



BRNO UNIVERSITY OF TECHNOLOGY

VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ

FACULTY OF ARCHITECTURE

FAKULTA ARCHITEKTURY

DEPARTMENT OF URBAN DESIGN

ÚSTAV URBANISMU

GHOST CITIES OF ESTONIA

GHOST CITIES OF ESTONIA

MASTER'S THESIS

DIPLOMOVÁ PRÁCE

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Assignment Master's Thesis

Project no.: FA-DIP0062/2022
Department: Department of Urban Design
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Study programme: Architecture and Urbanism
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Supervisor: **Ing. arch. Kateřina Dokoupilová Pazderková, Ph.D.**
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Title of Master's Thesis:

Ghost Cities of Estonia

Master's Thesis:

Ghost Cities are vacant neighborhoods and sometimes whole cities that were abandoned or built but were never inhabited. Ghostly cities are important because they allow us to see cities as they are. They remain empty for various natural and artificial reasons, ranging from natural disasters to preventive city planning. These towns bring attention to economic challenges, a lack of foresight in urban planning, and the beauty of the abandoned. Very little data exists which establishes the location and extent of these towns primarily in Estonia. We can talk about discontinuities and transformation of Post–Soviet cities as the role of urban transformation in the Post–Soviet towns and metropolis has changed.

Diploma project will focus on a research about shrinking and ghost towns in Estonia. One of the main goals is to determine main sources of the decline of the population in urban and rural settlements of the county with finding possible solutions to its improvement.

Graphics scope :

The work can be divided into two parts – research and strategies for a possible development of the chosen towns or villages. First part will include a short explanation of the topic and describes the value of the whole study. One of the important things can be reviewed as a post–soviet influence on the current issue. The first steps of the research considered social and economical data which show the most vulnerable or left towns in Estonia. The next step is to connect with a deep urban analysis of the chosen locations which will show different aspects and important features influencing the effect of the emptiness. This should reveal strengths and weak sides of selected regions.

The second part of the project will include work with examples of improving similar established situations. Additionally some specific socio–economical and urban readings will become a base in the theory of changing of dying villages or towns in a positive way. Own proposals in the urban redevelopment and economical strategies will become a main part of the work. It will open some perspectives from an architectural point of view on how regions can be developed in the future. A new master plan with the new design proposal should be the main output of the entire project

and make these towns more livable and attractive for its inhabitants or tourists.

I. Introductory data, analysis

Theoretical analysis of the problem;

Analysis of the Post–Soviet influence;

Detail analysis with shrinking cities;

Analysis of the selected towns – economical datas, planning documents, open source datas;

Analysis of the selected cities masterplan;

Problems, swot analysis of the chosen towns;

Text part of analyses, photo documentation, conclusions for the concept

II. Documentation of the designed area

Conceptual part, documentation of design development, presentation of the resulting concept.

Urban concept diagrams – schemes of basic principles;

Wider relationships on a scale of 1:10000–1:5000; documenting the relationship between the existing and the proposed urban structure for selected towns

Situation on a scale of 1:5000 – 1:1000; Strategic plan;

At least two perspective views of the exterior (e.g. in the form of a drawing in a photo), which best captures the character of the chosen solution. The specific locations of the selected cities will be determined during the work;

At least two perspective views of the urban planning unit as best as possible depicting the character of the chosen solution in selected cities;

Model in scale 1:5000 – 1:500 processed including the immediate surroundings – the necessity of the model will be specified during the semester.

The documentation will also be available in digital form. Scales are given as assumed values, they can be changed as needed.

List of literature:

1. Project about emptying villages and towns in Moldova, Bulgaria, Russia, Italy, and Spain -URL: <https://emptiness.eu/what-is-it/>

2. DZENOVSKA, Dace - Tolerance and Other Lessons in Political Liberalism in Latvia, Cornell University Press, 2018, 276 p. ISBN 9781501716850.

3. BURKHOLDER, Sean. The new ecology of vacancy: Rethinking land use in shrinking cities. Sustainability, 2012, 4.6: 1154-1172.

4. AMIN, Ash. Thrift N.(2002) Cities: Reimagining the Urban. Cambridge: Polity, 2002.

5. MCDONOGH, Gary. The geography of emptiness. The cultural meaning of urban space, 1993, 3: 3-16.

6. GIBAS, Petr. Globalised aestheticisation of urban decay. Beyond globalisation: exploring the limits of globalisation in the regional context, 2010, 155-161.

7. Post Soviet Cities:

https://www.researchgate.net/publication/289986549_Urban_transformation_and_role_transformation_in_the_post-Soviet_metropolis

Date of project specification Master's Thesis: 13.2.2023

the deadline for submission for the Master's Thesis: 9.5.2023

Master's Thesis is submitted in the scope determined by the project supervisor; in addition, one B1 exhibition panel and Master's Thesis in electronic form are submitted.

Bc. Nikita Akindinov
student

Ing. arch. Kateřina Dokoupilová
Pazderková, Ph.D.
project supervisor

doc. Ing. arch. Karel Havlíš
head of the institute

In Brno dated 13.2.2023

Ing. arch. Radek Suchánek,
Ph.D.
Dean

Statement about the originality of the work

The study about ghost settlements of Estonia may be considered as an important topic for the research. Nowadays question of dying and dead towns opens many discussions about their future. My own goal was try to organize the order how these spaces can be solved and rebuild. As a main principle of the dealing with these settlements I suggested the strategy of the designing of the new point of attraction which could help to warm up the interest at that area among visitors and investors. The general idea considers the way of designing there more a creative spot with art residence and cultural event. At the same time everything works together with the surrounded nature. This proposal is a unique concept for the region and during the work process there no other architectural and town planning concepts were found. Strategies for the ghost settlements also not found for Estonia which shows the novelty of the study.

Description of the work

The study includes two parts - theoretical and practical. The theoretical part explores the history of the place, issues of the shrinking and ghost settlements in Baltic countries and in particular in Estonia. One of the biggest part in the research considers the socio-economical relationships of this region. One of the main idea of the study was to divide the level of emptiness on certain stages: shrinking, dying and ghost. The term dying explains the settlement which is not completely abandoned and it still has some inhabitants. Based on this definition there was chosen Viivikonna town as a main goal for the proposal.

The second part of the study considers the idea in raising of interest among visitors and keeping the current amount of this who still live there. As a main idea there was proposed a method of the development of the new point of attraction. It should make the place more livable. As a concept I proposed to develop this area in five phases. The very first step was to warm up the interest with a special festival which could open the dialogue between private investors, authorities and artists. In the following steps the main concept of the process was to make the art residence in the heart of the abandoned town. The next phase was to connect the heart of the city with surrounded nature by the walking path. This way will show the visitor the strengths of nature which occupies the ruins and abandoned houses. The following phase considered the hotel development in front of the residence. This way can allow people to stay over the weekend at the village. The next step of my proposal was to create in Viivikonna a small memorial and open public spaces where people can walk and think about the town's past and future.

The general idea of the project was to support the feeling of emptiness and ghostliness by keeping the ruins and abandoned building without any refurbishments. At the same time this contrast between new residence volumes, nature and old historical buildings could really help to attract more visitors. People wish to visit unusual places, festivals and at the same time they truly enjoy merging with nature in an escape from the noisy cities. Towns like Viivikonna could help to satisfy all these desires and can show the possible way of dealing with almost dead settlements.

Ghost Cities
of Estonia
Part I

Master's Thesis. Pt. 1

Bc. Nikita Akindinov

Supervisors: Ing. arch. Kateřina Dokoupilová-Pazderková, Ph.D.;

Ing. arch. Kateřina Singer, Msc.

Faculty of Architecture VUT Brno

2022/2023

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Introduction



Ghost City - Urban phenomenon which is widely spread around all the world. The terminology was born in the United States in 1990s as a term which describes *abandoned or left urban settlements*. Some of the researchers noted certain options of how the ghost city may be defined. There are two distinct types of ghost towns that have been described by American explorers.¹ The first includes only a few parts of the city which may be represented as empty districts without inhabitants while others are filled with life. In a few terms it has variant when some of them do retain skeleton populations.² Another type involves the complete absence of the population in the entire settlement. The main group of factors can be defined as: *economical changes, human factor, natural disasters, diseases*. Human factors include man-made disasters (Pripyat, Ukraine), human intervention (Varosha, Cyprus), flooding by dams (Mologa, Russia), massacres (Agdam, Azerbaijan).

1. BROWN, L. Robert. Ghost towns of the Colorado Rockies. The Caxton Printers, Ltd. Cadwell, Idaho, 2006, p. 15, ISBN 100870043420

2. BAKER, T. Lindsay. More Ghost Towns of Texas. University of Oklahoma Press: Norman, OK, 2003, p. 9, ISBN 0806135182
Left: Vorkuta, Russia. Image source: [website] https://www.instagram.com/p/CX3HR5_L2Wz/, accepted 6 Feb 2023



Left up: Mologa, Russia. Photo by: www.liveinternet.ru , Source: <https://turist.delfi.ee/statja/74857075/goroda-svershivshegosya-apokalipsisa>

Left down: Varosha, Cyprus. Image by: [AndreasZerndl/Shutterstock](https://www.gettyimages.com/photos/andreas-zerndl)
Photo by: [Muhammed Fatih Orgas/ Anadolu Agency via Getty Images](https://www.gettyimages.com/photos/muhammed-fatih-orgas),
Source: <https://www.travelandleisure.com/travel-news/cyprus-varosha-ghost-town-reopen>

Middle up: Agdam, Azerbaijan. Photo by: AP Photo, Source: <https://www.dailysabah.com/politics/aghdam-returns-to-azerbaijan-after-end-to-27-yearlong-armenian-occupation/news>

