkshaus. (Credit: G. Willner)

paths mostly bisecting the large back gardens to create a short-cut. Bike routes on the major roads provide a relatively convenient connection for residents to the downtown. (Fig. 48.)

The area is well served by basic services as well as a scattering of small businesses throughout the area. The central square, Helmut-Loose-Platz, features a medium-sized grocery along with two banks, a pharmacy and a weekly open-air market. This spot offers the densest configuration of services, whereas most other commercial services are located on the periphery, with small businesses sparsely distributed throughout the area. (Fig.48.) In fact, as most small businesses are operated out of homes, they are highly unnoticeable. A number of kindergartens and primary schools are located in the district as well as churches of various faiths. The most recent establishment called the Mehrgenerationenhaus, a state-funded community center for all ages, has brought more activity into the area. It is located in a large stately building on Hürsland, originally built in the early 20th century as the center of local government, and offers a range of activities for different ages throughout the day as well as a small library and a cafe. Another important meeting point for residents is the SV Tungen-

dorf, an athletic center located on the outskirts of the district.

The green infrastructure in Tungendorf is mostly private, as almost all homes have access to an immense rear garden. (Fig. 48.) Public green spaces are more sparse; are a few sports fields adjacent to the respective schools and a scattering of playgrounds can be found. Many of the green spaces are simply 'left over' grounds, without built structures. A formal park is missing and especially one which could be used by all of the age groups.

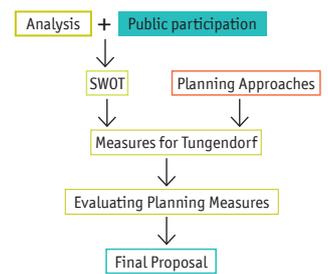
02.4.6 Conclusion

Redevelopment interventions by the city are aimed at creating more desirable living conditions in the inner city districts. This will no doubt have an effect on residents in Tungendorf, as the many elderly residents will be able to fulfill their needs better in an urban environment. The future of Tungendorf needs to be considered in light of these developments, so that necessary modes of action can be considered in time and before dilapidation sets in.

In addition, for the neighborhood to retain appeal for older generations as well as attract younger families, the building stock in Tungendorf as well as the amenities need rethinking. To allow people in different phases of life to meet their needs, affordable housing typologies for young families as well as a good availability of barrier free housing is required. This likely requires a need-based renovation and adaptation of the housing stock, and perhaps removal of superfluous housing in the future as necessary to stabilize the market.

03 Public Participation

03.1 Public Participation



03.1.1 Introduction

Under the premise of public participation as a prerequisite for sustainable development, this thesis uses local stakeholder involvement to create a proposal for the sustainable development of Tungendorf. Local stakeholders have been included in all phases of the project, from analysis to project planning, in the effort to create a more realistic planning proposal. Their input forms the basis for the objectives identified in the SWOT analysis and their feedback has been used to strengthen planning measures for the final proposal. This next section features the methods used and results gathered during the participation process.

03.1.2 Participation Goals

There are a range of methods which are considered participatory, varying in their degree of actual collaboration throughout all decision phases of the process. They can range from partnership to citizen control where citizens themselves manage both process and execution of a project.¹ Using participation in planning for shrinking cities offers the potential to create better and more livable communities, based on citizens actual needs and desires. In cities with dwindling tax bases, informing the community and activating them to take the future in their hands can also be key for the future. The goal of participation in this thesis is to both consult with citizens about their needs and in the identification of good planning measures for Tungendorf.

¹ S.R. Arnstein. *A Ladder of Citizen Participation*. JAIP, Vol. 35, No. 4, July 1969, pp. 216-224

03.2 Consulting the Citizens

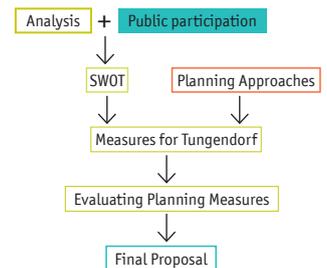


Fig.1. Flyers created to promote citizen participation activities, (Credit: G. Willner)

03.2.1 Introduction

As participation requires those involved to invest both time and energy, the arrangement of the event should be convenient for all target groups. Consideration was given for the timing and placement of the first event, so that as many participants as possible would be able to attend. Equally important for success in participation to keep in mind the formation of a participation group. According to experts in community organizing, it highly depends on the way those participant are approached. A personal invitation is often a deciding factor, as is the articulation of a motive in interest of the public good.²

03.2.2 Initial Consultation Method

In the initial consultation with stakeholders, topics of interests should be determined by the participants themselves, following the assumption that people are most apt to be engaged with problems which affect them personally.³ One method used for this is called the “Activating Consultation” (Aktivierende Befragung), developed in the context of enabling community development in disadvantaged neighborhoods.⁴ Its premise is, that the best way to certify that topics address the needs of those living in a given neighborhood is to conduct qualitative consultations with them. It should be recognized that the citizens are the experts on the living conditions in their neighborhood, and their opinions are essential to understanding the real conditions on site.

‘The Activating Consultation’ is the begin of a longer process of democratic participation, where the contact to participants is first made and the foundation for future work is laid down. Its intent is not to collect a representative sampling of opinions, its strengths are in its qualitative process, where both problems and solutions are sought after democratically.⁵ Although time and resources prevent this process to be carried out so assiduously in this case, this method was chosen as a good method for gathering first-hand information about the local conditions.

2 H. Richers, T. Habermann. *Aktivierende Befragung.*(1) Stadtteilarbeit. 17 Feb 2010. http://212.12.126.151/cms/index.php?option=com_content&task=view&id=48&Itemid=247

3 *Aktivierende Befragung.*(2) Wegweiser Bürgergesellschaft. 16 Feb 2010. www.wegweiser-buergergesellschaft.de

4 *Aktivierende Befragung.*(2) op.cit.

5 H. Richers, T. Habermann. *Aktivierende Befragung.*(1) Stadtteilarbeit. 17 Feb 2010. http://212.12.126.151/cms/index.php?option=com_content&task=view&id=48&Itemid=247



Fig.2 Article in local newspaper about participation events (Credit: Holsteinischer Courier)

The consultations were carried out in the local community center called the Mehrgenerationenhaus, located centrally in Tungendorf. Posters and flyers were distributed prior to the event to draw participants, and posters used during the event to explain global, national and local trends related to the topic. In total, 18 residents were interviewed ranging from 18 to 90 years of age.

03.2.2.1 Results

What do you like about living in Tungendorf?

The predominant reaction from residents was positive, many spoke of the calm atmosphere, good infrastructure and services, good bus connections, nice neighbors and variety of social events, such as the Mehrgenerationenhaus and the SVT Sport Verein. Many middle aged residents spoke of the good qualities the area offered for raising a family, with large backyards and good schools. Younger residents displayed a much higher sense of mobility- they had a hard time identifying only with the neighborhood itself. One young adult mentioned the good proximity to Hamburg and both the Baltic and the North Sea.

What don't you like about living in Tungendorf?

Unanimous opinion among the seniors living here was the complete satisfaction with their living environment. Some banalities like walking paths not being properly maintained or people not picking up after their pets were mentioned. Heavy traffic on some streets was mentioned as a nuisance. Residents in their middle age were more critical, mentioning the lack of activities for youth, the condition of the houses discouraging new buyers, and the uniformity of the area in term of appearance. Lack of activities, especially night life, was also mentioned by younger residents.

How long do you plan on staying in Tungendorf?

Most people that move to Tungendorf stay for life. Overall it can be said that none of the upper middle aged or elderly residents had the intent to leave the area of their own free will. Many middle aged residents were of the same opinion, as they begin to start a family. The consensus among younger residents was the lack of opportunities for them in Neumünster as a whole and planned on leaving to study elsewhere.

Have you seen signs of population decline in Tungendorf?

Answers here were varied. A good portion of the answers mentioned noticeably

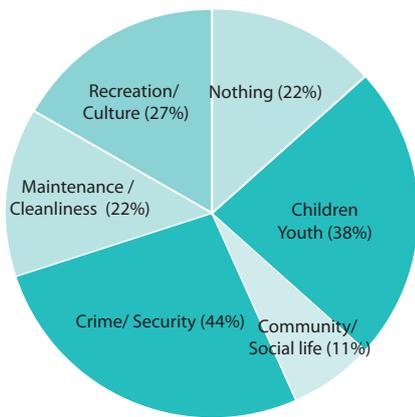


Fig.3. Results from question: In which of the following topics do you see the greatest need for action? (Credit: Gina Willner)

vacant buildings throughout the neighborhood. One person who walks her dog on a daily basis noticed an increase vacancy in the past 8 years. Others simply responded, that they hadn't noticed anything unusual. A minority mentioned redevelopment actions such as newly purchased and renovated houses, full kindergardens and the area having exactly the same reputation as ten years ago.

What would you change when you would have influence?

Many elderly people had absolutely no wishes for the area, one possibility mentioned however was the provision of more elderly facilities, so that elderly people on assistance would not have to leave the district as they require more care. Some proposals included a winter playground for all ages, where elderly people could come as well. Many people of middle age noticed a lack of after school activities for youth and teenagers, as well as a poor cultural offering for these groups. For youth as well as elderly an internet cafe was suggested. This is intended to provide younger kids with a meeting point which fits to their interests, and give elderly residents an access point which they likely do not have at home.

Other questions asked included the identification of what topics were in special need of attention in the area, from a list already provided. The majority of residents mentioned the issue of criminality and security, and issues with youths—mainly teenagers. Topics second often mentioned were those of recreational activities and culture, and the neatness and cleanliness of the area. Additionally, many left the area blank or remarked that they see no need for action. Two categories left completely unmarked were Housing and Living Environment, and Shopping/ Health facilities. (Fig. 3.)

In order to determine the willingness in the area for future involvement in planning processes, I asked the residents which of a variety of planning activities they would be interested in participating in. The results show a low willingness for involvement in public participation, although a few did mark their desire to partake in a future scenario workshop. This workshop will be conducted in a later phase to discuss planning measures together with citizens.

03.2.2.2 Conclusion

The citizen consultations provided interesting insights into the various perceptions of the neighborhood depending on age and life stage. While most seniors in the area were highly content with their living area, contentment reduced ac-

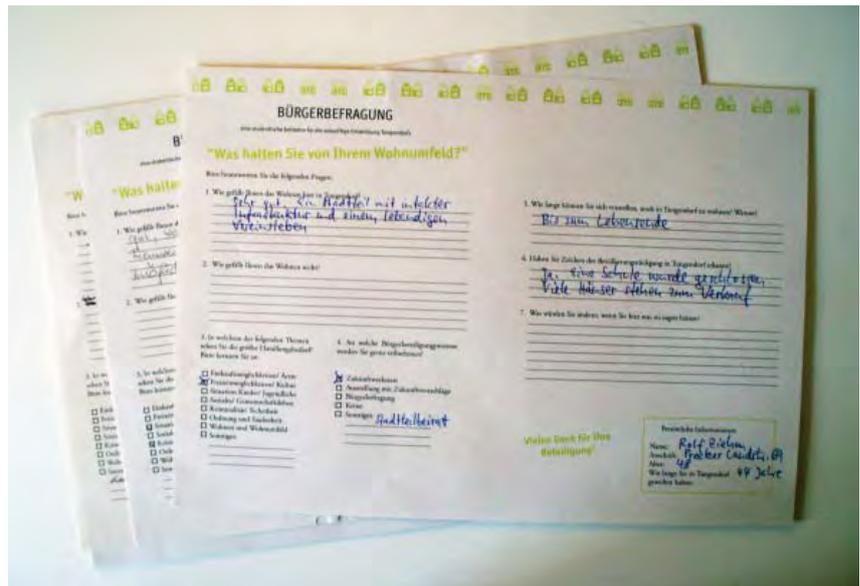


Fig.4. Questionnaire used as initial consultation method (Credit: Gina Willner)

ording to age. Daily needs seem well met in the area, although more cultural activities would be welcome from all ages. The greatest concerns expressed were the limited opportunities to stay in the area for older generations as they age, and therefore the necessity for senior housing and assisted living facilities. Crime was also mentioned by many as a great problem, perhaps due to high unemployment rates in the city, but also related to the lack of recreational opportunities for the areas youth. Interesting to note is the lack of attention paid to vacant housing. Some mentioned numerous vacant housing on the street, but did not see it as a negative phenomenon, or something which affected them personally.

03.2.3 Mental Mapping

Shrinkage offers the chance to so to say, “correct the previous sins of city planning”⁶ and create a better and more sustainable community. As supplement to the first consultation with residents, a method of mental mapping created by city planner Kevin Lynch, was used to gain information about the physical environment as perceived from residents. This involved the identification of five

⁶ Falk. *Bewohnerpartizipation- ein Potenzial für den stadumbauprozess nach stadtökologischen Gesichtspunkten in Wohngebieten*. HU Berlin. http://www2.hu-berlin.de/geo/gkol/phase1/fortsetzung/project_1



Fig.5. Mental mapping exercise worksheet (Credit: Gina Willner)

important elements: paths, edges, districts, nodes and landmarks.⁷

Understanding which Paths from the resident's point of view are of importance can lead to interesting conclusions about how it is to movement through the city. For example, streets which change drastically in character along their length may not leave behind strong image. Depending on the user, some paths can be perceived as edges, when they do not offer opportunities to be crossed. edges can also communicate where two districts converge. Districts help create a simplified overview of a city, through which residents can orient themselves. Strong character contributes to the identity of a district, giving residents a sense of pride and community about their district within the larger city.

Often the most important places in the city are the nodes. These are important meeting points and centers of interaction, which also can act as a symbol for a neighborhood's image. How strong these nodes are perceived can relate to the intensity of their form, their accessibility, etc. Landmarks are used for navigation through the district and contribute greatly to the perception of an area,

⁷ Lynch, K. *Das Bild der Stadt*. Berlin/ Frankfurt a.M./ Wien. Verlag Ullstein GmbH, 1965. p. 60.

from within and without.

03.2.3.1 Results

Maps from different residents were combined to determine the most commonly identified elements. Although paths were highly dependant on the location of the inhabitants home, the most commonly used paths were along Hürsland between the Mehrgenerationenhaus and the center at Helmut-loose-platz. Other commonly used paths were the major thoroughfares of Kielerstraße and Tugendorferstraße, as routes into the downtown. Schulstraße was additionally a commonly used connection to Hürsland. The route to the neighboring village were also quite frequented, as well as the peripheral streets. Most people were very aware of the borders of the district being the industrial districts and busy thoroughfares as well as the farmland bordering the north and east. Concerning unique districts within the neighborhood, the neighborhood was considered quite uniform in character, except for areas with apartment housing. Main meeting points were identified as Helmut-loose-platz and the Mehrgenerationenhaus, both framing the main thoroughfare of Hürsland and the SVT, the local fitness club. Helmut-loose-platz and the Mehrgenerationenhaus were additionally mentioned as landmarks, along with the Rudolf Tønner and Pestalozzi schools and the Luther and Andreas churches.

03.2.3.2 Conclusion

The elements identified should be kept in mind in future development schemes, especially under conditions of shrinkage, as they are important to the identity of the area. For example, one element which can be improved is the sense of disconnectedness the residents feel from the city. The major routes to the city are highly trafficked and perceived as barriers from the surrounding areas. These barriers have the potential to be softened as well as more accessible. Additionally, the most highly trafficked streets within the area- such as Schulstraße and Hürsland- are core elements and could be optimised as such, with better accessibility and an even higher concentration of activity.