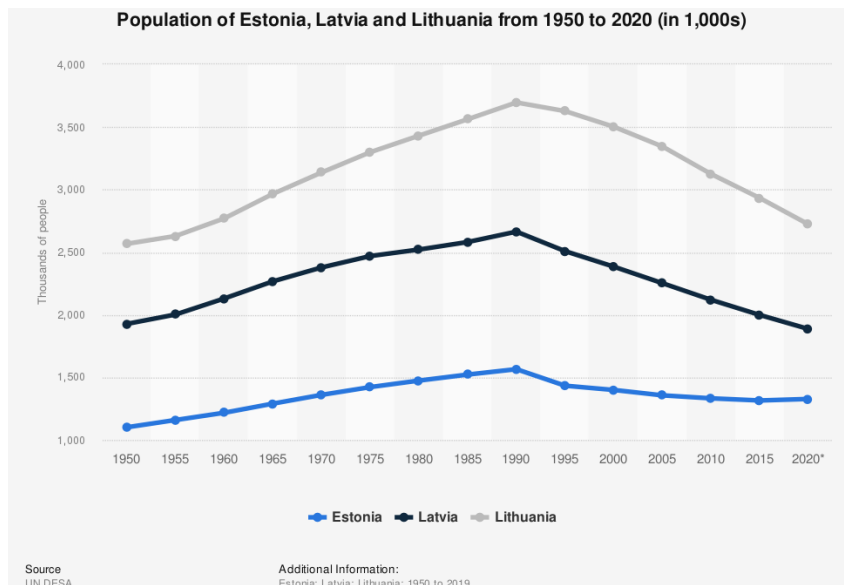
Middle down: Poggioreale, Italy. Photo by: [AndreasZerndl/Shutterstock](https://www.gettyimages.com/photos/andreas-zerndl), Source: <https://www.loveexploring.com/galleries/100771/europes-eeiest-ghost-towns?page=1>

Right up: Kennecott Mine Town near McCarthy, Alaska. Photo by: [IntentionalTraveler/Shutterstock](https://www.gettyimages.com/photos/intentional-traveler), Source: <https://www.thrillist.com/travel/nation/ghost-towns-near-me>

Right down: Pripjat, Ukraine. Photo by: [Tijuana2014](https://www.gettyimages.com/photos/tijuana2014)
Source: [Getty Images/iStockphoto](https://www.gettyimages.com/photos/tijuana2014)

Urban emptiness in the Post-Soviet space. Baltic countries.

On the map of the European continent we can find pieces of the empty settlements that were formed due to special circumstances. Professor of the University of Oxford Dace Dzenovska defined in her research emptiness of the eastern part of Europe as a post-effect of the soviet period.³ Economical and social chains were strongly connected between the neighboring republics and center. Today shrinking and ghost towns cover lands of Georgia, Ukraine, Latvia, Lithuania, Estonia and other CIS countries. The research project „emptiness“ describes stories of these settlements and opens discussions around the questions: Why did it happen and how can we handle the phenomenon now?⁴



3. DZENOVSKA, Dace. Tolerance and Other Lessons in Political Liberalism in Latvia, Cornell University Press, 2018, p. 276, ISBN 9781501716850.

4. Project about emptying villages and towns in Moldova, Ukraine, Russia, Italy, and Latvia. URL: <https://emptiness.eu/field-reports/> [website] accessed 29 Jan 2023

Emptiness and shrinkage in Estonia.

Baltic countries clearly demonstrate tendencies in urban shrinkage as well as other neighboring countries. According to the open statistics (fig.1) of the population of the country it has three most common cities where people move from the smaller settlements. Tallinn, Pärnu and Tartu currently are the most attractive places for moving (fig.2). Besides the shrinking effect it occurs as well some another issue – ghost towns and villages. Rabasaare, Viivikonna and Sirgala became attractive spots for stalkers and curious visitors.

The aim of this research will allow us to understand the origin of these tendencies. The socio-economical and historical analysis will draw the understanding of the urban processes in the countryside and towns of Estonia. Possible steps in the prevention of it will be considered as a part of the existent programs of the Estonian government and research.

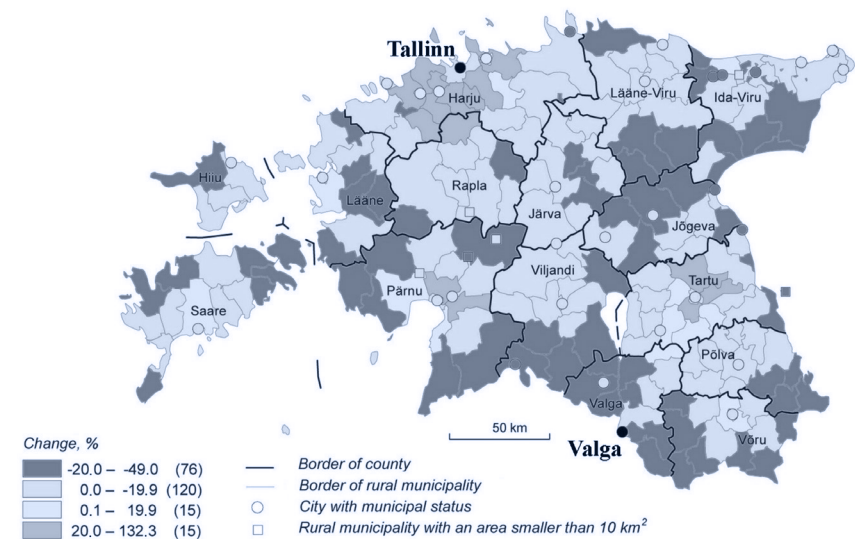


Figure 1 (left): Relative change in population of Estonia, Latvia and Lithuania from 1950 to 2020

Figure 2: Relative change in population in local government units 31.03.2000-31.12.2011 (Statistics Estonia)



Post-Soviet effect. Urbanization in Estonia.

II

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody." - Jane Jacobs; The Death and Live of Great American Cities.

Soviet impact and monotowns in Baltic countries.

The ghost urban effect which happened on the territories of Baltic and other countries *was partially connected with USSR* time and its influence. The work of the system is possible to represent as a centralized planning system which was managed through the Planning Commission – *Gosplan*. This institution was responsible for the plan of the development of the national economy of the USSR and its monitoring. After the occupation the Baltic countries became a part of the system. Gosplan was responsible for general goals of how much to produce goods or items and in what period of time.⁵ According to these requirements there were developed dozens of mining towns, manufactures, fields with a peat production on the territories of the Baltic countries. Part of these mines were open during the first independence time. The beginning of the XX century was affected by Industrialization. Countries like France, England, Germany and USA had the same production and mining regions. Most of the time *these spots* were brought under a specific feature till the certain period – they *proposed monofunctionality*.

The term *monotown* is especially connected with the USSR and it describes a settlement where the economy is represented by a single industry, production or company.⁶ During the Soviet Regime there were developed hundreds of new towns in all parts of USSR and also in the Baltic countries. The system of the settlement usually was formed with a production core where people worked. This part was connected with residential areas. Additionally there were built schools and kindergartens, polyclinics, cultural houses etc. Boiler house was responsible for the water supply and heating. The system of the monotown was mostly formed by a centralized workforce which had an agreement to work for a certain period. The second group of people was represented by those who provided any services for the first group. *This structure did not provide any conditions to make these settlements suitable for the diversified long-term way of living.*⁷

5 Borén, T. and M. Gentile (2007): Metropolitan processes in post-communist states: An introduction. In: Geografiska Annaler, Series B Human Geography 89, 2, pp.95-110

6 "Darkness on the Edge of Monotown". The New York Times. 2009-10-16. Archived from the original on 2018-10-10. Retrieved 2018-10-27.

7 JUNGSMANN, Jens; SAGEMANN Bernd (Eds.). Financial Crisis in Eastern Europe: Road to Recovery, Gabler Verlag, 1st ed. 2011, pp. 455-457, ISBN 978-3-8349-2740-8



Viivikonna carier. Photo by Gorbunov, V. 1 Oct. 1956

SHRINKING
Dying
Ghost

Mining settlements in Estonia.

Observing the map of the minerals and sources (fig. 3) it is visible to get their main locations. One of the important spots with peat productions is based not far from Pärnu. *Lavassaare pit and Tootsi village* are famous for their peat briquettes – the main source of energy in 1930-60ss. Tootsi village was founded before The Second WW but after the Russian occupation it became part of the production of USSR. Nowadays this village has declined in population by 2019 - about 737 inhabitants in comparison with 1959 when there were about 1033 people.⁸ The drop of the population by 29 percent during the last 60 years should be considered as a *shrinking effect* of the settlement which makes the village vulnerable in the context of the ongoing depopulation.

Kohtla-Jarve region is one of the main spots of the oil shale and mining industry. Additionally it had some peat sources, sand, gravel and clay. *Town Viivikonna and its separated district Sirgala* were founded in the 1950s. The young work mining towns and villages like this had certain popularity in all USSR parts. People were moving there from bigger cities with their families. They created new communities of where everyone had a job, children had visited a new local school and during the free evenings they spent time in local cultural clubs. Now this settlement *should be considered as a ghost or dying.*

There is another important location in Kohtla-Jarve – *The village Ravassaare* was founded in 1936 and till 1977 it *was the main center of peak production* for tens years. The period of production was there mostly during the warm seasons About twenty buildings were built there for employers. The biggest number of inhabitants was about 300, in 2000 - 21 persons and in 2011 - 2.⁹ At the same time this village was designed as a place of comfortable life. It had a precise structure with private, public and work parts. Living houses had a special design which reminded in details Estonian traditional housing.