Meeting Points



Important paths



Barriers



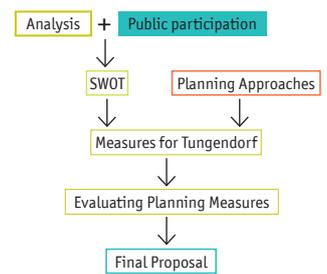
Special Areas



Landmarks

Fig.6-10. Combined results from mental mapping exercise (Credit: G. Willner)

03.3 Consulting the Experts



03.3.1 Introduction

To gain deeper insight into recent developments in Tungendorf, interviews were conducted with various stakeholders and city officials. These included the department of urban development, local board of representatives for Tungendorf and the real estate office WOBAU.

03.3.2 Interview with City Official

To find out more about influences and obstacles affecting development plans in Neumünster, I consulted with an official from the city's Department for Future Development (Fachdienst Stadtentwicklung und Zukunftsaufgaben). This department takes care of the general management of the city's future development in all sectors: economic, social, environmental. They are also responsible for the commission of the Integriertes Stadtentwicklungskonzept discussed previously.

I based my questions on the leading documents and reports commissioned by the city which outline modes of action and statistics from the Federal Department of the Environment in Germany (Umweltbundesamt) regarding trends and prognoses for Germany. Some of the methods used in other cities dealing with shrinkage were also presented to determine feasibility for implementation in a German context.

Regarding the 'Integrated City Development Concept', would you say that this forms the basis for the future development plans in Neumünster?

This document was originally commissioned as a condition of state funding received through the program Soziale Stadt. It has since been acknowledged by the city as a tool for consideration in future planning actions, however, there is no binding obligation to use the document. This is primarily due to an unwillingness to admit that the city is in a situation of long term, consistent shrinkage- a taboo in the current political atmosphere.

How would you describe the short- and long-term goals for the real estate market in Neumünster?

The real estate market is primarily dominated by a demand for single family housing. Apartment housing however is to some extent being restored and consolidated into larger units. The most recent focus on restoration activities occurred in the city districts West and Böcklersiedlung under the funding of

the program 'Social City'. The existing building stock of single-family houses needs improvement, as the majority originated in the pre-war and between war periods. Most of the owner-occupied housing stock does not fulfill today's demands in size or amenities and requires serious renovation work. Renovation work must be financed on a personal basis, which can be a burden on many households.

Would the city take into consideration the deconstruction of single-family housing in peripheral areas, when the long term costs of maintenance for infrastructure can be reduced and more financial means for the resulting population is made available?

This will definitely be considered when it comes to the point that peripheral housing districts experience high rates of vacancy, and housing could be acquire from owners. Using financial means to encourage people might be difficult considering the attachment people feel to their homes. The situation here is different than that in former East Germany, where demolition usually only required negotiations with one owner. Additionally, it might be difficult to procure the financial incentives. What would help of course is to calculate how much tax money could be saved in the long term by the removal of infrastructure in a certain area. It was mentioned that housing in Germany is often built for the long term, so that the- so to say- embodied energy, in the house and infrastructure may outweigh the long term costs spared with their removal.

Do the equivalent of land-banking or land trusts exist in Germany, where firms purchase and consolidate plots from different homeowners and take care of the deconstruction, decommissioning of the infrastructure and rehabilitation activities?

The closest comparison would be the deconstruction activities in former eastern Germany, but these properties were often already owned and financed by the state.

What instruments could be implemented to prescribe how the land acquired can be redeveloped?

This would be determined in a personal contract between the city and the purchaser of the lot, rather than stipulated in an overall document for a city area. Most often, mixed uses are allowed in single-family housing areas, and are even promoted by the city. In Ruthenberg, a district of Neumünster, many private houses have been converted small businesses. It is not in the interest of

the city to normally discourage small scale commercial activities. In order to prescribe a certain type of usage, demand first needs to exist. In most districts outside of the city, an urban environment is not desired. Even new kinds of building typologies, such as row-houses or cooperative housing, are difficult to promote to residents. Attracting new residents from Kiel or Hamburg may however be an option to increase demand for new types of living.

03.3.3 Conclusion

Tungendorf still has hope when considering the continued demand for single-family housing city-wide. Adapting these homes and bringing them up to date could be the key to preserving the district and meeting this demand. Also worth investing in is the potential to bring in commuters from nearby cities which could initiate demand for other housing types.

03.3.4 Interview with Citizen Representative

In an attempt to gain an overview of the city district and clues to its development through the past, I interviewed the chairman of the City District Advisory Board. The board itself is responsible for mediating between the residents and the city government. They meet regularly throughout the year to discuss problems and concerns raised by the citizens, as well as initiatives of the city. The chairman of the board is often approached by concerned citizens with problems for discussion at future sessions.

What sort of problems have been brought up by the residents?

Most complaints deal with practical issues of cleanliness and sanitation. In order to increase awareness about these issues, the chairman often writes a short excerpt in the local district magazine. Many citizens are also active in new local developments. One recent example occurred in response to new bus routes initiated to expand the existing public transportation network. Citizens living in affected streets formed in protest against this development as it increased the traffic and noise level outside their homes.

Teenagers in the district have also been a source of concern lately. Even though the area has a relatively good offering of youth activities, there are some groups who prefer to occupy the local playgrounds; whose presence of course leads to problems with the younger children. To deal with this issue, a local initiative was started which resulted in the creation of a local cafe exclusively for youth. Although the cafe has had good results, it hasn't solved the problem complete-

ly as some groups still choose not to participate. Unfortunately, the initiative will be canceled after one year due to lack of funding from the city.

Another recent problem is a sudden surge in burglaries of single-family houses. It is speculated that this is due to the high rate of unemployment in the city as the goods being stolen are often expensive and easily resold.

Do many people have problems selling their homes in Tungendorf?

There are many homes and apartments which have stood empty for quite a long time. It may not be noticeable because after a period of time the 'for sale' signs are removed to prevent a negative image being formed of the house and the area. A change of ownership has started to occur in the past twenty years resulting in complications as people sell their homes. Elderly residents commonly move into another home before selling their previous one; when they discover the difficulties in selling it is often too late. The major reason for difficulties in turnover are the size and condition of the housing stock in Tungendorf, as most homes were built 50-80 years ago.

On the other hand, Tungendorf is one of the most attractive places to live in the city. It has good infrastructure and facilities, as well as a strong sense of community with citizens very involved in local activities. Twenty years ago there were many attempts to densify the neighborhood through the consolidation of large backyards into developable land; many of which failed due to citizen protest.

Many small businesses are dispersed throughout Tungendorf. Is it a desire of citizens and/or shop owners Tungendorf to create more dense areas, such as at the center?

The development of shops dispersed throughout the neighborhood occurred historically. Earlier there were small dairy shops and green grocers located all throughout the area. There is a desire to densify the center of Tungendorf, to expand the supermarket and also provide health facilities there. This would provide a better environment for elderly and disabled, who could then have most of their daily needs met at the central square. However, it has been difficult to implement, as most of the surrounding properties are single family homes owned privately.

03.3.5 Conclusion

The challenge people experience with the sale of their homes stems from the outdated housing stock in Tungendorf. However, as 'one of the most attractive places to live' in Neumünster, it is worth preserving as for its established infrastructure as well as the cultural heritage the housing stock represents. To avoid the same results as when densification actions were proposed years ago, measures taken to deal with population decline will need to engage the residents to ensure a mutual conception of the district's future. The youth problems associated with a lack of variety in activities may also have new opportunities as the flexibility in the district increases.

03.3.6 Interview with Real Estate Company Representative

To determine the conditions on the local real estate market firsthand, I spoke with the president of a local real estate company involved in rental, sales and property management in Neumünster, which owns a number of apartments in Tungendorf. As exact data regarding the number of vacant houses in Tungendorf is not available, and signage has largely been removed, it is important to talk to experts to determine recent developments on the market.

How would you describe the real estate market in Tungendorf?

Tungendorf is overwhelmingly characterized by single-family houses and large gardens. As the area was originally founded by working class families, mostly employees of the railroad repair station located along the Kielerstraße, the houses are humble, simply constructed and have undergone numerous renovations over the years at the hand of the owner. The people which originally founded Tungendorf were of a lower middle class- they grew vegetables and kept animals in their backyard as additional food supply. This is why, more so than other single-family neighborhoods in Neumünster, Tungendorf is undergoing extreme changes as current owners attempt unsuccessfully to sell their homes. Other areas, such as Gardenstadt, had an original building stock of a higher standard, and haven't had as much trouble for the homes to change hands.

How high do you estimate the vacancy rate in Tungendorf today?

I would estimate that it lies at about 10%. In the last 1-1/2 years it has skyrocketed as the change of generation begins to occur. Homes are often left to the children, who are uninterested in occupying the homes themselves and have difficulty selling as price expectations are often unable to be met.

What real estate properties are still sold today in Tungendorf, and why is it so?

It is dependant upon the size of the units and whether or not they have already been renovated in the past years. The presumed costs of renovation are often higher than building new, which for new home owners is of course unattractive. The last few homes which were sold by WOBAU in Tungendorf were newly built rowhouses, which were however quite difficult to sell. The market in Neumünster is for free standing houses, anything more dense is not marketable. People move to Neumünster for the open space and green surroundings, not for the 'big city feel'. The easiest to sell pieces of land in Tungendorf today are empty lots.

Could you give me an idea of the price range on the market in Tungendorf?

No, I don't think I can answer that.

What is your opinion of the living conditions in Tungendorf- are they satisfactory or is something missing?

The infrastructure and facilities in Tungendorf are completely satisfactory. There are multiple schools, supermarkets, doctors offices, and so on. The attractiveness of the area could not be better, it is simply the building stock which is inadequate.

Do you see the potential for Tungendorf to undergo a restructuring of the building stock in that it becomes more like the Gardenstadt neighborhood?

The decline in Tungendorf has already started and regarding the predicted population developments it is probably not likely. I would predict that as more and more houses are unable to be sold, they will increasingly be torn down.

03.3.7 Conclusion

The current procedure for demolition has no guiding strategy; homes seem to be simply torn down to create more marketable pieces of land. However, it is likely that many sites in the future remain unoccupied, according to population projections. When sites throughout Tungendorf become randomly rebuilt, while others remain vacant, the current density cannot be maintained. Under conditions of oversized infrastructure systems, and efficient utilisation ratio cannot be maintained. This is a drain on a dwindling supply of capital for the entire city. What is needed to maintain density and efficiency of infra-

structure within the district is an overall plan to guide where new construction activities occur. Sites can then be consolidated for other uses, such as a community parks or a nature reserve.

On another note, Tungendorf should be recognized for the range of infrastructure and facilities it does offer. The district is very well established within Neumünster, and provides a good living environment for its inhabitants. More energy needs to be invested in the renovation and alteration of the outdated housing stock, rather than simply opting for demolition.

04 Planning for Shrinkage

04.1 A New Perception of Shrinkage

04.1.1 Introduction

When considering shrinkage within its historical context, it can be seen that it is actually as commonplace as growth. Indeed, it often accompanied by negative developments, which explains the stigmatization it has traditionally received. The type of shrinkage occurring in Neumünster today can however be attributed to the changing economic and demographic conditions characteristic of advanced societies. These trends are predicted to continue in the long run. While shrinkage no doubt presents challenges for sustainable development, it is also essential to consider the chances it creates.

04.1.2 Reevaluating Shrinkage

The word itself -shrinkage- is inherently laden with negative connotations. As the opposite of growth, which is connected to advancement and prosperity, shrinkage is associated with regression and decline.¹ This view, as a measurement of the worth of a society is flawed, as it is based purely on quantitative indicators. A sustainable development does not focus only on the economic prosperity of society, but the importance of a functioning economy to meet the needs of society and the environment on which we so greatly rely. (Fig.1.) In a context of shrinkage, as the urban fabric becomes more flexible, social and environmental conditions have potential to improve.² These quantitative factors are more difficult to measure, but should be taken into consideration nonetheless.

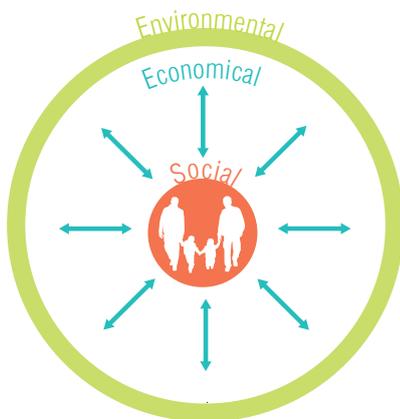


Fig. 1. Development in a sustainable ecological framework, with economic sustainability as the means to ensure a sustainable society today and in future generations. (credit: G. Willner)

04.1.3 Planning for Shrinking Cities

What do the challenges of shrinking cities mean for planners? First of all, less people in the city, which means a lower amount of tax income collected for same amount of public services and infrastructure. The urban fabric as a result can begin to fall into disrepair. Unoccupied buildings and empty spaces can promote vandalism and provide opportunities for illegal activities. All of these factors combine and reduce the quality of the urban environment. A city with numerous 'non-places' and inactivity is not an attractive one, nor does it appear as a cohesive entity. Shrinkage can also increase the socioeconomic inequality of a city. As skill and income level affects mobility, more vulnerable residents are

1 B.Brandstetter, T. Lang, A. Pfeifer. *Umgang mit der schrumpfende Stadt- ein Debattenüberblick*. Berliner Debatte Initial 2/2002.

2 M. Bischof. *Wachstum und Schrumpfung in Biologie, Medizin und Biophysik*, in: *Schrumpfung: Chancen für ein anderes Wachstum*. Springer-Verlag, Berlin Heidelberg 2000.

left trapped in declining areas. Additionally, property values decrease as amount of vacant property rises, making it difficult to attract new residents or businesses.

However, it could be argued that this rather negative chain of events resulting from shrinkage goes hand in hand with the lack of accountability and action by responsible professionals. The continued perception of shrinkage as a hindrance on the livability of a city and its chances for the future are a direct result of overlooking the chances shrinkage presents.

Since the great industrial boom at the turn of the 20th century, industrialized countries have been programmed to believe in growth as part of a healthy and advancing society. For this reason today, even in the face of shrinkage, most cities continue with the same type of growth strategies as before. As observable in Fig. 2, a table examining concepts for handling shrinking cities, many strategies are aimed at encouraging growth, renewal, regeneration and re-branding of cities to attract new economic activities. This focus on rejuvenation implies some sort of a financial 'comeback' in which growth resumes its original course. While it is true that new economic strategies should be investigated, it should not be assumed that new sectors will be as economically profitable, nor require the same manpower as in the industrial past. Frankly, western societies have not seen the same type of growth since the Industrial Revolution.³ There is an avoidance of acceptance of the fact that shrinkage is here to stay in many cities, until a sustainable and appropriate size for those cities is reached.

04.1.4 An Environmental Standpoint

The environmental implications of shrinkage are additionally worth considering. At present, the exhaustion of natural resources and degradation of the environmental already inhibits our ability to sustain life on earth. Famine and water shortages are real problems in the many over-crowded regions of the world. When we consider that most of the environmental damage such as pollution originates in wealthy countries but hits hardest in the developing world, there will undoubtedly be increased environmental refugees seeking shelter in the future. Not to mention the numerous people displaced due to climate change and the consequent temperature changes, droughts, storms, and rising sea levels. Most advanced countries are situated in regions of temperate climate with

³ P. Oswalt. op. cit. p.120

Pattern	 Industrialization	 De/ Post-Industrialization	 Globalization	 Demographic Change	 Climate Change
External forces	Concentration of public/private investments, centripetal forces	Focus on creative class, technology changes, industrial restructuring	'Corporate cities', global cities, competing economies, knowledge-based economic sector	Decline in birth rate, aging population, absolute population decline	Drought, floods, Natural disasters, Coporatization of farming
Manifestation	Rapid development of 'centers', industrial zones, free-trade zones, pollution	Downtown decline, increase in socioeconomic inequality, unused brown-field sites	Global cities, decline, gentrification, increase in socioeconomic inequality	Vacant and abandoned areas, unused infrastructure, socioeconomic inequality	Abandoned farms, shrinking coasts, changing territories, displacement
Planning approaches	Deconcentration strategies aiming at growth at the periphery	Urban renewal programs, tax-free zones, industry clusters, 'smart cities'	Branding of cities, Science park, Biotech parks, attracting the 'creative class'	Demolition and renewal, 'smart shrinkage' reurbanization & renewal of urban centers	Water management, disaster management, refugees, visa concession

Fig. 2. Conceptual frameworks for Shrinking Cities: Overview of established frameworks for viewing the complex influences surrounding the shrinking cities phenomenon today (credit: Martinez-Fernandez & Wu, 2007)

lower risk for environmental disasters, and could become a haven for people fleeing other parts of the world. Keeping in mind the rapidly growing mega cities of the developing world, immigration is likely to increase in the future.

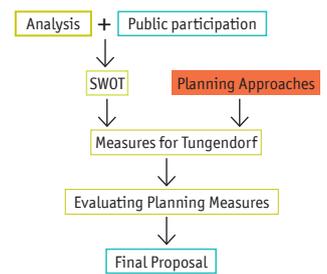
The concept of carrying capacity stipulates the maximum number of organisms of a particular species that can be supported indefinitely in a given environment.⁴ It is speculated that we have reached the earth's carrying capacity, which means we are already unable to ensure the survival of future generations. In view of the emerging competition between cities, that not each city can, or should, grow. When considered within its global context, and the rapidly growing cities in other parts of the world, the prospect of shrinking cities may be a welcome one.

04.1.5 Conclusion

It's time to accept the fact that some cities will become smaller. Despite this, they need to fulfill the needs of current inhabitants, and for this, we need to explore new theories of planning for shrinkage as well as models of success. The next section will explore some examples of shrinkage management and adaptation in planning.

⁴ www.dictionary.reference.com

04.2 Planning Approaches



04.2.1 Introduction

It is important to take a look at planning approaches already used effectively in managing shrinkage. Methods used previously under assumptions of growth were not considered in this evaluation. Rather, the methods analyzed are those concentrated on shrinkage control and improvement of the urban environment, based on the projection of future population counts. These tried methods can be evaluated and considered based on their suitability for the city of Neumünster and Tungendorf. Local stakeholders will be involved in this process, and new methods will also be sought after.

04.2.2 Let it Be

The concept of this method is simple: Allowing nature to claim back what we have taken through a natural process of biodegradation. It is a realistic strategy, and a useful one in some cases. Many of the problems associated with shrinking cities stem from the fact that the demand for redevelopment is nonexistent.⁵ Demolition and rehabilitation of the land is also extremely costly, as well as refurbishment and reuse. Sensible discretion can furthermore allow funds to be invested in more strategic locations in the city.

It is also interesting to consider the cultural implications of refraining from demolition. Some buildings or sites, although not in use, represent the cultural heritage of a place. They can act as reminders of the course of development of the city has taken. And there always remains the possibility that in more economically stable times, the old industrial buildings or train stations have the opportunity to be converted into museums or adaptively reused. In the Nordrhein-Westfalen region of Germany, a trust fund was set up to purchase and preserve former industrial sites under historic preservation laws. (see Fig.3)

This transition can course can take quite a long time, especially when considering the type of materials most building have been constructed of since the Second World War. It is important that the inaction on the part of the city is not interpreted as the unworthiness of a certain district. The reasons for natural reclamation should be made clear to citizens, and they should be included in the process of choosing which sites to let be.

⁵ T. Wiechmann, S.Siedentop, Chancen des Schrumpfens- Stadtumbau als kommunale Gestaltungsaufgabe. Bertlesmanns Stiftung. 29 Jan 2010. <http://www.wegweiser-kommune.de/>



Fig. 3. Decommissioned industrial sites initially left standing, now preserved through a trust fund set up for industrial buildings. Top: Former colliery in Bottrop, now a museum (credit: Die Industriedenkmalstiftung)



Fig. 4+5. Vacant, unrentable property made useful again through an in-between use system of tenancy called 'Wächterhäuser'. Building details represent the cultural heritage of a city (top picture). In-between uses contribute to the life of a city (bottom picture). (credit: Haushalten e.V.)

04.2.3 In-Between Uses

In many cases, it may be desirable to preserve buildings of historical or cultural importance. These buildings can suffer great damage when allowed to lie vacant for long periods of time, jeopardizing their integrity and potential for future use. For the owners of these buildings, a costly restoration in the classical manner is also not economically viable. Once the spaces were refurbished, the lack of demand would make it difficult to find renters for living or workspace purposes. This is where it is necessary to think outside the box of the typical owner-renter relationship.

For the residents of a city, extra space can provide a plethora of opportunities for creative uses. While it may be unaffordable for these individuals to rent additional space in a real estate under pressure, circumstances are different on a relaxed market. For building owners in a relaxed market, when rental or sale is not a possibility, the maintenance of these buildings and prevention of future damage is first priority. Building owners at risk of foreclosure should welcome short term usage under different parameters as a good solution.

Under these conditions, a new structure for contract-based building occupation and usage has been set up Leipzig, Germany. Building owners can opt to allow their property to become a part of the program 'House Guardians' (Wächterhäuser) in which rent-free contracts are made with users simply in exchange for occupancy. The initiative was started by a non-profit organization 'Haushalte e.V.', who manages the agreement between owner and user, and provides a network for them to find each other.⁶ Tenants are required to restore the building to the condition they require and as they like. This benefits the building owners and the society at large, in that the building shows signs of life. It has practical advantages as well, in that the occupancy can hinder vandalism and thievery, and potential problems in the building fabric can be noticed sooner and taken care of.

04.2.4 The Right Size

Condensing a city to a size agreeable with its current and projected population makes good sense. As children in a family grow up and move out, many parents seek to downsize their home; they simply don't need as much space anymore. They don't want to spend unnecessary time going from A to be nor

⁶ Haushalt e.V. 27. February 2010. http://www.haushalten.org/de/haushalten_idee_und_ziel.asp

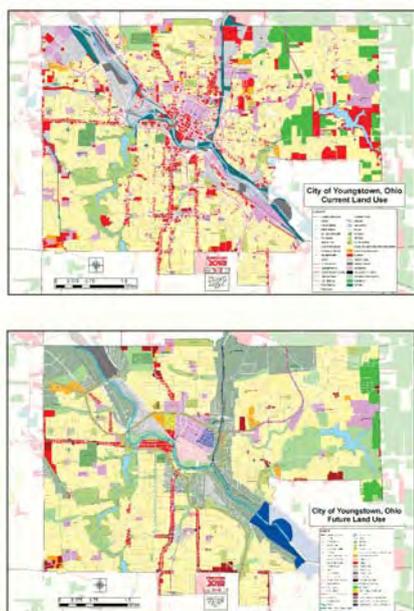


Fig.6. Aggressive 'right-sizing' approach by the city of Youngstown, Ohio. Top: Before land use map, Bottom: Proposed land use map under shrinkage conditions.

do they want to spend the extra money on unused facilities. However, some of the spaces are essential, and these they need to maintain as they scale down. It is the same concept in the 'right-sizing' of a city.

In a situation of surplus properties on the market, reducing the area a city occupies can stabilize the property market. As property values plunge, owners are unwilling to accept low property reassessments and find it hard to find buyers. This can lead to many abandoned and vacant lots, while the owners are forced to relocate to find jobs. The now 'oversized' and under used infrastructure is expensive to maintain, especially from the pocketbooks of a smaller group of taxpayers.⁷ Acquisition by the state can liberate the property owners and citizens from this burden, and maintenance and infrastructure costs can be spared in the long run.

Shrinking cities are often described as being 'perforated'. This is because most cities are characterized by decay in one area but relative stability or growth in others. Compromised zones can have a negative effect on adjacent areas and spread the decline. Consolidating the population into areas of stability while strategically de-annexing certain neighborhoods can halt this process.

There are many ways in which land can be acquired and consolidated by public or private institutions. Homeowners in more vulnerable areas can be provided with monetary incentives relocate within the city, as was the case in Youngstown, Ohio. Through clearing out these areas, infrastructure and services can be turned off, saving the city the costs of operation and maintenance.⁸ 'Land banks' can be established to finance demolition and rehabilitation of unused parcels of land. The properties can then be used as buildable land or can be converted into green infrastructure, which will be explored in the next section. The decommissioning of the infrastructure facilities inherent to this land helps shrink the city to a more manageable size. 'Land trusts' demonstrate another way in which land can be acquired and consolidated, in this case however to conserve and protect green space for social and environmental purposes.

Certain is, that right sizing serves to create a city which is financially sustainable on the private and the public sphere. According to a study by Michigan State

⁷ T. Weichmann, op. cit.

⁸ S. Shetty. *Shrinking Cities in the Industrial Belt: A Focus on Small and Mid-size Cities in Northwestern Ohio*. Urban Affairs Institute. 02 Feb 2010. <http://uac.utoledo.edu>

Land Trusts

A private, nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements. (Land Trust Alliance, 2010)

Land Banks

A land bank is a government entity that focuses on the conversion of vacant, abandoned, and tax delinquent properties into productive use. Land banks arose to address the increasing quantity of private or publicly owned urban land, not reclaimed or redeveloped by market forces. (N. Griswold, P. Norris, 2007)

University Land Policy Institute, higher levels of abandoned lots surrounding houses are associated with lower housing values.⁹ However, vacant lots have a less detrimental effect on surrounding properties, and can even result in increased value due to the increased ‘sense of space’ they provide. Financing is provided from the redevelopment of other tax-forclosed properties. When collected from an entire region, properties with higher value can help support projects in problematic neighborhoods.¹⁰

04.2.5 Greening the City

Developing green infrastructure in shrinking cities changes the appearance of a city and creates opportunities for reuse. Green areas in a city are extremely beneficial as they provide spaces for rest, recreation, urban agriculture, rainwater and storm water management. They also reconnect us with nature in the often overly urban environment of cities, an essential aspect in increasing awareness about environmental issues. Through increasing green infrastructure, environmental quality goals can be achieved as well as an increased quality of life for inhabitants.

Linking green infrastructure and grey infrastructure can have synergetic effects on the social, ecological and economical health of a city. In an economic sense, green spaces have a overwhelmingly positive impact on property value. Properties close to parks average an 8% increase in value compared to similar properties further away.¹¹ Furthermore, higher property values contribute to an overall positive perception of a city neighborhood. In an increasingly competitive economy, the image of a city is essential to maintain residents and businesses as well as attract new ones. Studies show that businesses located near green space have happier, more productive employees who will likely stay in the company longer.

The main issue in implementing green infrastructure strategies is cost, especially in cities already struggling to maintain existing facilities by means of a smaller tax base. It is most often the responsibility of the local government to finance, landscape, and maintain traditional city parks. However, there are other pos-

⁹ N. Griswold, P. Norris. *Economic Impacts of Residential Property Abandonment and the Genesee County Land Bank in Flint, Michigan*. The MSU Land Policy Institute. Report #2007-05. April 2007. p. 31

¹⁰ Pallagst. *op. cit.*

¹¹ *The Economic Value of Green Infrastructure*. Northwest Regional Development Agency. 02 Feb 2010. <http://www.naturaleconomynorthwest.co.uk/resources+reports.php>



Fig. 7. Green infrastructure infill projects. A community agriculture initiative in Philadelphia, PA, USA. (credit: Pennsylvania Horticulture Society)

sibilities for stewardship of green spaces. In the city of Philadelphia, USA, a partnership between government, communities, residents and local business has been formed to improve neighborhoods dealing with the after-effects of deindustrialization. ‘Philadelphia Green’ has been able to stabilize dilapidated neighborhoods through creating community green spaces which, after initial landscaping would be managed in the future by the residents themselves. Green spaces can also be adopted and maintained by community organizations, or by residents themselves. For a small fee, allotment gardens could be rented by residents who would like to practice urban agriculture. In Detroit, another shrinking city of America’s Rust Belt region, eighty acres throughout the city have been turned over for agricultural purposes through a local collective where locals can receive training in soil management and crop cultivation, bee-keeping, orchard building, and composting.¹²

04.2.6 Strategic Revitalization

When ‘perforated’ shrinkage occurs, it may be desired to revitalize and effectively stabilize parts of the city which are deemed important to the city’s image or have good potential. Focus is on revitalizing strategic areas to regain a stable density in inner-city neighborhoods. In this scheme, residents and business owners are given incentives and assistance to initiate the redevelopment.

In Leipzig, price reductions are offered on the sale of certain city-owned lots for both residential and commercial purposes. The program was initiated by the city to encourage inner city redevelopment. Strategic small business entrepreneurs with the intention of promoting the job market as well as fill a niche in the city district, have the opportunity to receive this reduction. Based on available funds, this can reach to a maximum of 25% of the original price.

Price reductions are also offered on city-owned property for young families with less capital in the purchase of real estate. Families with at least two children, or in which one handicapped person lives, can apply for a price reduction up to 60%, contingent on household structure and income. This is coupled with the program ‘Selbstnutzer.de- Wohnen in Eigentum’, which provides both single family households and groups of households with the support and framework to run their own building projects. Through this program, people have the unique opportunity to create townhouses in central areas of the city, in close

¹² C. Tumber. *Small, Green, and Good: The role of neglected cities in a sustainable future*. Boston Review, March/April 2009. <http://bostonreview.net/BR34.2/tumber.php>



Fig.7.+8. Houses renovated by owners in the program Selbstnützer.de. Top: Rear side of house with expansions. Bottom: Restored facade of the same housing. (credit: Selbstnutzer.de)

proximity to schools, services and workplaces.¹³ This is made possible through network to facilitate the formation of ‘building groups’ (Baugruppen)- groups of building professionals and architects- to help interested parties find other partners for their project. Especially beneficial is the support offered by the city in the form of expert consultation and moderation as the building groups get started. So far, as many as 357 living units have been purchased and remodeled under this program.¹⁴

04.2.7 Attracting New Residents

Shrinkage and growth patterns cohabit on both a national and global scale. As was mentioned in a previous chapter, low-income countries are experiencing a population boom and strain on their infrastructure systems whereas infrastructure in shrinking cities is wasting away. Globalization has led to the high mobility of people and goods, but this does not result in a balancing of surpluses and deficits around the world. If the flow of people is redistributed, a more sustainable usage of existing infrastructure can occur. The problem has reached a global level, and perhaps solutions also occurring on this level should be considered.

Taking responsibility for the effects of climate change might mean opening the doors even wider in industrialized countries. Water scarcity is predicted to affect two in three people in the world by 2025, due to poor infrastructure and shrinking water supplies.¹⁵ In addition to assisting developing countries build up their own infrastructure systems, another approach considered in a balancing of global efficiency would be redistribute population to cities whose infrastructure is underutilized.

Industrialized countries are already in the habit of balancing natural population decline and labor demand with the influx of immigrants often leaving their country in pursuit of a better life. Most immigrants in Germany however find themselves in large cities in the western parts, probably based on job opportunities in those regions. If shrinking cities were able to attract more immigrants, and provide them with the training for competitive sectors, perhaps

13 *Was ist das Leipziger Selbstnützerprogramme?* 26 Feb 2010. www.selbstnuetzer.de

14 *Eigentumsbildung: das Leipziger Selbstnutzer-Programm.* 26. Feb 2010. <http://www.leipzig.de/de/buerger/stadtentw/projekte/erneuerung/selbst/>

15 A.Kirby. *World warned on water refugees.* BBC News Online Edition. 22 March 2001.

the shrinkage process could be stabilized in the nearer future. Perhaps a new urban revitalization can be realized, especially in small cities which often attract suburban seeking dwellers.