⁸ Tootsi. Eesti Entsüklopeedia. 2011. URL: <http://entsyklopeedia.ee/artikkel/tootsi1> [website] accessed 1 Feb 2023
⁹ Statistikaamet. Asulate rahvaarv - Mehed ja naised, Vanuserühmad kokku URL: <https://estat.stat.ee/StatistikaKaart/VKR> [archived] 16 March 2014



Figure 3: The map of the USSR impact. Source:

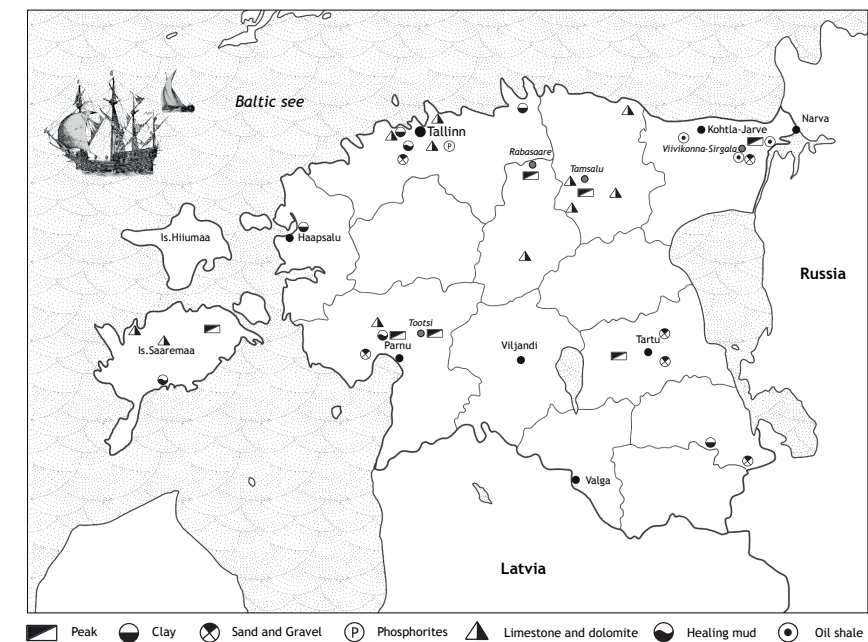
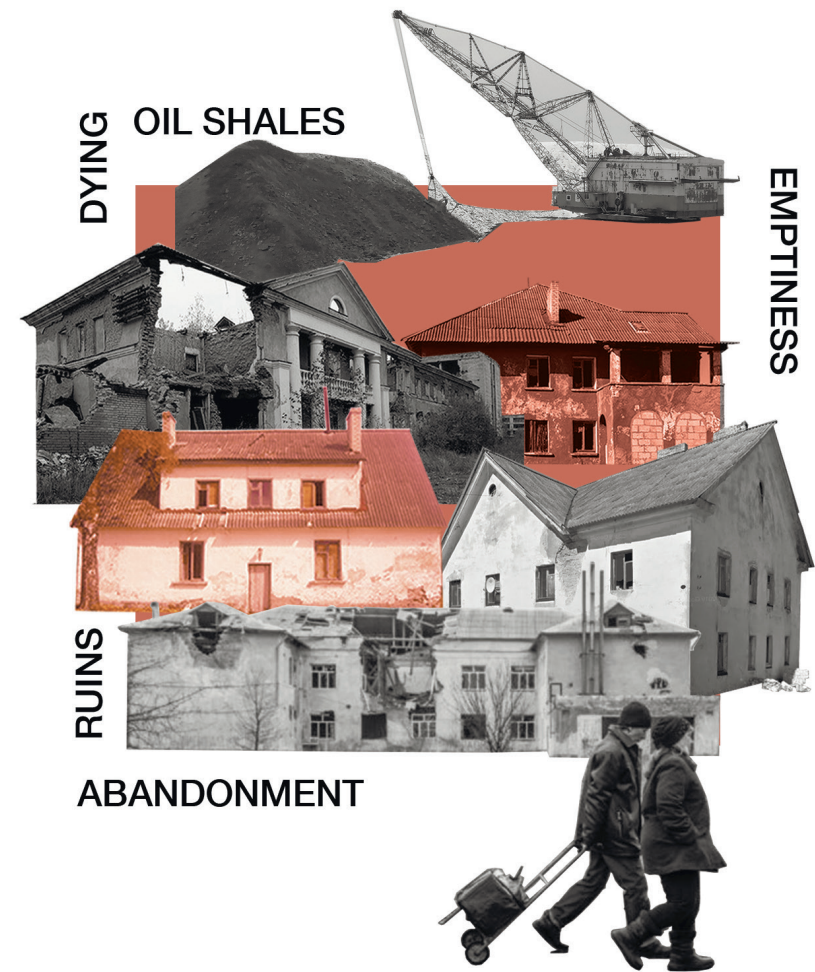
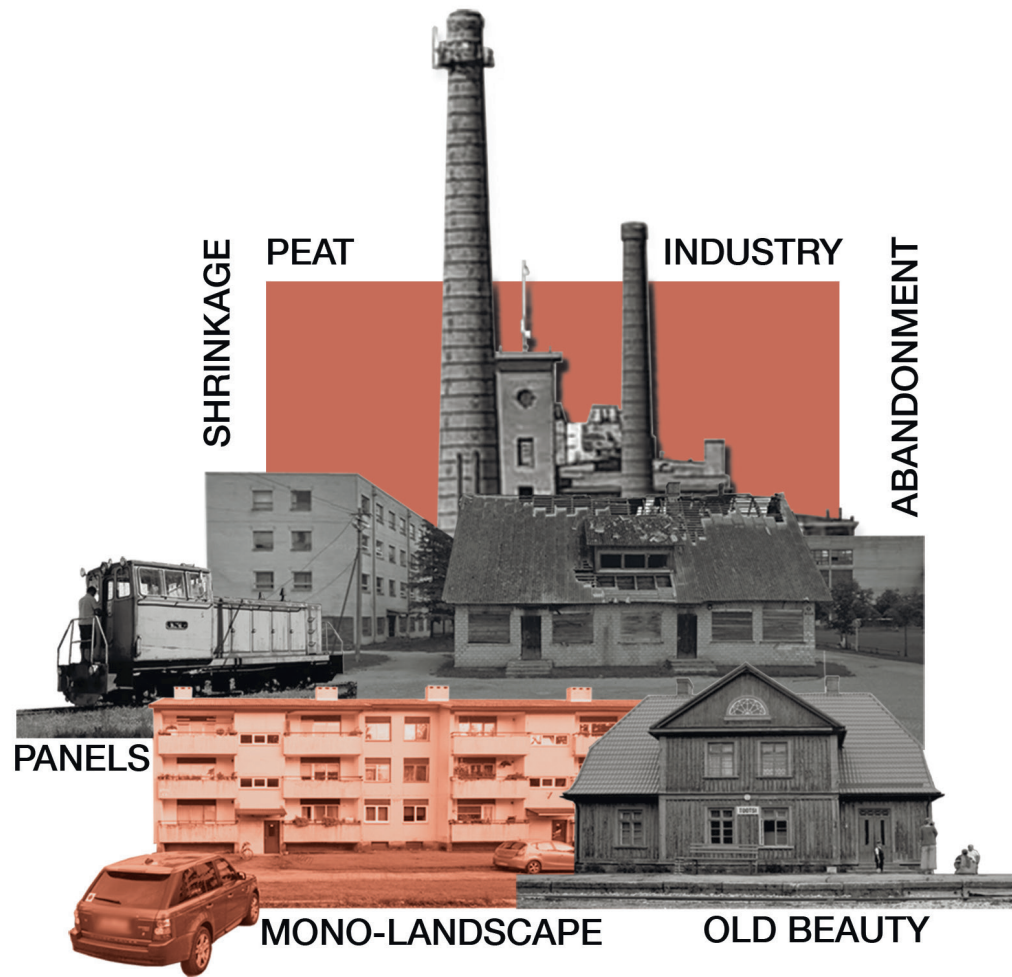


Figure 4: The map of minerals and sources. By author



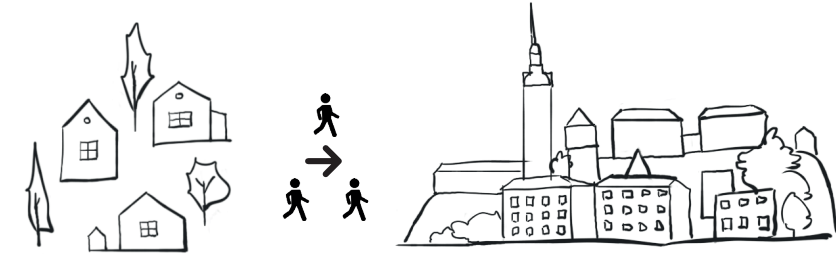




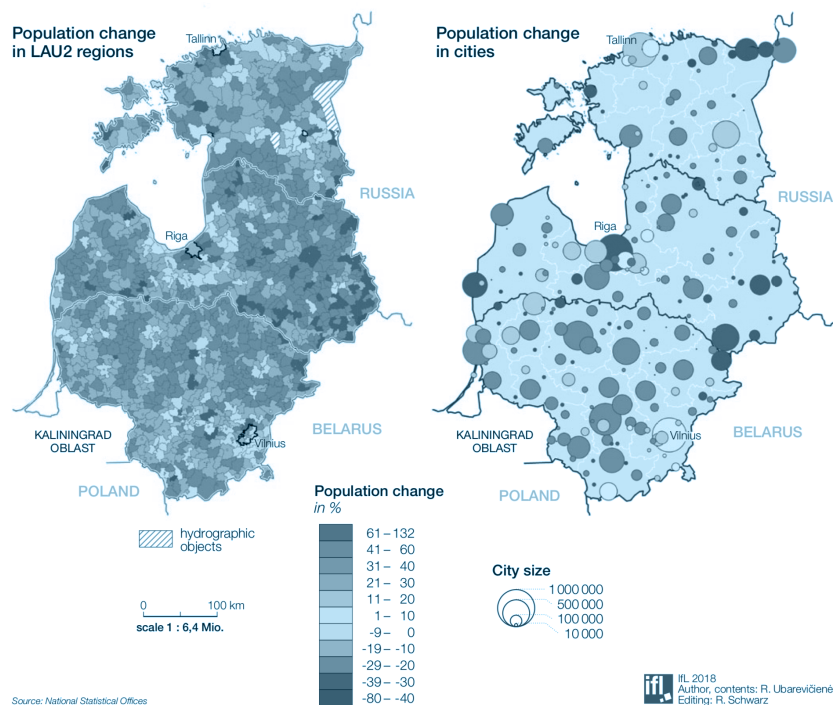
**New Urbanization.
Emptiness of Estonian
settlements.**

Urban challenges of Baltic countries after 1991.