Example cities in both Europe and the United States have taken this initiative to especially seek out foreign residents to fill their empty spaces. In Pittsburgh, PA, USA, local groups were given grants of \$800,000 to attract foreign students to stay, create jobs, and educate existing residents about diversity.¹⁶ Local liaisons who facilitate tours for immigrants help give a personal touch to the recruit of new citizens. According to the mayor in Schenectady, NY, USA who recently welcomed many S. Americans from Guyana, “They view Schenectady not as a tired worn-out industrial city, they view it as a beautiful city with tremendous potential”. Immigrants have been responsible for fixing up many old homes and filling entry level positions in nursing homes.¹⁷ As the proverb says “One man’s junk, is another man’s treasure.” Sometimes it just takes a fresh perspective and a will for entrepreneurship to start a movement.

04.2.8 Conclusion

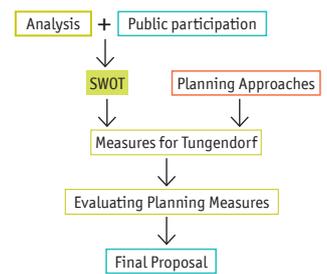
Which approaches are appropriate is highly dependant on the specific conditions of each city. It is likely that a combination of these options are used, and there are undoubtedly more solutions yet to be explored. Important to consider is that any approach should be strategic positioned in areas which are most in need. They should target the decline and protect the neighborhoods which are relatively stable. Areas of historical and cultural importance should be prioritized within any course of action, as they are important to a city’s and its resident’s identity. The ultimate goal of any redevelopment plan is the contentment of the inhabitants and their continued intent to remain in the city.

16 E. Schmitt. *To fill in gaps, cities seek new waves of foreigners*. New York Times. 2001.

17 *Shrinking Cities seek to lure new residents*. From: The Associated Press. Reading Eagle, Reading, PA. 03 March 2010. <http://news.google.com/newspapers?nid=1955&date=20030416&id=JfghAAAIBAJ&sjid=M6IFAAAIBAJ&pg=1280,29715>

05 Local Measures

5.1 SWOT Analysis



05.1.1 Introduction

Tungendorf can be described as a living and working environment, a place where people can have their daily needs met. People can invest in their future through the purchase of real estate and provide a home for their families. Many small businesses are located here providing both a means of living for them and essential services to the surrounding society. Educational and social facilities found here perform a central function in the lives of the citizens. Many of these factors make Tungendorf an attractive place to live and work. To ensure a sustainable development of Tungendorf, these positive aspects should be preserved and further developed, thus improving the social, economic, and environmental conditions for current and future generations. A variety of internal and external factors influence the feasibility of this objective. Some of these forces present opportunities waiting to be exploited, and some are threats which can manifest themselves as future obstacles.

Using the information gathered through previous analysis and consultations with stakeholders in a SWOT analysis, an overview of the factors influencing a sustainable future development of Tungendorf can be provided. This results of this method will be used in the formulation of future planning strategies which will be further evaluated and discussed with local stakeholders. The next section will outline the perceived strengths, weaknesses, opportunities and threats present in Tungendorf today.

05.1.2 Strengths

Tungendorf is strongly established in the history of Neumünster, and is important to the cultural heritage of the city. The working-class district evolved along with the city as the industrial revolution resulted in poor inner city living conditions. These humble homes represent the longing for a home in the countryside that many of blue-collar railway workers of the time were able to realize. Due to its established character, citizens today benefit from multiple schools, day-care possibilities and the services of numerous small businesses. The small town atmosphere and availability of homes surrounded by greenery still appeals to many people seeking relief from hectic city life. In addition, the good infrastructure and proximity to the city center provide a convenience not available to a home in the country. These strengths are important to preserve to some extent, so the neighborhood can go on fulfilling its niche within the range of living environments in demand today.



Fig.1. SWOT Analysis Diagram

05.1.3 Weaknesses

The reverse side of the strong heritage Tungendorf offers, relates to the modern context in which it is found. The predominantly single-family homes may offer a quick insight into the neighborhood's history, but many are too small to meet today's space demands. In addition, many need to be updated in terms of energy standards and utilities. Many residents who would like to stay in their area, but whose needs change as they age, are forced to leave, because of this limited housing typology available. The large properties are also more a deterrent than a benefit for many people today. Changing mentalities regarding car dependence have also led to recognition of the negative effects of this form of transportation can have on the environment as well as society. The lower density of Tungendorf, although desirable for many, also supports this car dependence. The lack of a proper center where services are more condensed also contributes to this.

05.1.4 Opportunities

Tungendorf has an involved community who could potentially be activated to collaborate in the future development of the district. In shrinking city with fewer capital funds to finance redevelopment, the initiative of the inhabitants is a commodity to be treasured. The continued demand for single-family housing offers great potential for Tungendorf. It is much more cost-effective for the city as a whole to reuse properties already served by infrastructure, of which Tungendorf has many. Existing vacant lots offer the potential for small scale redevelopment or the designation of new uses, according to demand. Vacant land can be converted to spaces for recreation, agricultural production, water management, and environmental conservation. As even more sites free up, the entire district becomes more flexible, and new planning opportunities arise.

These opportunities allow the possibility for new qualities to be created both encouraging existing residents to stay and attracting new resident to the area. The relatively low costs of housing in Tungendorf is an asset when compared with larger cities under more pressure. Considering Neumünster's location in the region between Kiel and Hamburg, new possibilities for to attract commuters can also be taken advantage of more proactively.

05.1.5 Threats

Although vacancy is not a yet highly visible as a problem in Tungendorf, continuing population loss due to demographic change and a weak economic situation featuring high unemployment rates threatens to change this. According to some sources, the vacancy rate is already estimated at 10%. Vacancy leads to vandalism and further decline, which could lead to future problems with the area's youth. This is exacerbated by an approaching generation change within the district of Tungendorf. A high percentage of home owners who purchased their home in post-war years will soon pursue a change of ownership for reasons of age. As these homes go on the market, yet another threat arises for potential new home buyers due to the condition of the housing stock. Major renovation actions are largely unprecedented, and present a risk for new investors.

As homes become vacant for the above reasons, a reverberating effect on adjacent homes will occur, which will consequently lose value. The result will be a perforated urban fabric, with spots of decline amid functioning areas. This presents a problem as the underutilization of the infrastructure system creates higher maintenance and costs for the remaining smaller number of citizens.

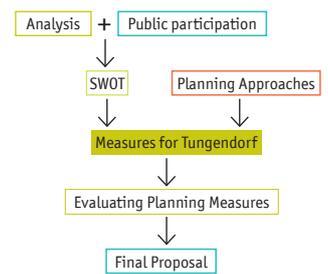
05.1.6 Conclusion

The purpose of a SWOT analysis is to identify strategies to exploit strengths and opportunities, while minimizing weaknesses and threats. With this in mind, the following objectives have been formulated with the aim of a sustainable development of Tungendorf.

- 1. Attract new residents from neighboring growth centers to even out regional market imbalances;**
- 2. Renovate and reuse existing homes to retain cultural heritage as well as valuable building stock;**
- 3. Promote the adaptation of the urban structure to fit the needs of the community;**
- 4. Stabilize real estate market to prevent the negative effects vacant and abandoned properties can have on the rest of the neighborhood;**
- 5. Promote qualities for vacant buildings and properties which contribute to a sustainable development for all user groups.**

These objectives will guide the creation of a local strategy, outlined in the next chapters.

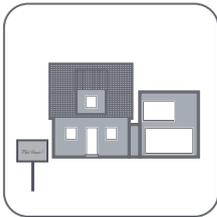
05.2 Measures for Tungendorf



05.2.1 Introduction

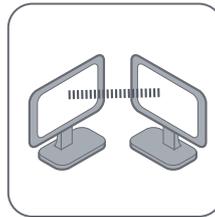
The review of planning approaches in Chapter 4.2 resulted in a greater understanding of opportunities in the local context of Tungendorf. This knowledge was combined with the guiding objectives identified in the previous chapter to identify local measures for application in Tungendorf. Some of these measures are based on precedent studies but specified for the local context, while others have been created to fit the local situation. Through discussions with local stakeholders, these measures have been evaluated for their feasibility in the local context. This chapter features an overview of these measures.

05.2.2 Overview of Local Measures



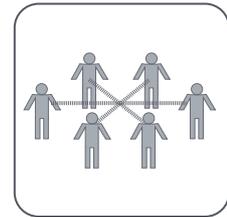
Pilot Projects

The creation of renovation pilot projects with local homeowners can show the adaptability and modernisation potential homes in Tungendorf possess. Both homeowners as well as the surrounding community can benefit from good renovation examples in the area.



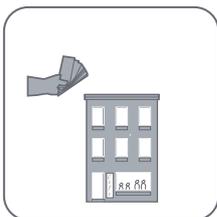
Internet Platform

As many problems arise with the turnover of homes in Tungendorf, a website dedicated to assisting this process is suggested. Home listings as well as an advice forum and information about pilot project showings can all facilitate the changing of ownership of homes.



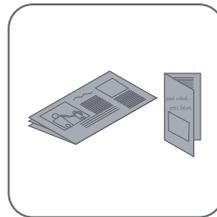
Building Network

Equally important to promote renovation activities are connections to local building professionals. With access to a network of subcontractors, homeowners have the potential to save costs during their remodel by acting as their own contractor. In addition, local small businesses can be supported.



Renewal Incentives

To preserve the character and livability of the district, financial incentives can be used in some areas to maintain the current density and mixed usage. While most of the district will become more sparse, a higher density in some areas can be favorable as it raises the accessibility for users.



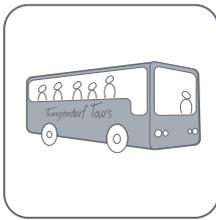
Marketing Strategy

With Neumünster's proximity to growth centers in the region, there exists a real potential to attract new citizens. The unique qualities of Tungendorf such as the abundance of green space should be emphasized in a marketing strategy aimed at target groups.



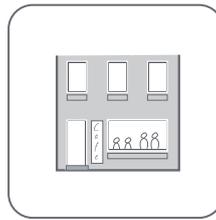
Welcome Kit

To ease integration for newcomers to the district a welcome kit can be distributed on arrival containing information about schools, social activities, and local events.



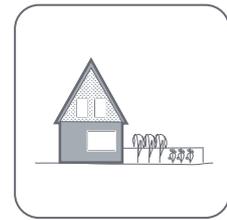
Bus tours

Minibus tours departing from nearby cities can be arranged to display homes for sale as well as finished pilot projects. This can make the house viewing process easier and more convenient and help promote Tungendorf to potential residents.



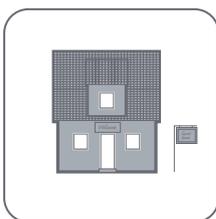
Alternative Building Usage

Before demolition is undertaken, it is possible to create alternative tenant agreements with owners of vacant buildings to promote use of the structure. For non-conventional users this is an opportunity to acquire space for very little cost.



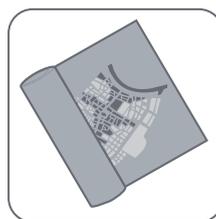
Alternative Garden Usage

The abundant vacant and unused gardens in Tungendorf can be used in much the same way. In exchange for use of the garden, users give back to the community through reducing signs of vacancy and neglect in the area.



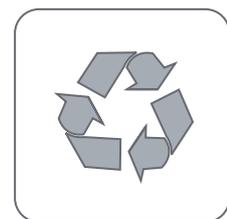
Building Adaptation

The surplus building stock has potential to be used in non-traditional ways, such as rental properties or for community use.



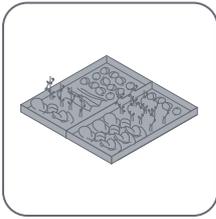
Right-sizing Strategy

In the long-term, deconstruction activities can be a part of a right-sizing strategy. Where possible, oversized infrastructure should be decommissioned to reduce maintenance costs as well as retain a compact city.



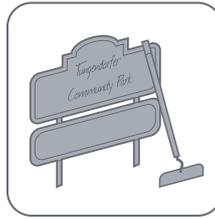
Deconstruction vs. Demolition

The promotion of deconstruction rather than demolition can allow valuable building materials to be re-used rather than thrown away.



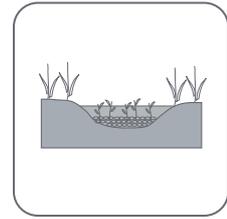
Private Property Consolidation

Through consolidation of parts of the long, narrow properties, new uses for the entire community can be created, such as allotment gardens or common yards for the entire community.



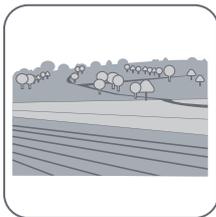
Community-managed Parks

Through the establishment of training programs initiated by organizations involved with the management of green areas, local inhabitants can learn how to rehabilitate and reuse vacant properties.



Local Water Management

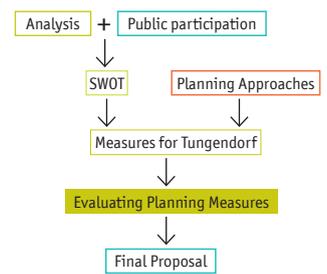
Another opportunity to increase ecological sustainability is through the creation of water management facilities for stormwater and greywater in vacant lots.



Land Preservation

Through the establishment of a Land Trust, vacant properties can be acquired and consolidated over time for the purpose nature parks or agricultural land usage.

05.3 Evaluating Planning Measures



05.3.1 Introduction

The planning measures reviewed in the last chapter were next evaluated by stakeholders for their feasibility in the local context. This was first done through a future scenario workshop with local citizens. Using the citizen's input, a second workshop was conducted with various members of the city planning department. This workshop aimed at determining the feasibility and estimated impact of the proposed measures. The ultimate aim of these workshops was to collaborate with local stakeholders in the development of local planning measures, and to share in the decision-making process.

05.3.2 Scenario Method

The Scenario Method enables participants to imagine a future situation based on current predictions, in order to generate possible courses of action for dealing with these predictions. Quantitative data is presented which builds the basis for current trends, and can be projected into short to long term scenarios for the future. This method can be used to gather reactions from participants and form visions for the future.

In this case, the mid-term future was presented as a projection of current trends of population decline and property turnover. The results of these trends were also communicated, including high rates of vacancy, pockets of decline, an instable real estate market and higher rates of crime. Possible planning measures as solutions were presented and discussed in turn, which citizens commented on and helped elaborate into more site-specific solutions.

05.3.2.1 Results

Planning measures aiming at the renovation and adaptation of housing were widely accepted, as many agreed with the poor and outdated condition of the existing stock. In regard to the use of an internet site to promote such activities, concern was raised about the accessibility of internet to the elderly. Training programs or assistance would need to be offered for this to reach all users.

Less well received were strategies to attract new residents from neighboring cities. Residents were unsure how successful these measures would be and what Tungendorf had to offer to people in other cities. Residents were also cautious about a bus tour for viewing homes for sale, wondering if this would be worth the effort. The welcome kit to ease integration for new residents was supported although it wasn't certain how great an impact such a measure could have.



Fig.2. Future scenario workshop with citizens
(Credit: G. Willner)

The next measure involved the alternative use of vacant buildings and their surrounding grounds, preceding any deconstruction or reconstruction activities. Ideas included the temporary usage of buildings or gardens as space for artists or for school gardens. The proposals received lukewarm reactions with most remarking on the existing low demand for such spaces. The concept of cooperative investment in vacant buildings for use as a community guest house or as a rental unit was well received, however the initiation of such projects was perceived as a challenge.

The next strategies discussed dealt with deconstruction and demolition actions. For ecological reasons, it was suggested that homes could be de-constructed and materials recycled or reused. This was widely seen as inefficient and difficult to implement. The strategy to focus demolition in some areas to ensure a more compact neighborhood was also moderately well received, presumably due to extreme nature of demolition.

Finally, strategies for green infrastructure were proposed. Of those spoken to, many agreed with the proposal to consolidate the enormous backyards into public space. This space could then be used as community gardens or for common water treatment facilities. Citizens were very positive about the latter, and the potential they may have to save on their water bills. A community program for the maintenance of properties freed up through demolition activities additionally received mixed reactions, mainly due again to the challenges of initiation. The final measure regarding a land trust was a preferred choice of dealing with vacant properties by the citizens.

05.3.3 Focus Diagram Method

The next workshop was conducted with city officials from the departments of human relations, nature and environment, planning, and real estate from the city of Neumünster. The goal of the workshop was to discuss and evaluate the implemenability of the proposals discussed with residents, with the aid of a focus diagram exercise. Focus diagrams are often used in local planning contexts to prioritize measures needed to achieve environmental objectives.¹ It enables an analysis which considers two dimensions at the same time. For this workshop, the vertical axis measured the 'Effort' for implementation, ac-

¹ *Planera med miljömål! en idékatalog*. Boverket Naturvårdsverket. Boverkets publikationsservice, Karlskrona, 2000.

according to available funds, networks, and actors. The horizontal axis measured the intended 'Effect' of the proposal on the neighborhood.

The values generated are subjective and rely on the extensive knowledge base of the local city officials. Priorities in terms of planning should arise through the convergence of a high 'Effect' combined with a low 'Effort'. These proposals would land on the top right. However, various local factors influence the values on both axis. It is necessary to consider the actors or network of actors responsible for execution as well as the financial means necessary to realize the project. Whether or not a potential actor exists can have a great impact as existing frameworks can be used and do not first need to be established. Considering financing, it may be possible to begin lower budget projects immediately, as the funds do not need to be collected. However, more costly projects should not be automatically ruled out, as grants and loans can often be acquired for community development projects.

The predicted impact of these proposals is an important factor in weighing their potential. Projects with a large return on investment may prove worth it even if they require greater supplies of time and money to be invested. And a community engaged in the initiation and execution of many smaller projects can result in a greater social impact on the community at large.

05.3.3.1 Results

Projects located in the upper left quadrant of the graph were identified as providing both a high effect with relatively low effort. Possible actors for the renewal strategies were identified as local building professionals, who could use pilot projects to begin a renovation movement in the district. The internet platform featuring a citizen forum for real estate listings could advertise the services of these professionals, the pilot project examples and a forum for renovation advice. To assist in the home purchasing process, information could also be provided. Financial incentives for renewal in select areas was also a good opportunity as federal funding may be available.

Many of the proposals requiring a low effort and still providing a relatively good effect were mainly reliant upon a high citizen initiation factor, such as community maintenance of green spaces, or the alternative use of buildings through cooperative purchase as rental units or guest houses.

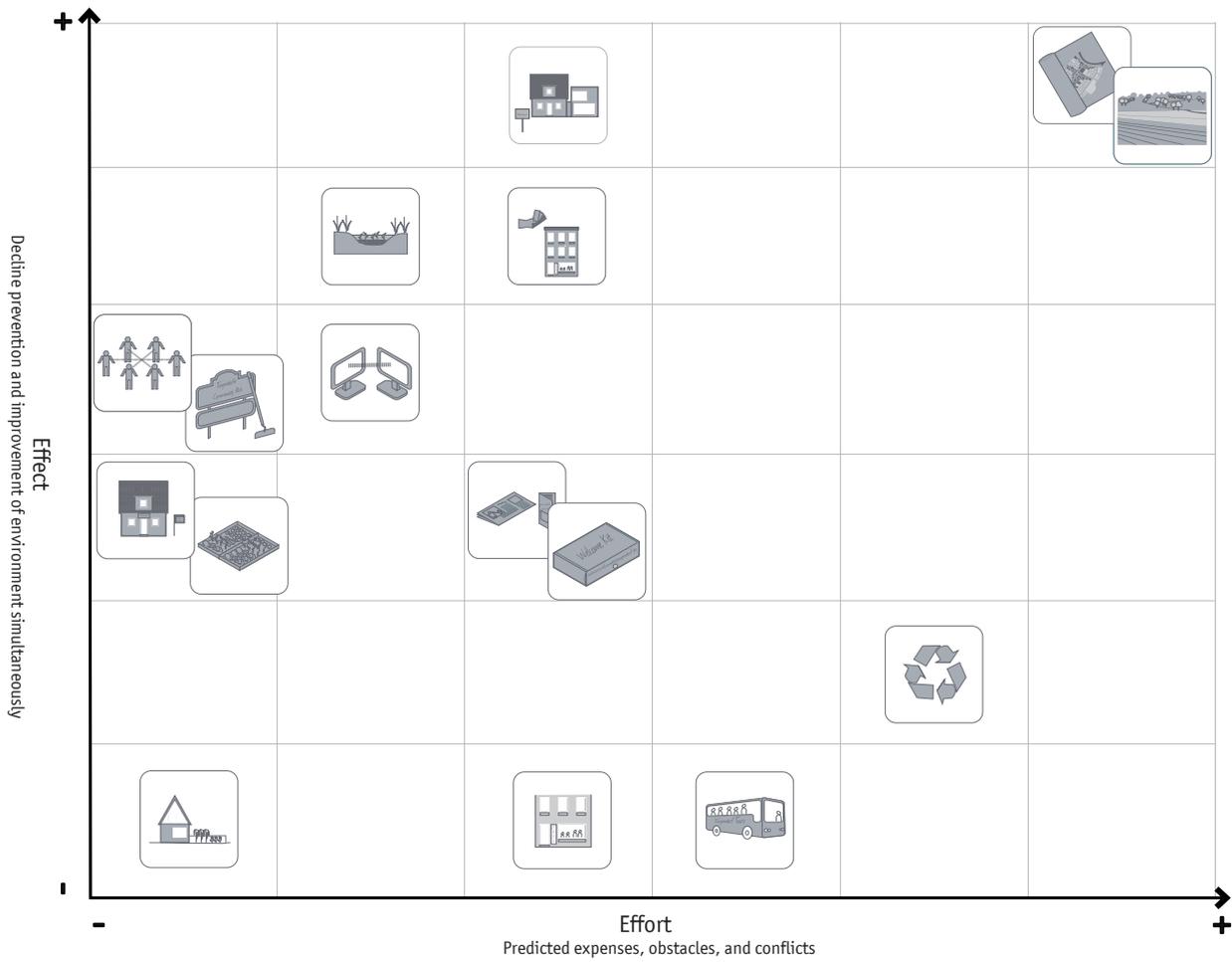


Fig.3. Focus diagram created in workshop with city officials (Credit: Gina Willner)

A low effect and high effort was identified for the in-between uses of buildings and green spaces, due to a lack of demand in the neighborhood for such uses. A bus tour was also considered inappropriate considering the target group demographic for Tungendorf.

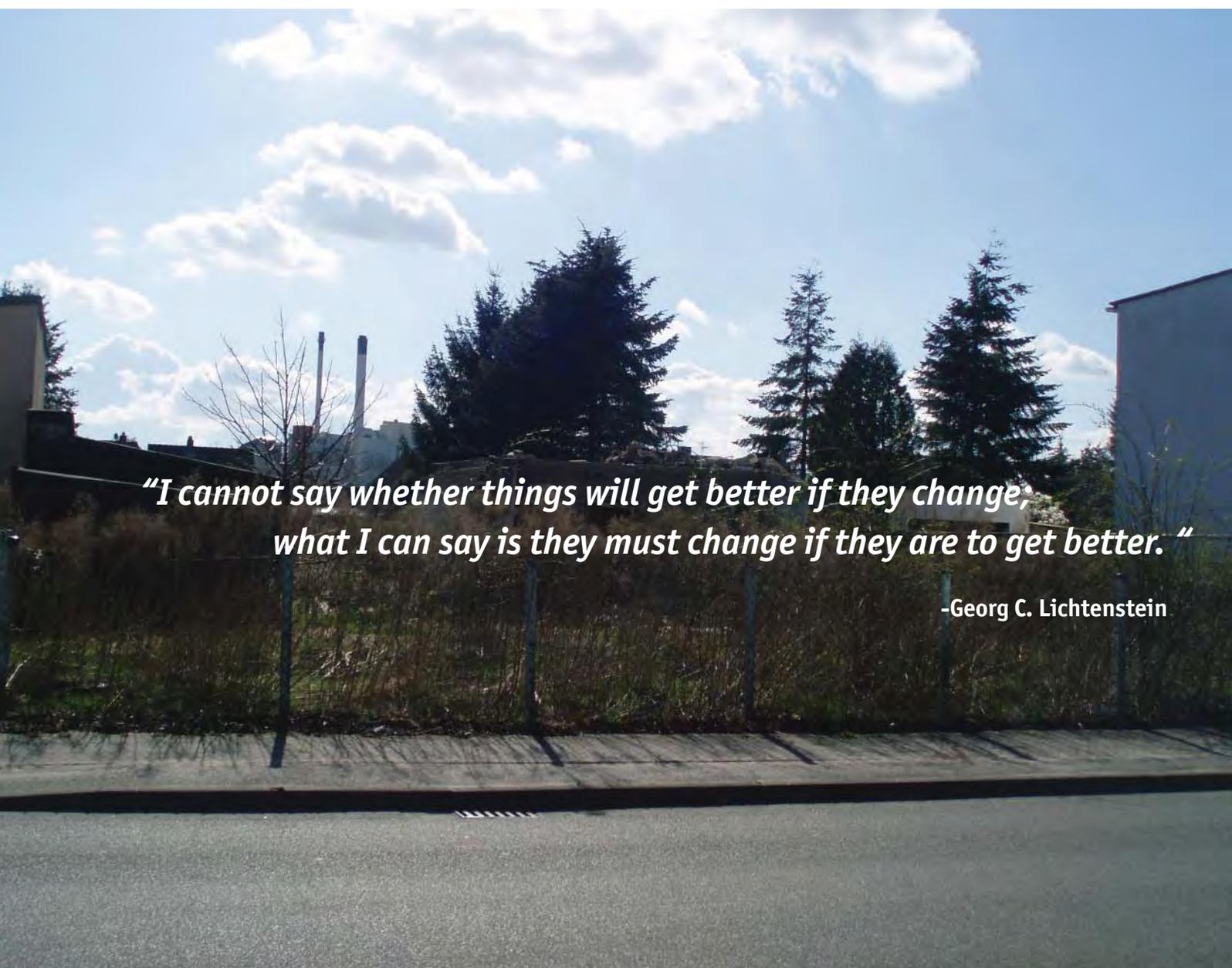
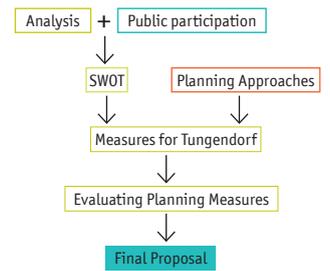
Proposals featuring both high effort and effect were those involving external organizations and potentially government funding on a larger scale in order to stabilise the real estate market through the demolition of surplus housing and consolidation of land for other purposes, such as agriculture or natural preservation.

05.3.4 Conclusion

Through the workshops, the measures were evaluated for their feasibility in the local context as well as developed into site-specific solutions for Tungendorf. Possible actors for initiation were discussed, an important step for establishing a feasible proposal.

Feedback received from both workshops was considered in the creation of the final proposal. Measures less supported by citizens were not rejected directly, but this feedback was considered important for the measure's success. A greater aspect of importance for citizen participation is the local wisdom received and the further specification of the measures to fit into the local situation. Ultimately, the measures developed further are those not only supported by citizens but also deemed highly effective and feasible by the local officials. The next section will present the final proposal in greater detail.

06 Final Proposal



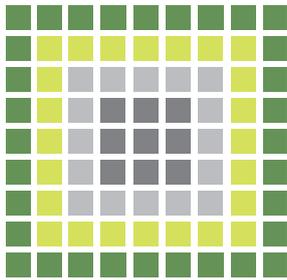
*“I cannot say whether things will get better if they change,
what I can say is they must change if they are to get better.”*

-Georg C. Lichtenstein

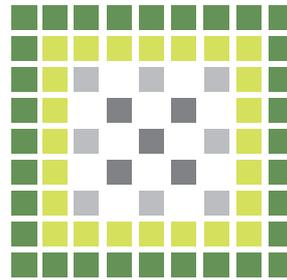
Jungmannstraße, Tungendorf, April 2010

Accepting and embracing change

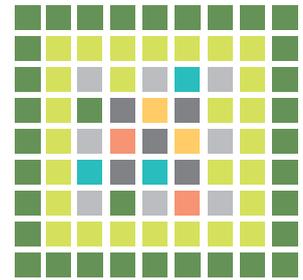
The first step made needs to be the acceptance of shrinkage as a new direction in the development of industrialized societies, in order to pro actively handle it. Allowing things to continue on the same course as before leaves the future to chance, and the negative consequences usually associated with shrinkage will likely occur. Change is certain; it is through our response to it that we can influence its impact.



The Compact City



The Perforated City



The Adaptable City

An new, adaptable city form

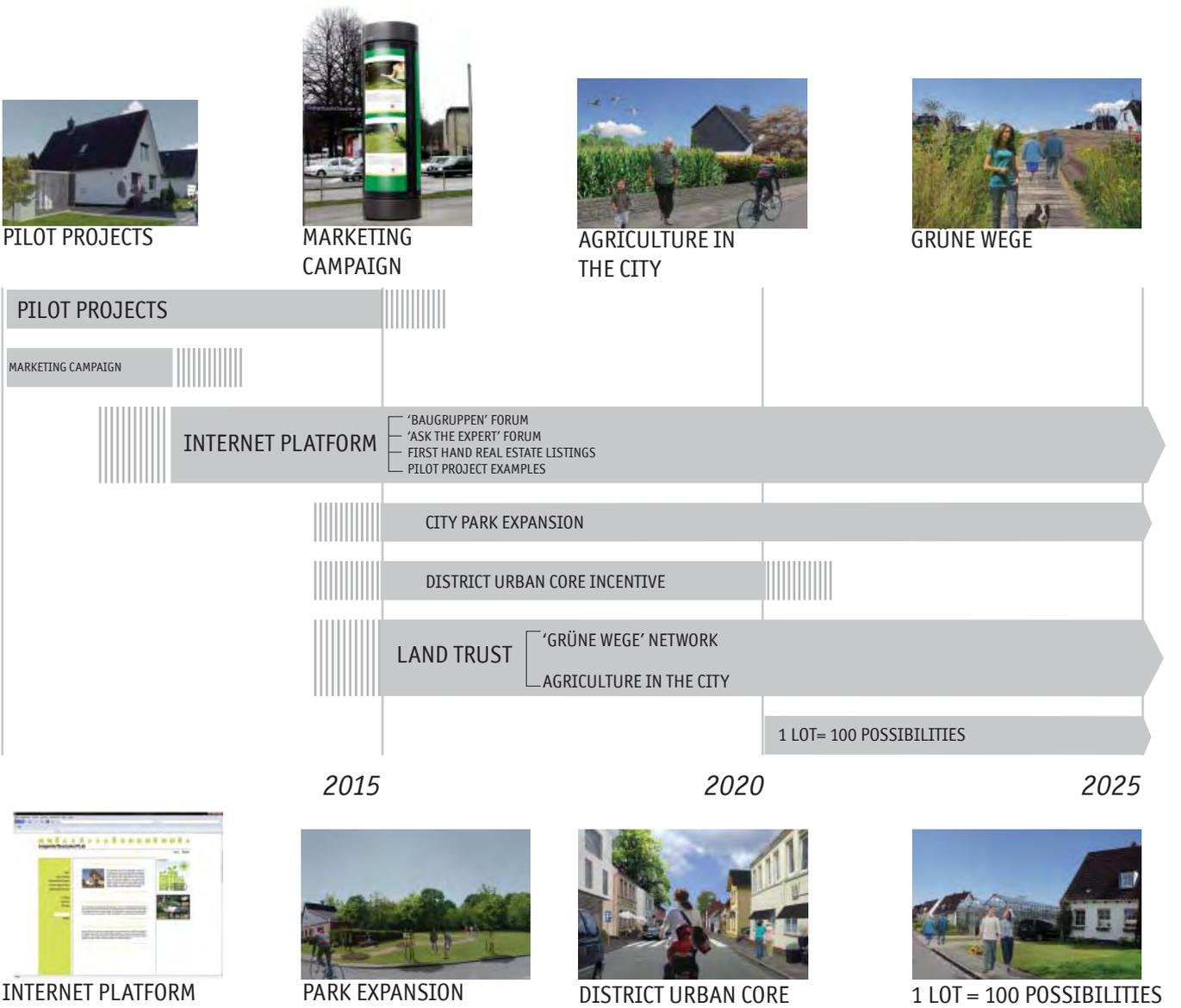
How should a shrinking city look? Is the traditional ideal of a compact city the only sustainable option for cities? Not only is it an ambition which is extremely difficult to achieve under conditions of shrinkage, it neglects to take advantage of new potentials to improve the social and ecological dimensions a shrinking city provides. Shrinking cities are often described as being perforated, due to pockets of emptiness and decline which develop as properties lie abandoned. But, unbuilt properties hold the potential to insert new qualities into a city space, which even have the opportunity to change according to society's needs. Through a less rigid city structure, the potential for adaptation according to changing factors in society is increased- allowing a more sustainable society to be created.