Soviet period in the life of the Baltic countries left visible urban issues after the collapse of USSR. Changing from the centrally planned economy to a market-led economy called several problems in the changes of the cities systems.¹⁰ Dependence from the government control transited economical work on market forces. The bigger cities were able to better react on these changes in comparison with rural settlements and mono-functional towns. The Baltic countries with the world's fastest shrinking countries where the 95 percent of all cities losing population between 1989 and 2015 (fig. 5). Population redistribution draws the increase of the suburbs around the big cities like Tallinn but at the same time it shows the decrease of other urban areas of the country.



Baltic countries
Population change in 2000/2001–2011



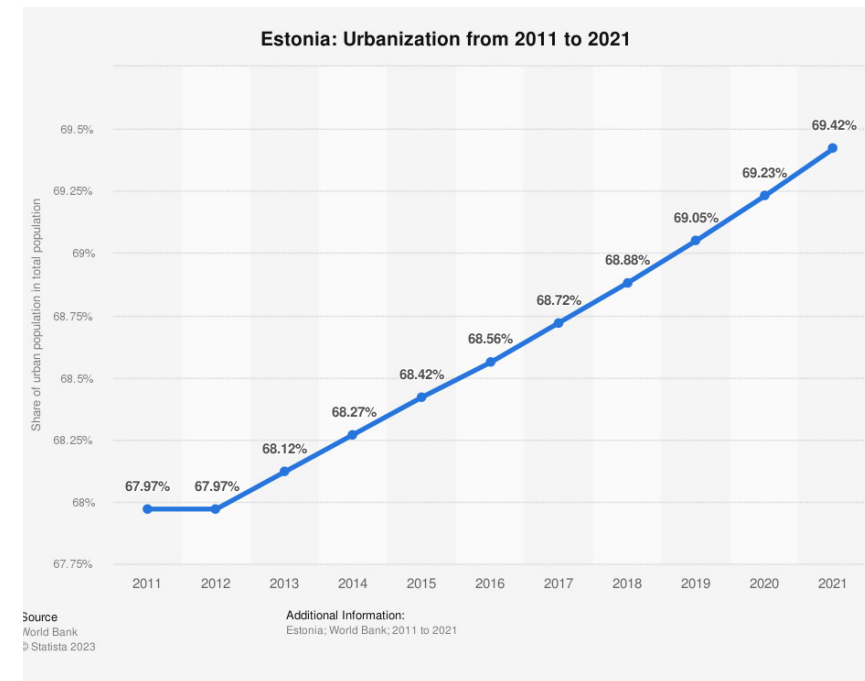
10 Ubarevičienė, R. (2018). City systems in the Baltic states: the Soviet legacy and current paths of change. *Europa Regional*, 25.2017(2), 15-29. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-59048-2>, accessed 21 Feb. 2023

Figure 5: Ubarevičienė, R. 2018 Population change in the Baltic countries in 2000/2001–2011. Source: National Statistical Offices.

Comparison of the Baltic countries, 1989 and 2015

Country	Total population			Population of capital city [% from total]			Primacy index		Urbanisation rate	
	1989	2015	Change [%]	1989	2015	Change [%]	1989	2015	1989	2015
Estonia	1,565,662	1,313,271	-16.1	478,974 (30.6)	413,782 (31.5)	-13.6	4.22	4.25	69.8	66.9
Latvia	2,665,770	1,986,096	-25.5	910,445 (34.2)	641,007 (32.3)	-29.6	7.29	7.42	70.0	67.9
Lithuania	3,674,802	2,921,262	-20.5	576,747 (15.7)	531,910 (18.2)	-7.8	1.38	1.77	67.3	67.2

Source: National Statistical Offices



Source: World Bank
Additional Information: Estonia; World Bank, 2011 to 2021
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Tab 1: Comparison of the Baltic countries, 1989 and 2015. Source: National Statistical Offices.

Figure 6: Ubarevičienė, R. 2018 Hypothetical models of city system change in the Baltic countries

Emptiness in Estonian towns and villages.

Economic issues of the transition period of Estonia and the other Baltic states intensified the process of Urbanization in the regions.¹¹ For the last twenty years some villages became less attractive for living in comparison with bigger settlements and people started to move. Estonian open data of the census during the 2000, 2011 and 2021 showed the enormous preponderance in the growing population only in two regions – Harju and Tartu. *Almost all other counties can match the parameters of the shrinking settlements* where the population is declining. In detailed statistics tables it is possible to recognize the most attractive Estonian municipalities with positive increases of the population. The main leader in the positive statistics is the capital – Tallinn and surrounding suburbs. The data proves *the tendencies of internal migration*. Official statistics of Estonia proves as well the current urbanization and shows the tendencies of the growing cities.

	Maakond / County	Status	Population Census 2000-03-31	Population Census 2011-12-31	Population Census 2021-12-31	Changing of population in %	
I	Harju	County	525,354	552,882	614,567	116,98	16,98
II	Hiiu	County	10,439	8,482	8,497	81,40	-18,60
III	Ida-Viru	County	174,819	145,373	132,741	75,93	-24,07
IV	Järva	County	37,880	31,169	29,697	78,40	-21,60
V	Jõgeva	County	36,891	30,117	27,858	75,51	-24,49
VI	Lääne	County	24,031	20,506	20,229	84,18	-15,82
VII	Lääne-Viru	County	71,795	61,649	58,709	81,77	-18,23
VIII	Pärnu	County	95,841	86,279	85,710	89,43	-10,57
IX	Põlva	County	29,816	25,263	23,991	80,46	-19,54
X	Rapla	County	36,835	34,280	33,529	91,02	-8,98
XI	Saare	County	35,950	31,317	31,292	87,04	-12,96
XII	Tartu	County	153,869	154,666	157,760	102,53	2,53
XIII	Valga	County	34,597	28,756	27,651	79,92	-20,08
XIV	Viljandi	County	57,987	47,599	45,413	78,32	-21,68
XV	Võru	County	43,502	36,117	34,180	78,57	-21,43
	Eesti [Estonia]	Republic	1370052	1294455	1331824	97,21	-2,79

11 Bertaud, A. and B. Renaud (1997): Socialist Cities without Land Markets. In. Journal of Urban Economics 41, 1, pp. 137-151.

Tab 2: Census data of the population of Estonia in Counties, in 2000, 2011, 2021 years (Statistics Estonia)

Population census of Estonia. Urban and rural municipalities.

	Name	Status	Population Census 2000-03-31	Population Census 2011-12-31	Population Census 2021-12-31	Changing of population in %	
I	Harju	County	525,354	552,882	614,567	116,98	16,98
	Anija	Rural Municipality	7,335	6,492	6,262	85,37	-14,63
	Harku	Rural Municipality	6,614	14,181	16,380	247,66	147,66
	Jõelähtme	Rural Municipality	5,213	6,462	6,970	133,70	33,70
	Keila linn	Urban Municipality	9,386	9,763	10,499	111,86	11,86
	Kiili	Rural Municipality	2,378	5,183	6,165	259,25	159,25
	Kose	Rural Municipality	7,543	7,297	7,451	98,78	-1,22
	Kuusalu	Rural Municipality	6,503	6,412	6,242	95,99	-4,01
	Lääne-Harju	Rural Municipality	15,030	13,630	12,997	86,47	-13,53
	Loksa linn	Urban Municipality	3,493	2,759	2,615	74,86	-25,14
	Maardu linn	Urban Municipality	16,736	17,524	16,170	96,62	-3,38
	Raasiku	Rural Municipality	4,429	4,579	5,115	115,49	15,49
	Rae	Rural Municipality	7,976	15,721	22,900	287,11	187,11
	Saku	Rural Municipality	7,302	9,590	11,001	150,66	50,66
	Saue	Rural Municipality	17,285	21,534	24,111	139,49	39,49
	Tallinn	Urban Municipality	400,150	393,222	437,817	109,41	9,41
	Viimsi	Rural Municipality	7,981	18,533	21,872	274,05	174,05
II	Hiiu	County	10,439	8,482	8,497	81,40	-18,60
	Hiiumaa	Rural Municipality	10,439	8,482	8,497	81,40	-18,60
III	Ida-Viru	County	174,819	145,373	132,741	75,93	-24,07
	Alutaguse	Rural Municipality	5,288	4,284	4,167	78,80	-21,20
	Jõhvi	Rural Municipality	13,876	12,738	11,948	86,11	-13,89
	Kohtla-Järve linn	Urban Municipality	46,973	37,103	33,499	71,32	-28,68
	Lüganuse	Rural Municipality	12,504	9,566	8,223	65,76	-34,24
	Narva-Jõesuu linn	Urban Municipality	5,289	4,160	4,175	78,94	-21,06
	Narva linn	Urban Municipality	68,665	58,663	53,955	78,58	-21,42
	Sillamäe linn	Urban Municipality	17,200	14,252	12,439	72,32	-27,68
	Toila	Rural Municipality	5,024	4,607	4,335	86,29	-13,71
IV	Järva	County	37,880	31,169	29,697	78,40	-21,60
	Järva	Rural Municipality	11,265	9,154	8,632	76,63	-23,37
	Paide linn	Urban Municipality	12,727	10,708	10,439	82,02	-17,98
	Türi	Rural Municipality	13,888	11,307	10,626	76,51	-23,49
V	Jõgeva	County	36,891	30,117	27,858	75,51	-24,49
	Jõgeva	Rural Municipality	17,216	14,073	13,186	76,59	-23,41
		Administrative cent	6417	5501	4959	77,28	-22,72
	Mustvee	Rural Municipality	7,227	5,793	4,982	68,94	-31,06
		Administrative cent	1753	1358	1221	69,65	-30,35
	Põltsamaa	Rural Municipality	12,448	10,251	9,690	77,84	-22,16
		Administrative cent	4849	4188	3981	82,10	-17,90
VI	Lääne	County	24,031	20,506	20,229	84,18	-15,82
	Haapsalu linn	Urban Municipality	15,112	13,360	13,132	86,90	-13,10
	Lääne-Nigula	Rural Municipality	8,667	6,915	6,796	78,41	-21,59

Tab 3: Census data of the population of Estonia in Rural and Urban municipalities in 2000, 2011, 2021 years (Statistics Estonia)

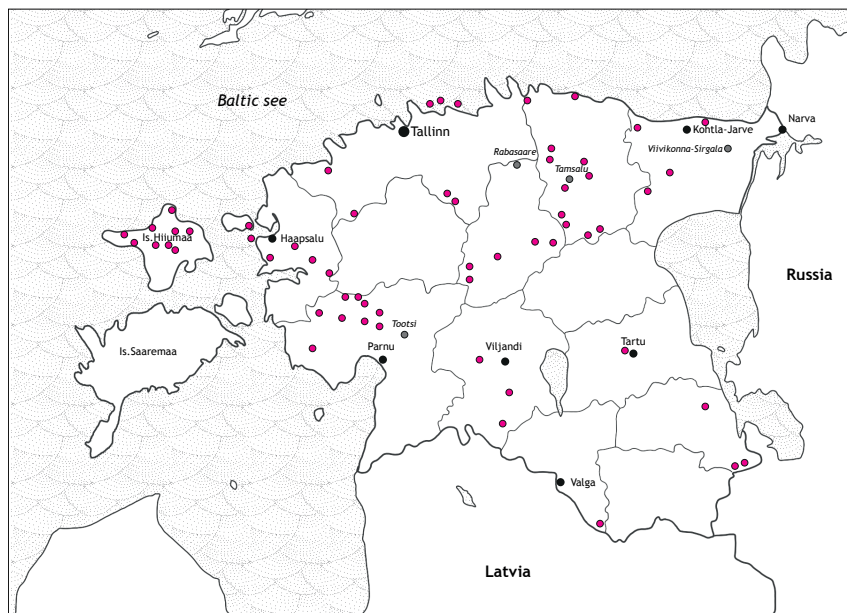
	Vormsi	Rural Municipality	252	231	301	119,44	19,44
VII	Lääne-Viru	County	71,795	61,649	58,709	81,77	-18,23
	Haljala	Rural Municipality	4,975	4,077	4,090	82,21	-17,79
	Kadrina	Rural Municipality	5,439	4,902	4,838	88,95	-11,05
	Rakvere	Rural Municipality	6,209	5,925	5,745	92,53	-7,47
	Rakvere linn	Urban Municipality	17,107	15,264	15,141	88,51	-11,49
	Tapa	Rural Municipality	14,073	11,772	10,901	77,46	-22,54
	Väike-Maarja	Rural Municipality	7,654	6,049	5,664	74,00	-26,00
	Vinni	Rural Municipality	8,685	7,238	6,683	76,95	-23,05
	Viru-Nigula	Rural Municipality	7,653	6,422	5,647	73,79	-26,21
VIII	Pärnu	County	95,841	86,279	85,710	89,43	-10,57
	Häädemeeste	Rural Municipality	5,177	4,830	4,616	89,16	-10,84
	Kihnu	Rural Municipality	510	487	551	108,04	8,04
	Lääneranna	Rural Municipality	7,065	5,497	5,073	71,80	-28,20
	Pärnu linn	Urban Municipality	55,541	50,121	51,212	92,21	-7,79
	Põhja-Pärnumaa	Rural Municipality	10,462	8,578	8,048	76,93	-23,07
	Saarde	Rural Municipality	6,421	4,790	4,349	67,73	-32,27
	Tori	Rural Municipality	10,665	11,976	11,861	111,21	11,21
IX	Põlva	County	29,816	25,263	23,991	80,46	-19,54
	Kanepi	Rural Municipality	5,494	4,652	4,481	81,56	-18,44
	Põlva	Rural Municipality	16,014	14,016	13,395	83,65	-16,35
	Räpina	Rural Municipality	8,308	6,595	6,115	73,60	-26,40
X	Rapla	County	36,835	34,280	33,529	91,02	-8,98
	Kehtna	Rural Municipality	6,758	5,667	5,407	80,01	-19,99
	Kohila	Rural Municipality	5,975	7,331	7,525	125,94	25,94
	Märjamaa	Rural Municipality	9,499	7,912	7,368	77,57	-22,43
	Rapla	Rural Municipality	14,603	13,370	13,229	90,59	-9,41
XI	Saare	County	35,950	31,317	31,292	87,04	-12,96
	Muhu	Rural Municipality	1,903	1,483	1,646	86,50	-13,50
	Ruhnu	Rural Municipality	67	55	89	132,84	32,84
	Saaremaa	Rural Municipality	33,980	29,779	29,557	86,98	-13,02
XII	Tartu	County	153,869	154,666	157,760	102,53	2,53
	Elva	Rural Municipality	15,811	14,870	14,707	93,02	-6,98
	Kambja	Rural Municipality	7,263	10,373	12,858	177,03	77,03
	Kastre	Rural Municipality	4,807	4,856	5,402	112,38	12,38
	Luunja	Rural Municipality	2,547	4,207	5,378	211,15	111,15
	Nõo	Rural Municipality	3,714	3,972	4,266	114,86	14,86
	Peipsiääre	Rural Municipality	7,077	5,764	5,108	72,18	-27,82
	Tartu	Rural Municipality	8,590	10,020	11,728	136,53	36,53
	Tartu linn	Urban Municipality	104,060	100,604	98,313	94,48	-5,52
XIII	Valga	County	34,597	28,756	27,651	79,92	-20,08
	Otepää	Rural Municipality	7,657	6,503	6,238	81,47	-18,53
	Tõrva	Rural Municipality	7,842	6,246	5,872	74,88	-25,12
	Valga	Rural Municipality	19,098	16,007	15,541	81,38	-18,62
XIV	Viljandi	County	57,987	47,599	45,413	78,32	-21,68

	Mulgi	Rural Municipality	10,169	7,516	7,026	69,09	-30,91
	Põhja-Sakala	Rural Municipality	10,101	8,234	7,735	76,58	-23,42
	Viljandi	Rural Municipality	16,928	14,376	13,407	79,20	-20,80
	Viljandi linn	Urban Municipality	20,789	17,473	17,245	82,95	-17,05
XV	Võru	County	43,502	36,117	34,180	78,57	-21,43
	Antsla	Rural Municipality	5,948	4,491	4,222	70,98	-29,02
	Rõuge	Rural Municipality	6,576	5,191	4,877	74,16	-25,84
	Setomaa	Rural Municipality	4,206	2,990	2,849	67,74	-32,26
	Võru	Rural Municipality	11,863	10,773	10,367	87,39	-12,61
	Võru linn	Urban Municipality	14,909	12,672	11,865	79,58	-20,42
	Eesti [Estonia]	Republic	1370052	1294455	1331824	97,21	-2,79

Tab 3: Census data of the population of Estonia in Rural and Urban municipalities in 2000, 2011, 2021 years (Statistics Estonia)

Left rural settlements.

Economic issues of the transition period of Estonia and the other Baltic states intensified the process of Urbanization in the regions.¹² For the last twenty years some villages became less attractive for living in comparison with bigger settlements and people started to move. Estonian open data of the census during the 2000, 2011 and 2021 showed the enormous preponderance in the growing population only in two regions – Harju and Tartu. *Almost all other counties can match the parameters of the shrinking settlements* where the population is declining. In detailed statistics tables it is possible to recognize the most attractive Estonian municipalities with positive increases of the population. The main leader in the positive statistics is the capital –Tallinn and surrounding suburbs. The data proves *the tendencies of internal migration*.



¹² Bertaud, A. and B. Renaud (1997): Socialist Cities without Land Markets. In. Journal of Urban Economics 41, 1, pp. 137-151.

Figure 7: Statistics of the left villages of Estonia 2000-2011. Source: <https://maaleht.delfi.ee/artikkel/65419330/vaata-millised-eesi-kulad-on-valja-surnud>

	Region	2000 year	2011 year
HARJU MAAKOND			
Koipsi küla	Jõelähtme	0	0
Rammu küla	Jõelähtme	0	0
Rohusi küla	Jõelähtme	0	0
Koitjärve küla	Kuusalu	0	0
Kolgu küla	Kuusalu	0	0
Pala küla	Kuusalu	2	0
Katsina küla	Kõue	2	1
Vahetüki küla	Kõue	3	1
HIIU MAAKOND			
Tohvri küla	Emmaste	0	0
Heistesoo küla	Kõrgessaare	0	0
Hüti küla	Kõrgessaare	2	0
Lehtma küla	Kõrgessaare	7	0
Leigri küla	Kõrgessaare	2	1
Mardihansu	Kõrgessaare	0	1
Ogandi	Kõrgessaare	1	1
Palli küla	Kõrgessaare	0	0
Puski küla	Kõrgessaare	8	1
Sülluste küla	Kõrgessaare	0	0
Tiharu küla	Kõrgessaare	0	0
Viitasoo küla	Kõrgessaare	2	0
Vilima küla	Kõrgessaare	0	0
Nõmmerga küla	Käina	0	0
Leerimetsa küla	Pühalepa	0	0
Määvli küla	Pühalepa	0	0
IDA-VIRU MAAKOND			
Kiissa küla	Avinurme	4	1
Aidu küla	Maidla	1	0
Koolma küla	Maidla	0	0
Lipu küla	Maidla	4	0
Uljaste küla	Sonda	1	0
Uikala küla	Toila	14	1