New qualities introduced over time

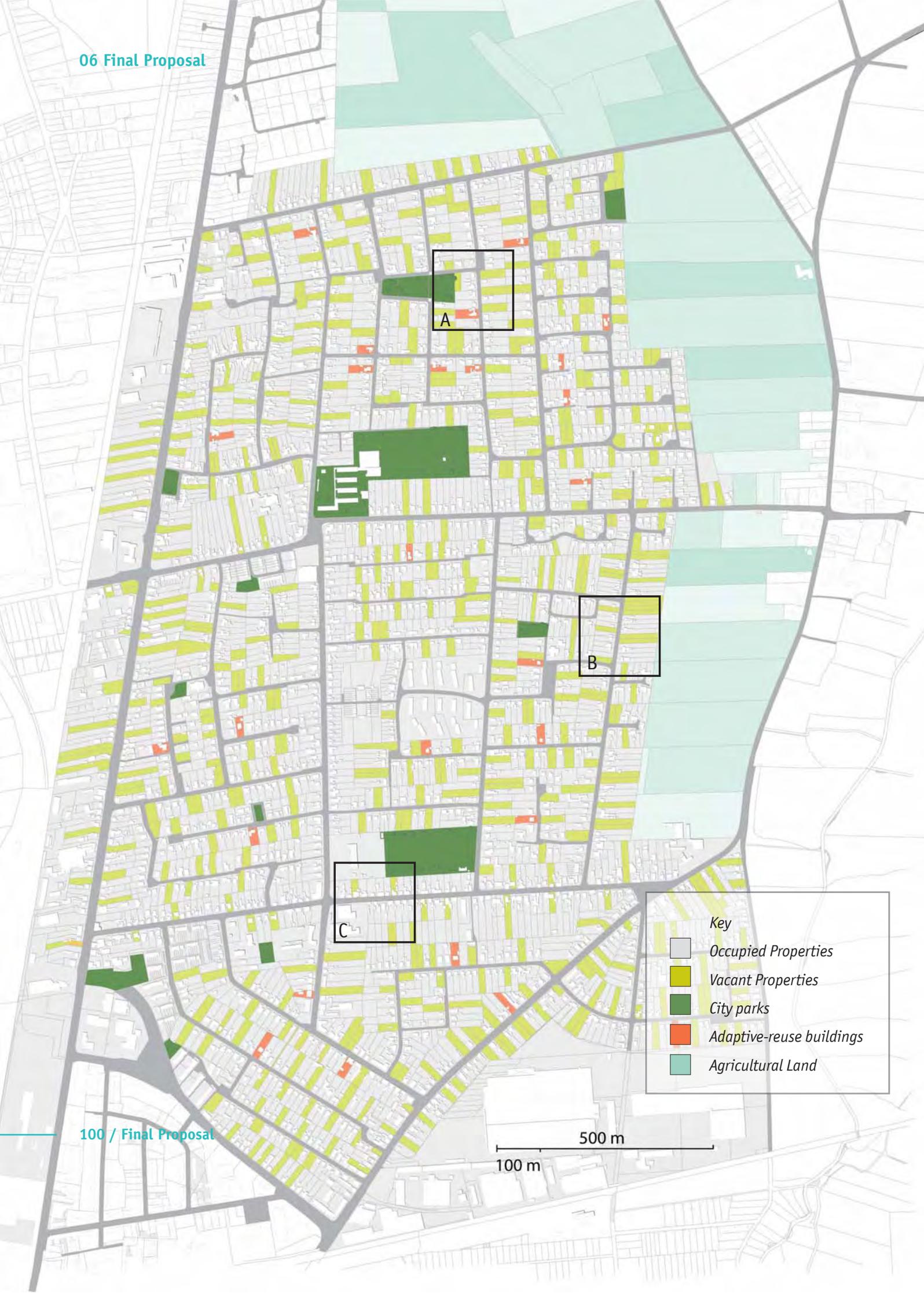
So, where to go from here? The unpredictability of the many homeowners and actors in Tungendorf makes it impossible to know exactly how the future will unfold. Therefore, any planning strategy must be flexible to deal with changes as they occur. The following proposal suggests a gradual restructuring of the neighborhood over the next fifteen years, according to projected population changes and vacancy rates within this time. Vacant properties are seen as opportunities to promote new sustainable uses, from green infrastructure to small-scale entrepreneurship.

Timeline for planning measures



A flexible and phased strategy

Planning measures will need to be initiated according to local conditions, which will change over time. The measures proposed are therefore arranged in a tentative timeline, which can be adjusted as necessary to the current situation. Some measures are meant to run long-term, while some are only temporary. This is based on the estimated impact of the measures and the funding and structures necessary to support them.



A

B

C

Key

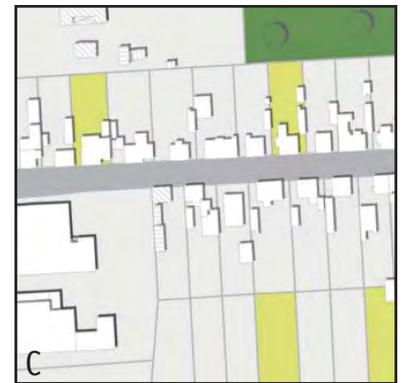
- Occupied Properties
- Vacant Properties
- City parks
- Adaptive-reuse buildings
- Agricultural Land

500 m
100 m

Strategy 2015

Prognosis 480 vacant units*

The prognosis for 2015 expects higher vacancy rates- approximately 9%. Vacancy is beginning to become more visible in the area as homes lie vacant for long periods of time. New residents are needed who can benefit from low property prices and an established infrastructure.. This phase focuses on adapting the built environment as possible and promoting use through attracting new residents to the area.





There exists great potential in Tungendorf to adapt the existing housing stock to meet modern demands. Cost-effective pilot projects demonstrating affordable renovation options are necessary to prevent homes from demolition. It is important to accentuate the qualities present in older homes and how they can be aesthetically and energy-efficiently modernized to remain competitive on today's housing market.

Pilot Projects- Ein Platz für alle

Objectives:

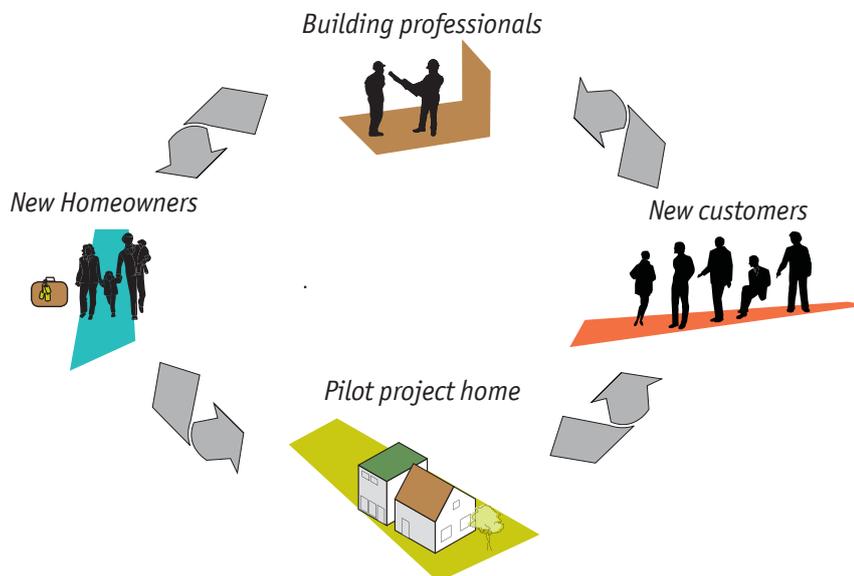
Attract new residents from neighboring growth centers to even out regional market imbalances;

Renovate and reuse existing homes to retain cultural heritage as well as valuable building stock;

Adapt urban structure to fit the needs of the community



Starting a remodeling movement



Pilot projects can benefit building professionals, homeowners, as well as the community. Homeowners can profit through a reduction of cost on building services, making their remodeling plans more realizable. The pilot project itself attracts both new residents to the area and customers to the building professional involved in the project.

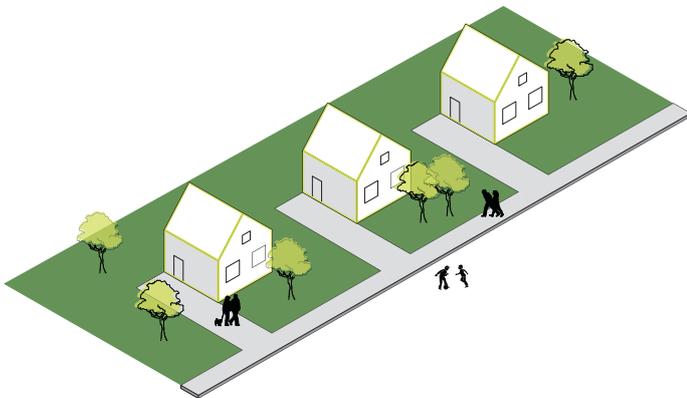
Introducing new user groups



Current Groups



Future Groups



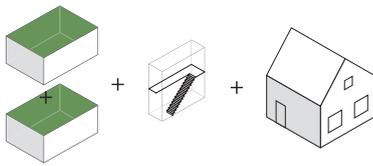
Current building fabric



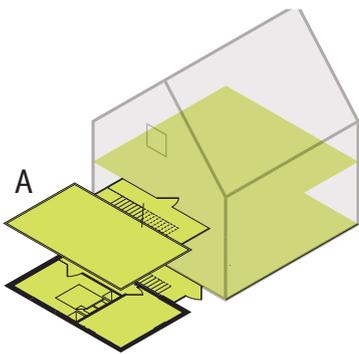
Future adaptation

At the moment, the neighborhood predominantly features a building typology suitable for families. Pilot projects create the opportunity to exhibit new housing typologies, which allow the neighborhood to adapt as needed to meet demographic demands. Barrier free-adaptations for seniors are already in top demand, and combining senior living units with units for singles or small families can have synergetic effects.

Adaptable and cost-effective building modules



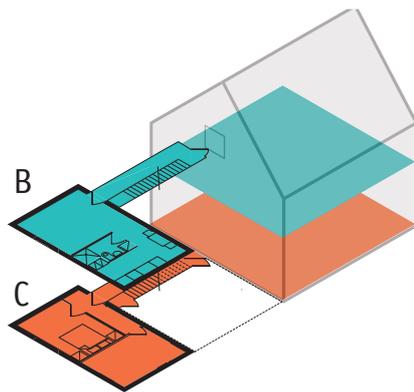
Module



Combinations

Enlarged single-family residence

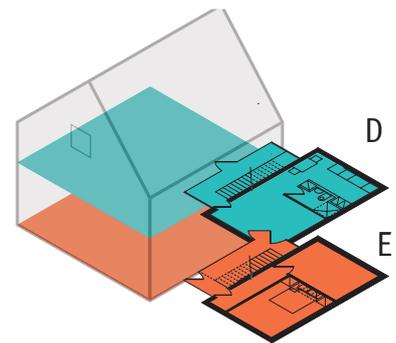
A Family or cooperative living unit



Two-story addition with courtyard

B Singles or small family unit

C Senior living unit



Two-story addition

D Singles or small family unit

E Senior living unit

Due to the uniform character of many of the homes in Tungendorf, there exists a potential to develop a system of prefabricated modules used for pilot projects, which can be adapted to on-site conditions and constructed in different configurations. A simple prefabricated box addition adds contrast to the original structure, and is additionally the most cost-effective form to build. This box stands alone and can be stacked as necessary to create more living space, also necessary to have minimal effect on the original structure. It is connected to the house through a greenhouse/ stairway module, which not only allows window openings to remain untouched but also provides a respectful separation from the original structure.

ETROER

"I meditated every day for a week during prep."

Get to know your future neighbors.

How to know them before they say it back.

"I went up hills to have the same kind of freedom I had growing up."

Get to know your future neighbors.