GHOST

JARVA MAAKOND			
Jõeküla küla	Koeru	0	0
Norra küla	Koeru	3	0
Valila küla	Koeru	8	1
Näsuvere küla	Türi	0	0
LÄÄNE MAAKOND			
Enivere küla	Martna	4	0
Soo-otsa küla	Martna	3	1
Hobulaiu küla	Ridala	0	0
Rohense küla	Ridala	9	0
Varni küla	Ridala	0	0
Hosby küla	Vormsi	0	0
LÄÄNE-VIRU MAAKOND			
Kallukse küla	Kadrina	10	1
Luusika küla	Laekvere	5	0
Sootaguse küla	Laekvere	4	1
Kadiküla küla	Rakke	0	0
Padaküla küla	Rakke	0	0
Villakvere küla	Rakke	0	0
Araski küla	Tamsalu	3	1
Järsi küla	Tamsalu	8	0
Koiduküla küla	Tamsalu	3	1
Lemmküla küla	Tamsalu	0	0
Andi küla	Vihula	10	0
Kaukvere küla	Vinni	1	0
PÕLVA MAAKOND			
Koidula küla	Värska	10	0
Rääptsova küla	Värska	5	0
PÄRNU MAAKOND			
Altküla küla	Halinga	5	1
Joonuse küla	Koonga	1	0
Kuhu küla	Koonga	2	0
Kurese küla	Koonga	0	0
Naissoo küla	Koonga	1	1
Parasmaa küla	Koonga	0	0

Piisu küla	Koonga	6	1
Sookatse küla	Koonga	0	0
Õepa küla	Koonga	0	0
Koeri küla	Varbla	0	0
Rahkma küla	Vändra	0	0
RAPLA MAAKOND			
Koluta küla	Märjamaa	0	0
SAARE MAAKOND			
Abaja küla	Kihelkonna	6	1
Karujärve küla	Kihelkonna	1	0
Kiirassaare küla	Kihelkonna	1	0
Karulase küla	Kihelkonna	2	1
Kuremetsa küla	Kihelkonna	3	0
Metsaküla küla	Kihelkonna	0	1
Neeme küla	Kihelkonna	4	0
Rannaküla küla	Kihelkonna	1	1
Sepise küla	Kihelkonna	2	1
Tohku küla	Kihelkonna	4	1
Vaigu küla	Kihelkonna	2	1
Varkja küla	Kihelkonna	2	0
Rannaküla küla	Laimjala	2	0
Kaisa küla	Leisi	0	0
Liiva küla	Leisi	0	0
Moosi küla	Leisi	0	0
Nava küla	Leisi	2	1
Peederga küla	Leisi	9	1
Tõre küla	Leisi	0	0
Täätsi küla	Leisi	0	0
Eeriksaare küla	Lümanda	0	0
Vana-Lehetaguse küla	Lümanda	0	0
Raegma küla	Muhu	4	0
Merise küla	Mustjala	0	0
Matsiranna küla	Pihtla	4	1
Metsaküla küla	Pihtla	0	1
Räimaste küla	Pihtla	0	0
Sagariste küla	Pihtla	4	1

GHOST

Hindu küla	Salme	0	0
Karuste küla	Torgu	4	0
Mõntu küla	Torgu	3	0
Maantee küla	Torgu	0	1
Soodevahe küla	Torgu	0	0
Sääre küla	Torgu	13	0
Väkra küla	Valjala		0
TARTU MAAKOND			
Lahe küla	Alatskivi	6	1
Palupõhja küla	Puhja	5	0
Praaga küla	Vara	0	0
VALGA MAAKOND			
Tõrvase küla	Taheva	0	0
Mustumetsa küla	Õru	2	1
VILJANDI MAAKOND			
Maru küla	Halliste	7	0
VÕRU MAAKOND			
Andsumäe küla	Haanja	0	0
Kotka küla	Haanja	0	0
Mahtja küla	Haanja	0	0
Käänu küla	Haanja	4	1
Kirbu küla	Haanja	3	1
Mäe-Tilga küla	Haanja	1	1
Naapka küla	Haanja	1	0
Pillardi küla	Haanja	6	1
Posti küla	Haanja	1	0
Pundi küla	Haanja	4	0
Saluora küla	Haanja	0	0
Vaarkavi küla	Haanja	1	0
Vastsekivi küla	Haanja	4	1
Vorstimäe küla	Haanja	0	0
Kastamara küla	Meremäe	3	1
Kiiova küla	Meremäe	6	1
Klistina küla	Meremäe	1	1
Lutja küla	Meremäe	0	0
Masluga küla	Meremäe	2	1

Ostrova küla	Meremäe	5	1
Paklova küla	Meremäe	0	0
Palo küla	Meremäe	0	0
Triginä küla	Meremäe	4	0
Sulbi küla	Meremäe	1	1
Tedre küla	Meremäe	4	1
Tuulova küla	Meremäe	3	0
Horosuu küla	Misso	4	0
Häärmäni küla	Misso	2	0
Korgõssaarõ küla	Misso	3	1
Kossa küla	Misso	3	0
Kundsa küla	Misso	4	1
Laisi küla	Misso	0	0
Muraski küla	Misso	0	0
Parmu küla	Misso	1	1
Pulli küla	Misso	6	1
Saagrimäe küla	Misso	1	1
Sapi küla	Misso	1	1
Savimäe küla	Misso	8	1
Toodsi küla	Misso	1	1
Aabra küla	Rõuge	2	0
Ahitsa küla	Rõuge	0	0
Haki küla	Rõuge	1	1
Kadõni küla	Rõuge	5	1
Kaku küla	Rõuge	0	0
Kaluka küla	Rõuge	5	0
Muna küla	Rõuge	2	0
Murdõmäe küla	Rõuge	0	0
Ortumäe küla	Rõuge	3	1
Petrakuudi küla	Rõuge	0	0
Sõemõisa küla	Rõuge	4	0
Udsali küla	Rõuge	2	1
Laurimäe küla	Varstu	5	1
Kornitsa küla	Vastseliina	4	1
Käpa küla	Vastseliina	1	1
Tellaste küla	Vastseliina	1	0

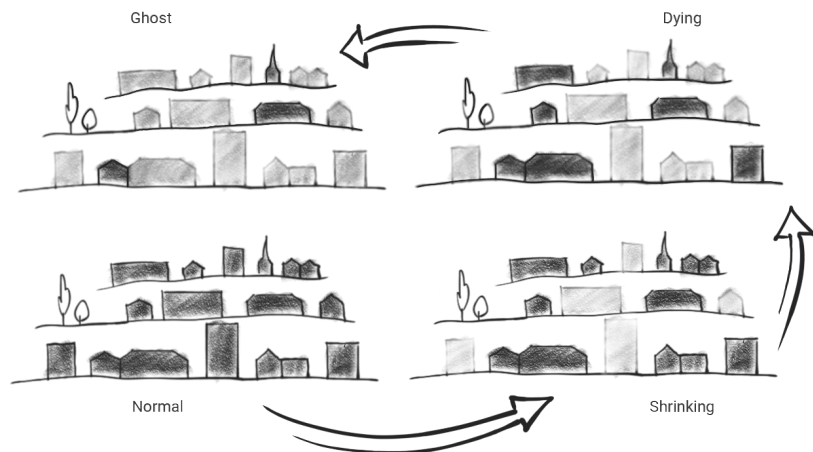
Shrinking, dying or ghost ?

The terminology question is always important as an ability to define the border between several levels of the disappearing cities. Based on some studies the ghost town may be represented as totally unpopulated. Part of the researchers consider the town as a still livable place with a bunch of inhabitants.

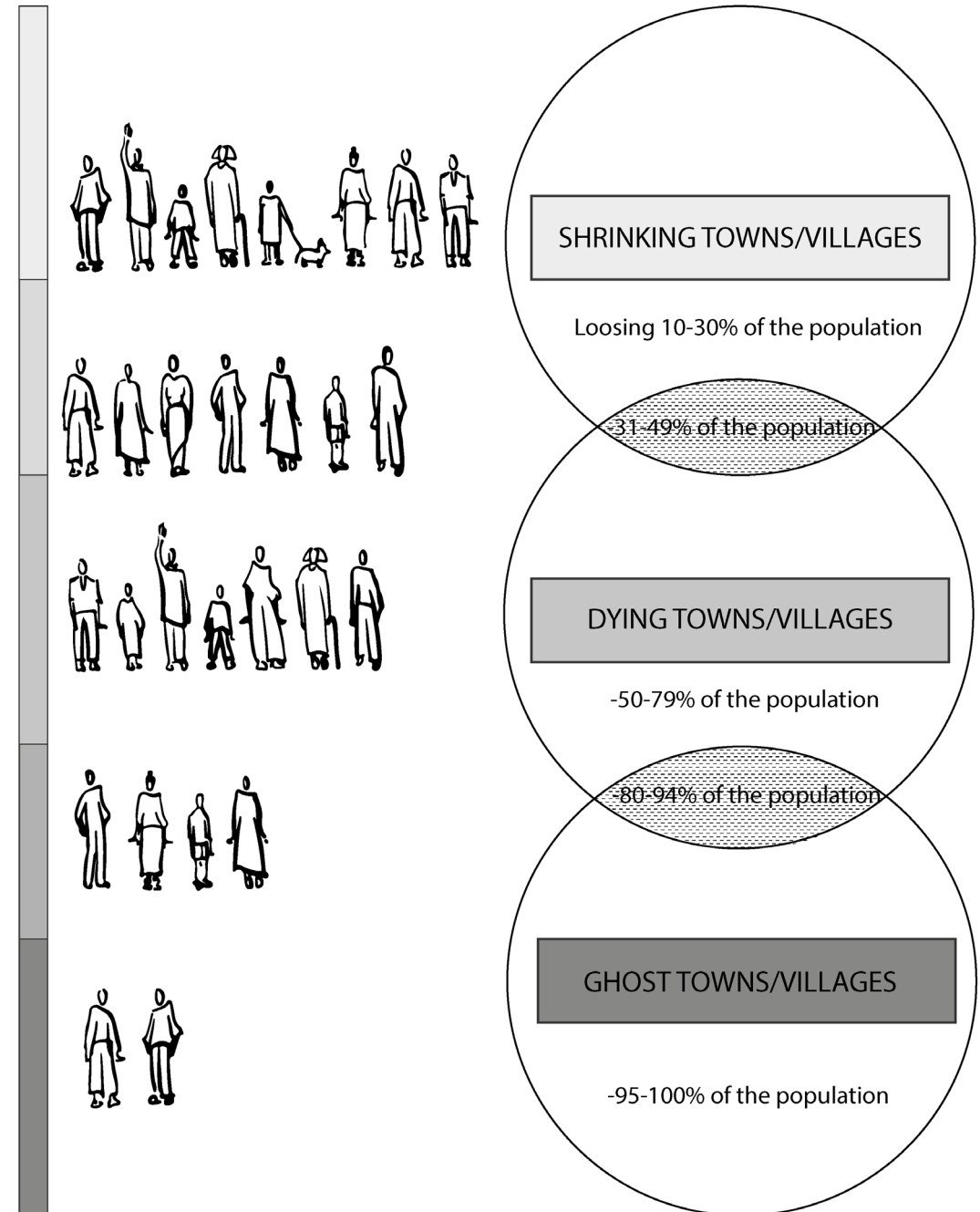
In my view this level of the city abandonment should be determined as a dying and not only ghost. Transport system is still in use. The town has the rest of public buildings like the grocery and a couple of living buildings have a water supply and sanitation. At the same time its population is decreasing.

Some cases as a shrinking Detroit faces critical points of the population and now it is still declining. Somehow it may be considered also as a dying city as it has completely abandoned districts which cannot be easily renovated but some of the parts are in the process of life support.¹³

The term „dying“ is represented in this research as a possibility to give hope in town saving where some people are proceeding with a life.



¹³ <https://www.oxfordurbanists.com/magazine/2018/5/14/ghost-cities-and-ruin-lust> [website], accessed 28 Feb. 2023



During the period of 10-50 years

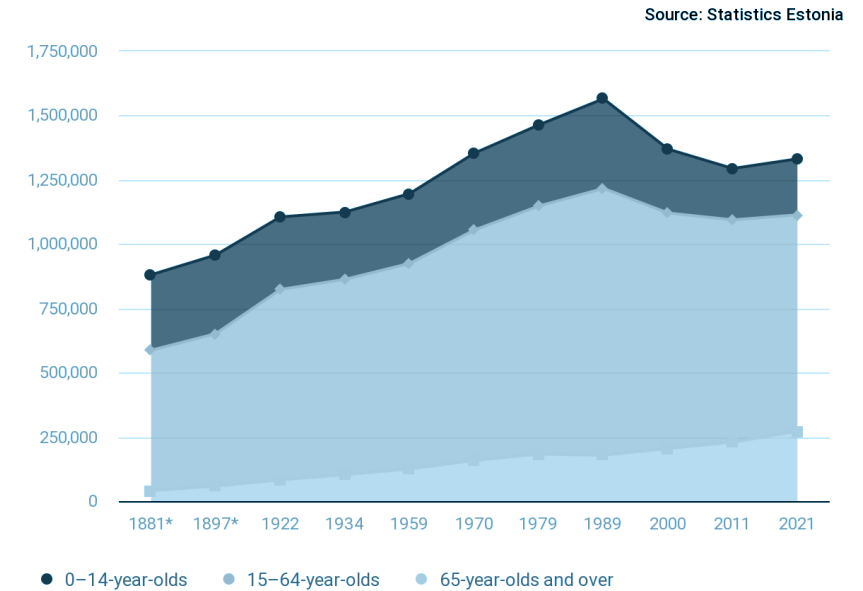
Ongoing depopulation. Reasons.

Considering population issues of Estonia it is necessary to distinguish two general groups as an external movement and internal changes. Internal are divided on demographic changes and internal migration. External movement during the last twenty years was forced by the attractiveness of west well-developed countries in the first integration period in the system of the European Union. Additionally the economical crisis of 2009-2011 made this wave of movement.

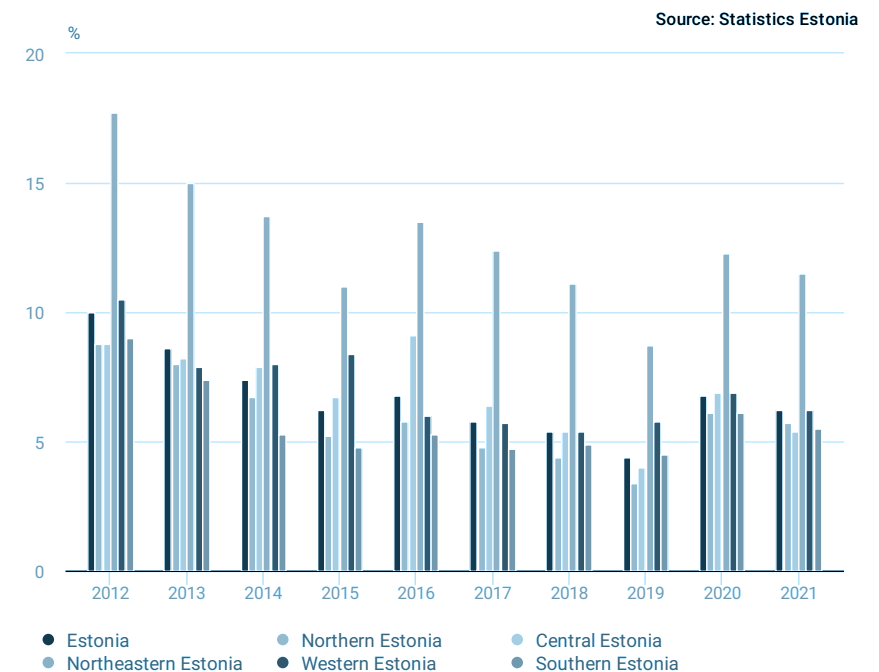
Internal issues of Estonia were represented during the last 20 years with a demographic imbalance. The major problem of the country nowadays is a big group of aging people which is faced with declining working-age inhabitants. The quantity of infants and young people was negatively affected by the period of the 1990-2000 when the economics of the country was in the renewal condition.

Immigration policy of Estonia for moving from other countries was ranked as one of the most unfriendly states. In 2017 it scored 2,37 out of nine points in Gallup's new Migrant Acceptance Index which considers strict law policy and conditions for it.¹⁴ All these factors show the issue of the unfilled territories where the population density in 2022 was 30,6 persons per square kilometer. Same parameter in the Czech Republic equals 130 persons per square kilometer and 234,7 in Germany. The tendencies of the low internal and external population growth are challenging the country with the declining demand in economics. There are no people to consume all goods and items so there is no demand to produce and deliver something enormously competitive for healthy economic development. Otherwise the war between Russia and Ukraine brought the big wave of refugees who were involved in the process of the integration in Estonia. According to the autumn statistics there are about 60 thousands of people who asked for asylum. This amount will change but some of the Ukrainians will decide to stay. This will bring new strengths in the economy of Estonia.

¹⁴ <https://news.err.ee/614818/estonia-among-countries-least-accepting-of-migrants-survey-shows>, accessed 01 Feb. 2023

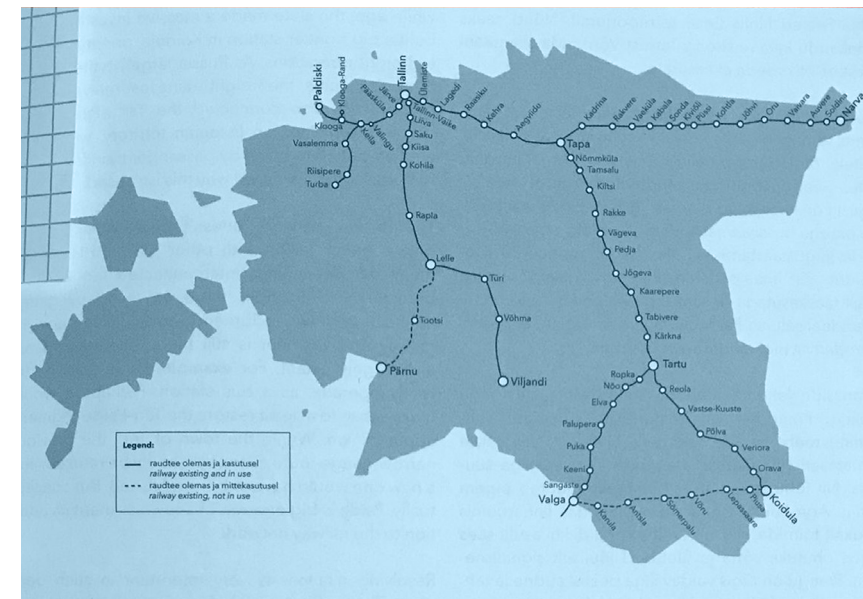
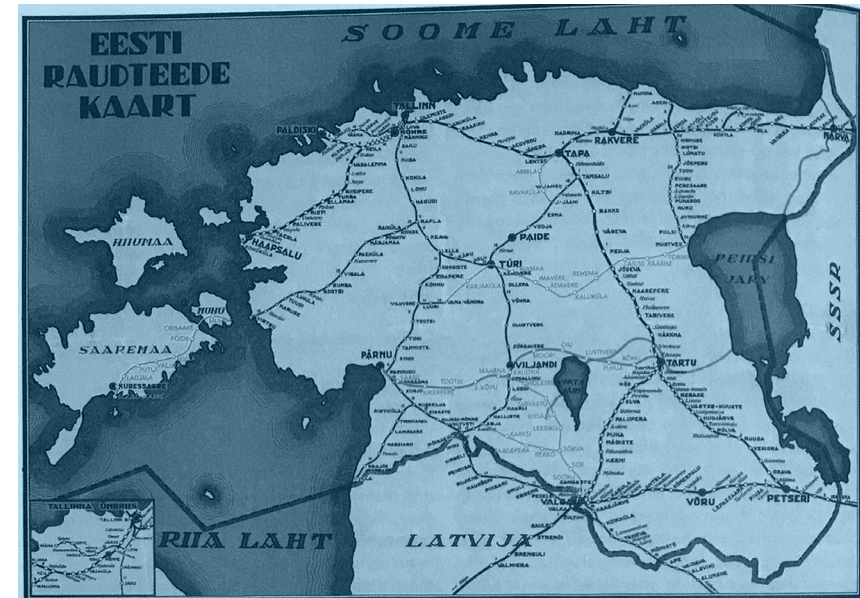