UNIVERSITY OF NORTH CAROLINA

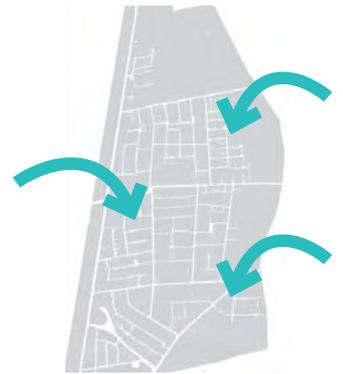
Rothenbaumchaussee

Marketing campaign

Objectives:

Attract new residents from neighboring growth centers to even out regional market imbalances;

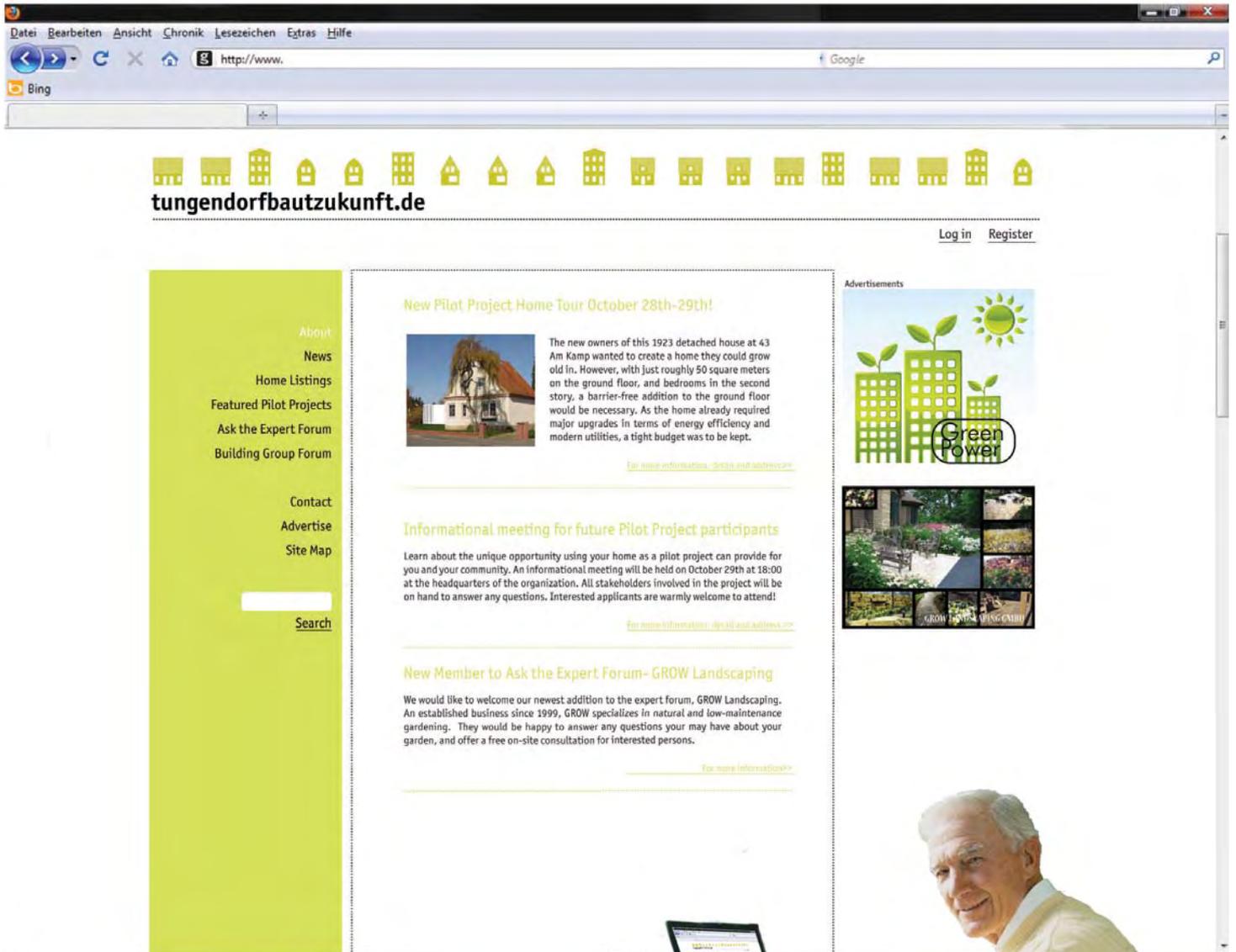
Stabilize real estate market to prevent the negative effects vacant and abandoned properties can have on the rest of the neighborhood;



Get to Know your Neighbors



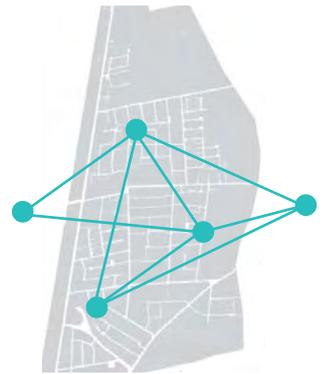
‘Get to know your neighbors’ is a city-wide marketing strategy using pictures and quotes from real residents to represent the real qualities Neumünster, and Tugendorf has to offer. Each neighborhood offers distinct characteristics, and these should be exemplified through the campaign. Tugendorf, with its established infrastructure and multi-generational potential as well as abundance of green space, can provide a high quality of living attainable at a much more affordable price than in other cities.



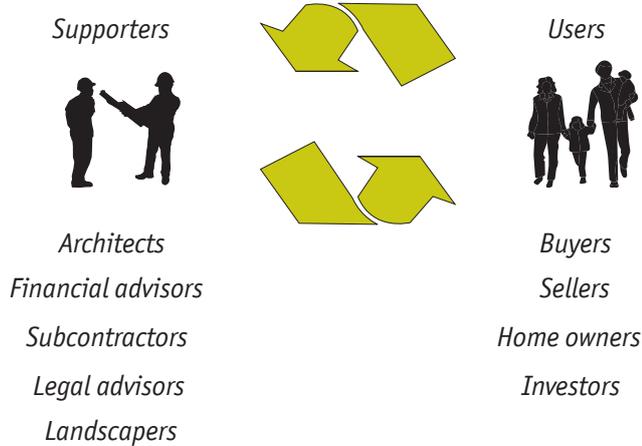
Internet Platform

Objectives:

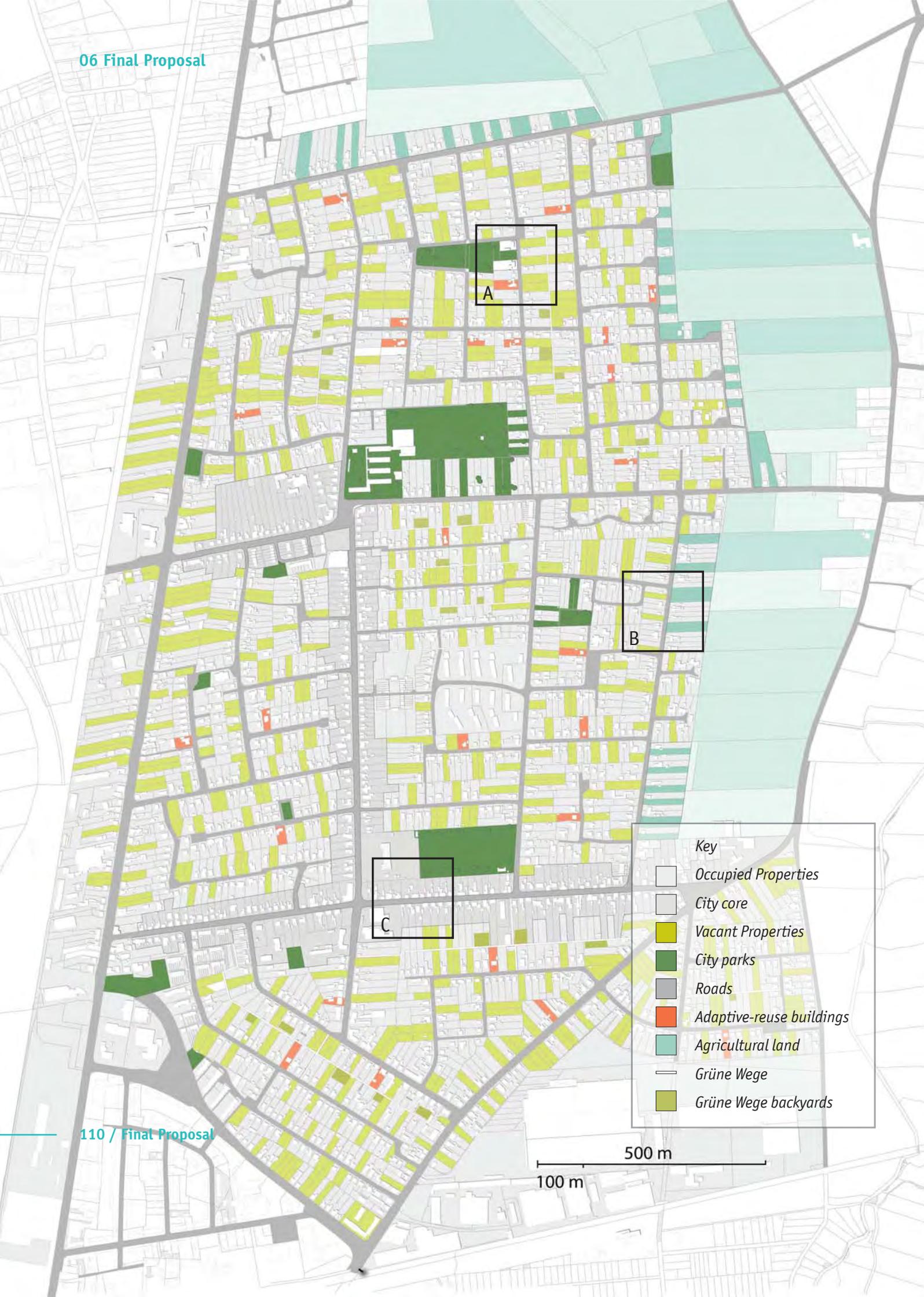
*Attract new residents from neighboring growth centers to even out regional market imbalances;
Renovate and reuse existing homes to retain cultural heritage as well as valuable building stock;
Promote qualities for vacant buildings and properties which contribute to a sustainable development for all user groups*



Stakeholders Diagram



An internet presence is nowadays a prerequisite for any successful venture. Creating a platform for Tungendorf can not only ease the turnover of housing through local and independent real estate listings, new and existing residents can inform themselves about renovation opportunities, access a network of building professionals, and find other people for cooperative projects. Building professionals as well benefit from new work generated by new clients.



Key

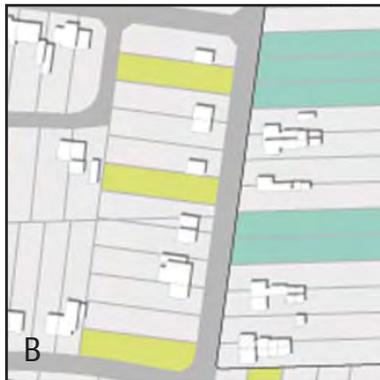
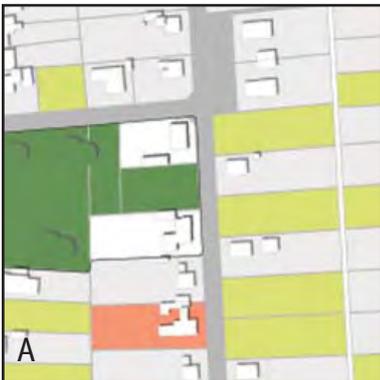
- Occupied Properties
- City core
- Vacant Properties
- City parks
- Roads
- Adaptive-reuse buildings
- Agricultural land
- Grüne Wege
- Grüne Wege backyards



Strategy 2020

*Prognosis * 650 vacant units*

The prognosis for 2020 is for even higher vacancy rates, now lying around 13%. Homes begin to lose value as vacancy become more evident in the community. It becomes necessary to stabilize the real estate market before this spiral of decline goes out of control. New opportunities open up to not only expand upon current qualities but also insert new ones into the district.





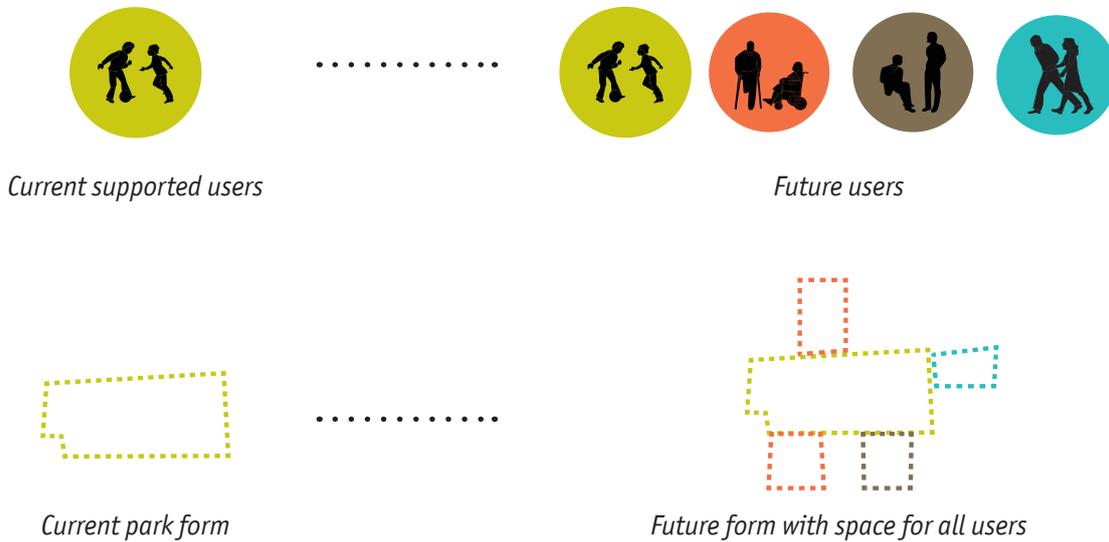
City Park Expansion

Objectives:

*Stabilize real estate market to prevent the negative effects vacant and abandoned properties can have on the rest of the neighborhood;
Adapt the urban structure to fit the needs of the community;
Promote qualities for vacant buildings and properties which contribute to a sustainable development for all user groups;*



Public space for all user groups



The opportunity to expand the existing park network as a way of stabilizing a real estate market characterized by surplus can have benefits twofold. The existing park network is primarily targeted at younger children, while other user groups tend to be neglected. Outdoor areas especially created for the area's youth could potentially solve some of the current problems with crime and vandalism among this group. Senior citizens and adults as well would benefit from a covered outdoor area adjacent to the children's play areas.



As the city district changes under current conditions it is important to consider the aspects of Tungendorf which contribute most strongly to its identity, and how these can be preserved. The urban district core in Tungendorf is identified as the main thoroughfares of Schulstraße and Hürsland, Helmet-Loose-Platz, and Wilhelminenstraße leading to the Kielerstraße at the periphery. These highly frequented routes through the district also allow access to the important landmarks and meeting points in the area.

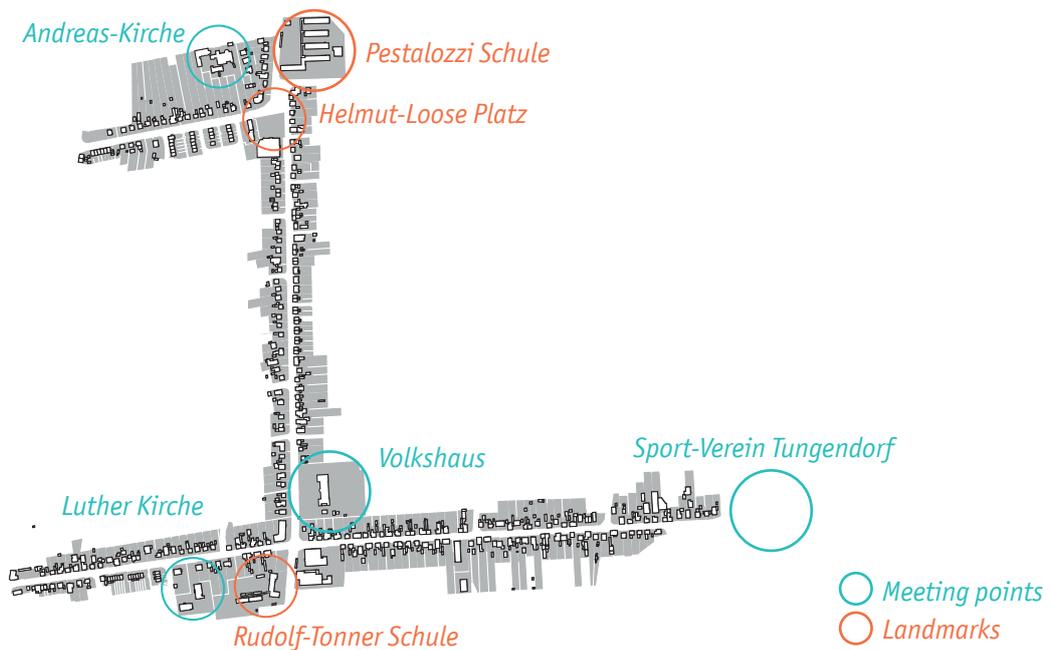
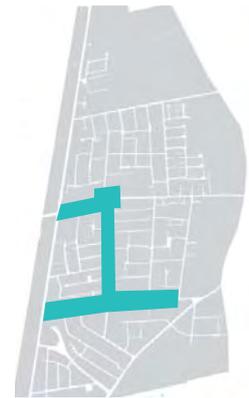
Urban district core

Objectives:

Renovate and reuse existing homes to retain cultural heritage as well as valuable building stock;

Adapt the urban structure to fit the needs of the community;

Preserving and improving what is important



Through incentives to promote continued use and redevelopment in these areas, not only can the character of Tungendorf be maintained, but improved. A higher concentration of services and living opportunities in these areas can create a more accessible district with a better proximity to services by foot or bicycle. Businesses struggling in a shrinking district can also benefit from better accessibility.



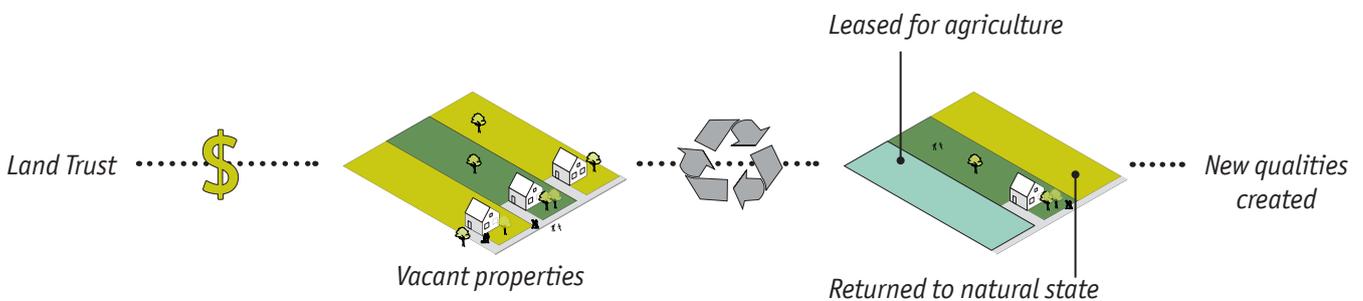
Local land trust

Objectives:

*Adapt the urban structure to fit the needs of the community;
 Stabilize real estate market to prevent the negative effects vacant and abandoned properties can have on the rest of the neighborhood;
 Promote the creation of new qualities for vacant buildings and properties which contribute to a sustainable development for all user groups.*



A planning instrument for shrinking cities

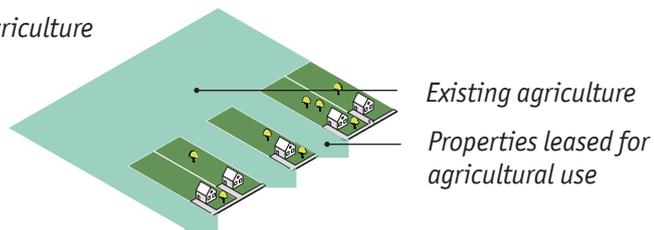


A land trust can be an effective planning tool to both stabilize and revitalize a shrinking city. As housing surplus rises even more and demand remains low, it can be used to remove surplus properties from the private market, thus stabilizing it. These properties can then be rehabilitated and held as natural habitat or leased for new purposes, short or long term. As leased properties pose a lesser risk to users, new ecologic, economic and social functions can be more easily pursued and new qualities inserted into the community.

Land leased for agricultural use



Linking new with existing agriculture

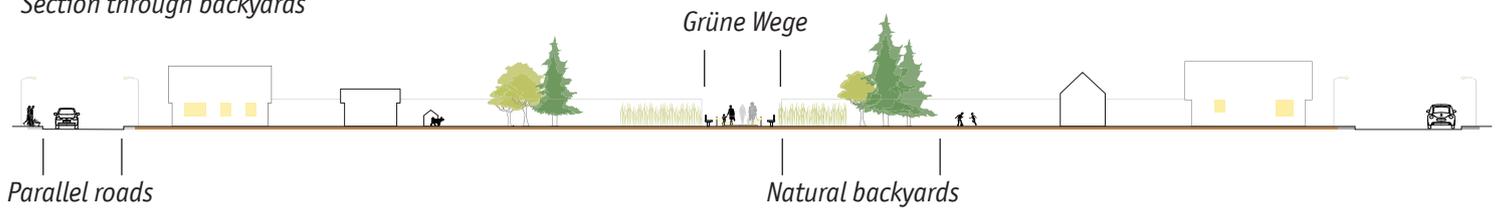


The agricultural land surrounding Tungendorf on two sides contributes to the rural character found here and in the surrounding villages. As the city district shrinks and less living units are needed, the properties on the periphery can be rehabilitated and re-purposed for agricultural production, linking to the existing agricultural plots. This can become a task of the land trust, which would lease the properties out to the surrounding land owners. Within the district, the lines between rural and urban become blurred, as the countryside enters into the neighborhood.

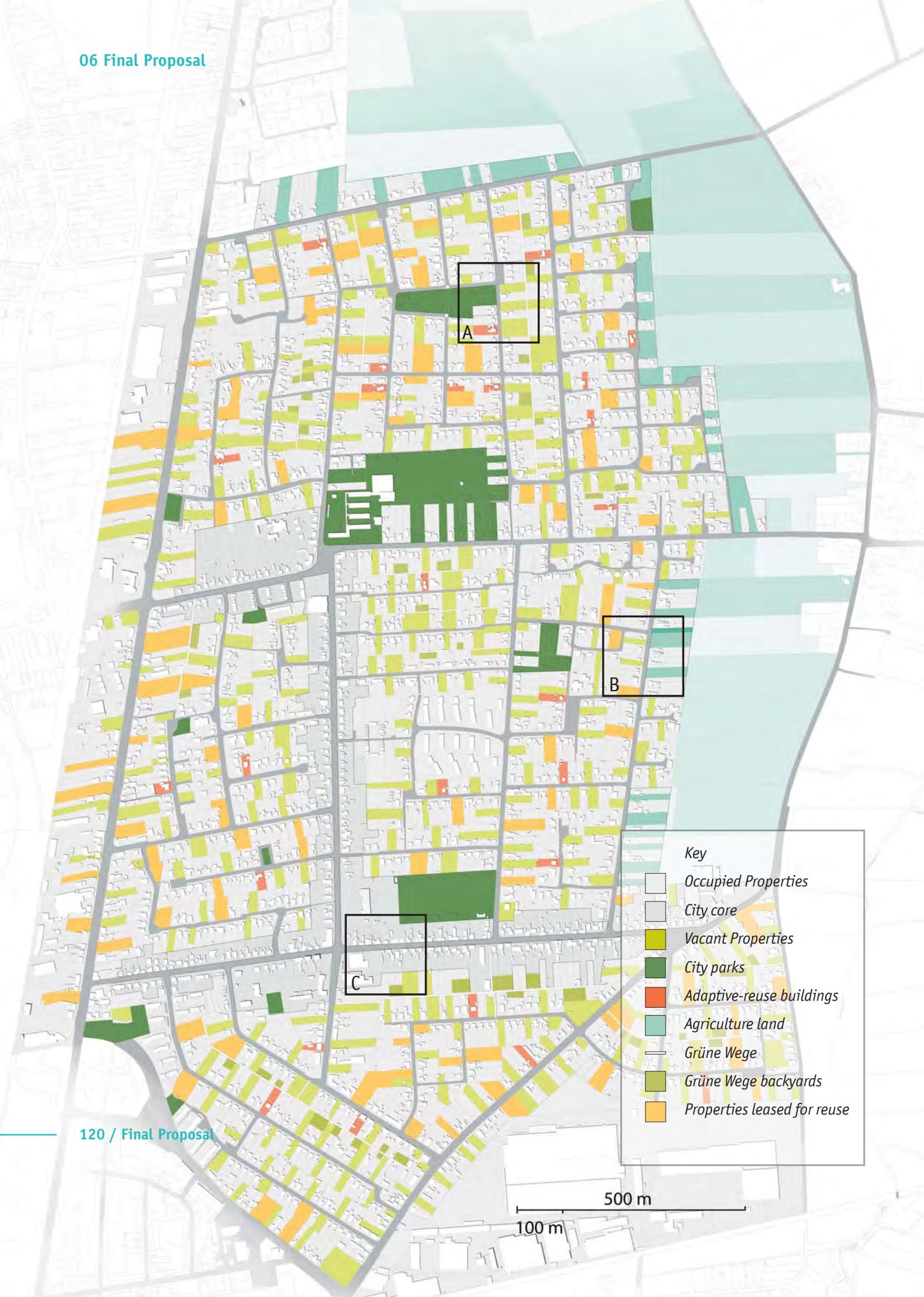
Land returned to natural state



Section through backyards



Many properties acquired from the land trust will likely remain as natural areas under stewardship of the trust itself. The opportunity arises to connect these spaces through a network of paths for public use. Running between resident's backyards, these paths create a safe and traffic-free zone for pedestrians and bicyclists, parallel to the main roads. Residents with adjacent properties can opt for their property to become a part of the network as well, where they would be managed by the land trust and returned to a natural state.



Key

- Occupied Properties
- City core
- Vacant Properties
- City parks
- Adaptive-reuse buildings
- Agriculture land
- Grüne Wege
- Grüne Wege backyards
- Properties leased for reuse

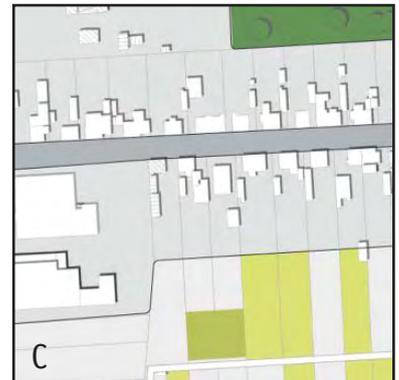
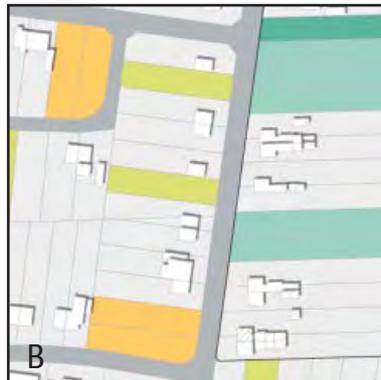
500 m

100 m

Strategy 2025

*Prognosis * 810 vacant units*

The vacancy rate for 2025 is predicted to lie at around 16%. More and more properties become available for new uses which can contribute to social, environmental and economic qualities of the neighborhood. Private ventures should be encouraged to take advantage of the unique opportunities which open up.





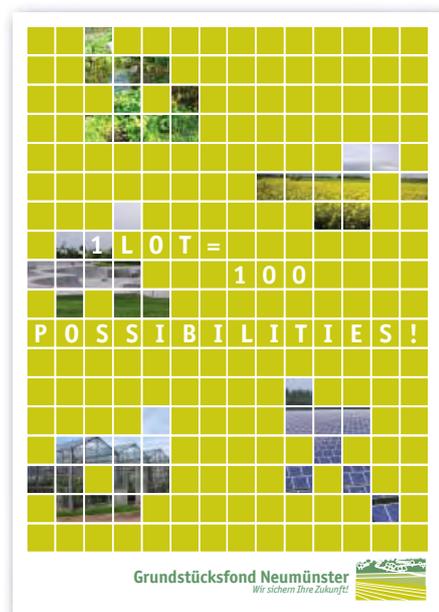
1 Lot= 100 Possibilities

Objectives:

*Adapt the urban structure to fit the needs of the community;
Stabilize real estate market to prevent the negative effects vacant and abandoned properties can have on the rest of the neighborhood;
Promote qualities for vacant buildings and properties which contribute to a sustainable development for all user groups.*



New entrepreneurship opportunities



As the land trust continues to acquire properties to stabilize the real estate market and rehabilitate properties for future use, the opportunity arises to release a number of properties for new purposes. A campaign by the land trust '1 Lot= 100 possibilities', allows residents and organizations to lease different sized plots for a period of time. As leased land removes the risk of ownership, entrepreneurship opportunities can be promoted. The new abundance of space in Tun-gendorf allows for new economic, ecological and social qualities to be created, that in a previously rigid urban structure weren't possible.















07 Conclusion

07.1 Conclusion

I would like to finish with some of my personal thoughts and conclusions about my thesis work. I originally chose the subject of shrinking cities at the suggestion of the city of Neumünster as I found it to be an interesting- and neglected- challenge for city planning in the future. Tungendorf was chosen as an area of focus because it faced specific challenges based on its building stock and demographic makeup. As stated in the introduction, this led to my aim to explore planning measures for shrinkage at the local level, with the ultimate aim to develop a phased strategy for sustainable development in the district of Tungendorf, Neumünster.

As many of the causes of shrinkage occur on a global and national level, it seems relevant to seek out solutions across both international and national borders. However, it remains unclear to what extent a manipulation of the flows of goods and people at this level is even possible, considering the various factors influencing the success of a city nowadays, from the quality of the urban environment to geography and location. Perhaps, strategies at a regional level are more likely to be effective, as distances and connections to nearby growth centers can be relatively short. As is the case with Neumünster, the potential to redistribute businesses and people on this level may be a possibility.

With regard to the development of a sustainable development strategy for Tungendorf, became quickly clear that the city as a whole is lacking in such. In terms of goal setting for sustainable development, Tungendorf represents one problem of many within Neumünster, and may not have first priority. Therefore, the measures proposed in this thesis should ultimately be part of a city-wide strategy for sustainable development, where public funds are distributed to areas and citizens representing the greatest need.

My initial goal was to develop a planning proposal for the restructuring of Tungendorf together with the citizens, as a way to not only inform citizens about future threats, but to activate them to take ownership for the development of their community. The reality was that the intangible nature of the problem made it difficult to engage with citizens. Without having posed direct questions related to vacancy and decline, the issue may not have been acknowledged at all. The initial method used called the 'Activating Consultation' helped to assess the local situation, but could have been more fruitful when followed up on with yet more consultations to go more into depth on the information received. Additionally, the high standard of living and relative satisfaction of the

residents resulted in a resistance of change, even when it appeared inevitable. Perhaps the key to activating citizen initiative is that it needs to get worse before it can get better.

The review of planning approaches in Chapter 4 was helpful to see how other cities have dealt with shrinkage. Although this thesis is restricted to Tungendorf, many of these measures could be applied more strategically on a city-wide level. This would allow priorities to be set which apply to the city as a whole. The planning approaches which were identified by citizens and city officials as inappropriate in the local context of Tungendorf would also likely find better chances of implementation in other districts. However, as many of these approaches rely on citizen initiative, a demand needs to be established before they can be pursued.

In the identification of local measures, the research done on my part was combined with the reactions of citizens and city officials. Ideally, workshops would have been more intense and generated more ideas about future opportunities related to shrinkage. However, as previously stated, the difficulty was in engaging the citizens with the issue of shrinkage at all. The workshop which resulted was a compromise; ideas were presented and citizens helped to adapt them even further to the local context. But perhaps this is also the extent of participation at this level in the development of shrinkage- as vacancy becomes more present, a more direct cooperation with citizens can be sought.

In the creation of my final proposal I began to view planning under conditions of shrinkage rather as the unplanning of the city. The development of shrinkage is largely unpredictable, especially in single-family housing districts, which means in order to redevelop vacant properties the district must first be unplanned to a degree. The opportunities for citizen initiated development in a shrinking city are endless, especially when compared to the compact city model. However, as most people have gotten used to rigid city structures in which the market drives development, a change of mentality for planners as well as citizens is called for. Land needs to be viewed not only as a common resource which is community maintained, but one which holds potentials for sustainable functions which benefit the community in social, ecological and economic ways. Therefore, effort should be made even more in the future to engage citizens with the design of their environment, to ensure that the needs of future inhabitants continue being met.

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