Unemployment rate by region | 2012–2021



The labour market of the countryside is represented as a lack of vacancies. North-eastern part of the country which borders Russia has one of the highest numbers of unemployed people – 11,5 percent. This part of Estonia is represented by Ida-Viru county where there are industrial and mining areas. Viivikonna and Sirgala are situated at that part and somehow it represents the huge issue of the post-soviet influence and subsequently current economic decline. At the same time the local government should be interested in creating attractive conditions and special tax quotas for the entrepreneurs and knowledge-intensive productions in the region. The new industries should turn the site in the new direction of economical positive growth.

The transport system of Estonia has some difficulties and was criticized by some politicians and researchers. The railways routes are represented as a rare network with a few directions. After the privatization period the system lost a big amount of the destinations. Comparing the plan of the railway network of the 1935 and 2022 we can see the contrast between two periods. Connections between different regions is the most important thing which helps to unite all parts of the country in the one system of neurons where each cell–town has relations with another settlement. Bus system of the country which replaced the railways may be considered as problematic. The time schedule in smaller rural municipalities is weakly connected with bigger towns. For instance, buses in Viivikonna come just two times per day and it causes some issues for its residents.



To leave or to live?

IV



The urban shrinkage or total death is a great challenge for the Estonian government today. Mining towns and villages became one of the most vulnerable groups of settlements which may add more city names on the list of abandonment. Some of them as Viivikonna moved to the stage of dying and it should be healed while it still has some residents. The main interest of the possible redevelopment is connected with people from these towns and with an existing urban skeleton. The railways which were used previously can be restored. Historical buildings where life is still going should be checked and if it is possible renovated according to the sustainable trends. The main issue of these places is strongly connected with inefficient urban future planning which was missed during the Soviet regime.

The next study part will propose the positive way of redevelopment. It will give some understanding of how we can reorganize the future of these villages and towns, which kind of urban, economical, architectural tools will be involved in the process of gentrification.

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National Statistical Offices. *Comparison of the Baltic countries, 1989 and 2015*. Source:

Content

01 New points of attraction. Baltic and world experiences

- Estonia:*
- a Viinitsu Kunstmuuseum*
 - b Arvo Pärt Center*
 - c Estonian National Museum*
 - d Rabasaare. Training military camp*
- Latvia:*
- e Daugavpils. Mark Rothko center*
- Lithuania:*
- f Kaunas. Cultural capital of EU 2022*
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- g Nikolo-Lenivets. Festival Archstoyanie*
- Hungary:*
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02 Viivikonna. Urban analysis

03 Strategies of dealing with dying settlements

04 Rebirth of Viivikonna. Proposal

05 Conclusion

New points of attraction. Baltic and world experiences

01

The fate of ghost towns has many options according to the future. Some of them are left and now they dissolve in the landscape of the ruins and nature. In these cases it charms curious tourists who explore the lost corners of the world. However in some cases these spots become a point of interest among other initiative groups of people who try to organize new businesses around the settlements and the tourists. Some of the places become the epicenter of new concepts among authorities which causes positive changes in the urban and economic structure of the site. Part of the dying villages are subject to the process of creating new “magnets” for visitors and inhabitants such as cultural spots, hotels, eco-farms, music centers or temporary events.

The idea of development of these magnets has a certain definition which is called “Business Attraction Management”. The main idea of this trend is to build strategies which could help to warm up the interest at the location.

It considered small, medium and big scaled places. Sometimes we can talk about small areas, but in some cases we can find strategies for entire cities and regions.

Estonia is exposed to a cold climate which makes some of the ideas less workable. However it still has a wide range of possibilities to make the places more attractive at any time of the year. New points of attraction could treat dying settlements of Estonia or other neighboring countries. The following examples of this chapter highlighted certain tools which created the new interest. Some of the steps can be useful as a temporary solution where the function of the site may be used mostly by tourists. Other references consider the way of keeping the interest among inhabitants to stay in the village or city for instance with a new workplace. The references from this chapter show different specific situations with small and medium scale projects which could be helpful for Viivikonna.



Viinitsu Kunstmuuseum

01^a

Location: Village Viinitsu, Harju Maakond

Stage: Shrinking

Population (- 44%): 171 (2000), 97 (2021)

The main point of interest: The New Art Museum

Participants: Private investor

*Permanent functions: street installations,
harbour, exhibition, hotel, cafe*

Temporary functions: events, exhibitions, theater

The museum was founded in 2002 and it is located in the village Viinistu on the north of Estonia. The place includes the reconstructed old port buildings and the new additional parts. Historically it was a fishing village where was located a small local rural life museum. Nowadays the area is represented as a harbor with museum buildings, hotel, restaurant and auditorium. There is one artist who is

living nearby the area which makes the area targeted at local artists. The location has permanent street installations and sculptures. Inside of the building visitors can observe some permanent and temporary exhibitions. There are some theater plays and cinemas are going during the some special events. This cultural spot attracts more visitors who bring some financial aim.

Viinitsu Kunstmuuseum

01^a



Left up: Estonia, Viinitsu Art Museum. Photo by: Kristi Saaremael. Image source: <https://www.visitestonia.com/en/viinistu-art-museum> [accessed: 07.04.2023]

Left down: Estonia, Viinitsu Art Museum. Image by: Nikita Akindinov, August 2021

Middle up: Estonia, Viinitsu Art Museum. Image by: Nikita Akindinov, August 2021

Middle down: Estonia, Viinitsu Art Museum, Interior. Image source: Viinitsu Art Museum [accessed: 07.04.2023]

Right up: Estonia, Viinitsu Art Museum. Harbour. Image by: Viinitsu Art Museum. Source: <https://visitvosu.com/en/viinistusadam/> [accessed: 11.04.2023]

Right down: Estonia, Viinitsu Art Museum. Street installations. Image by: Nikita Akindinov, August 2021

Arvo Part Centre

Location: Village Laulasama, Harju maakond

Stage: Shrinking

Population: 627 (2011), 789 (2021)

The main point of interest: The New musical center

Participants: Private investor

Permanent functions: archives, research center, exhibition, souvenirs, cafe

Temporary functions: events, exhibitions, musical auditorium



0 1 10
PLANTA +0

The music center is located in the Laulasmaa village 35 kilometers to the west from Tallinn. It was built in 2010 and represented as a foundation of the famous Estonian composer Arvo Pärt. The foundation is responsible for maintaining the personal archives of him. The function of the building includes permanent and temporary scenarios. The constant is represented as a research center with

a museum about the composer, souvenir shop and cafe. Additionally it has also a chapel and observation tower where visitors can look at the beautiful landscape around the center. The temporary function consists of the auditorium with periodical concerts, exhibition halls and event spaces. The new building was built by private investors in cooperation with Arvo Pärt Foundation.

Arvo Part Centre

01^b



1. Estonia, Arvo Part Centre. Photo by: Nikita Akindinov. Oct 2020
 2. Estonia, Arvo Part Centre. Aerial view. Image by: Roland Halbe. Source: <https://www.designcurial.com/news/part-of-the-landscape-arvo-part-centre-by-nieto-sobejano-6909529/>, [accessed 09.04.2023]



3. Estonia, Arvo Part Centre. Aerial view. Image by: Roland Halbe. Source: <https://miesarch.com/work/3920>, [accessed 09.04.2023]
 4. Estonia, Arvo Part Centre. Interior. Photo by: Nikita Akindinov. Oct 2020



5. Estonia, Arvo Part Centre. Interior. Photo by: Nikita Akindinov. Oct 2020
 6. Estonia, Arvo Part Centre. Interior. Photo by: Nikita Akindinov. Oct 2020
 7. Estonia, Arvo Part Centre. Source: Arvo Part Centre Facebook





Estonian National Museum

01^c

Location: Town Tartu

Stage: Stable

Population: 98 561 (2011), 91 407 (2021)

The main point of interest: The new museum building

Participants: Ministry of Culture, Museum foundation, Union of Architects

Permanent functions: Exhibition, cafe

Temporary functions: events, exhibitions, auditorium

The Museum was founded in 1909 but during the II WW the historical building was destroyed. In 1940 the aerodrome Raadi was developed. The competition for the new Museum building was organized in 2005 by the Ministry of Culture and The Union of Estonian Architects and the new Mu-

seum was opened in 2016. The museum is located on the outskirts of Tartu city and it is surrounded by an empty landscape with rare private houses. At the same time it attracts visitors from the whole country. It includes 6000 sq.m of exhibition spaces and now it is the largest museum of Estonia.

Estonian National Museum

01^c



Left up: Estonia, Tartu. Estonian National Museum. Photo by: Takuji Shimmura. Image source: https://www.archdaily.com/790838/project-of-the-month-estonian-national-museum?ad_source=search&ad_medium=projects_tab&ad_source=search&ad_medium=search_result_all [accessed: 07.04.2023]

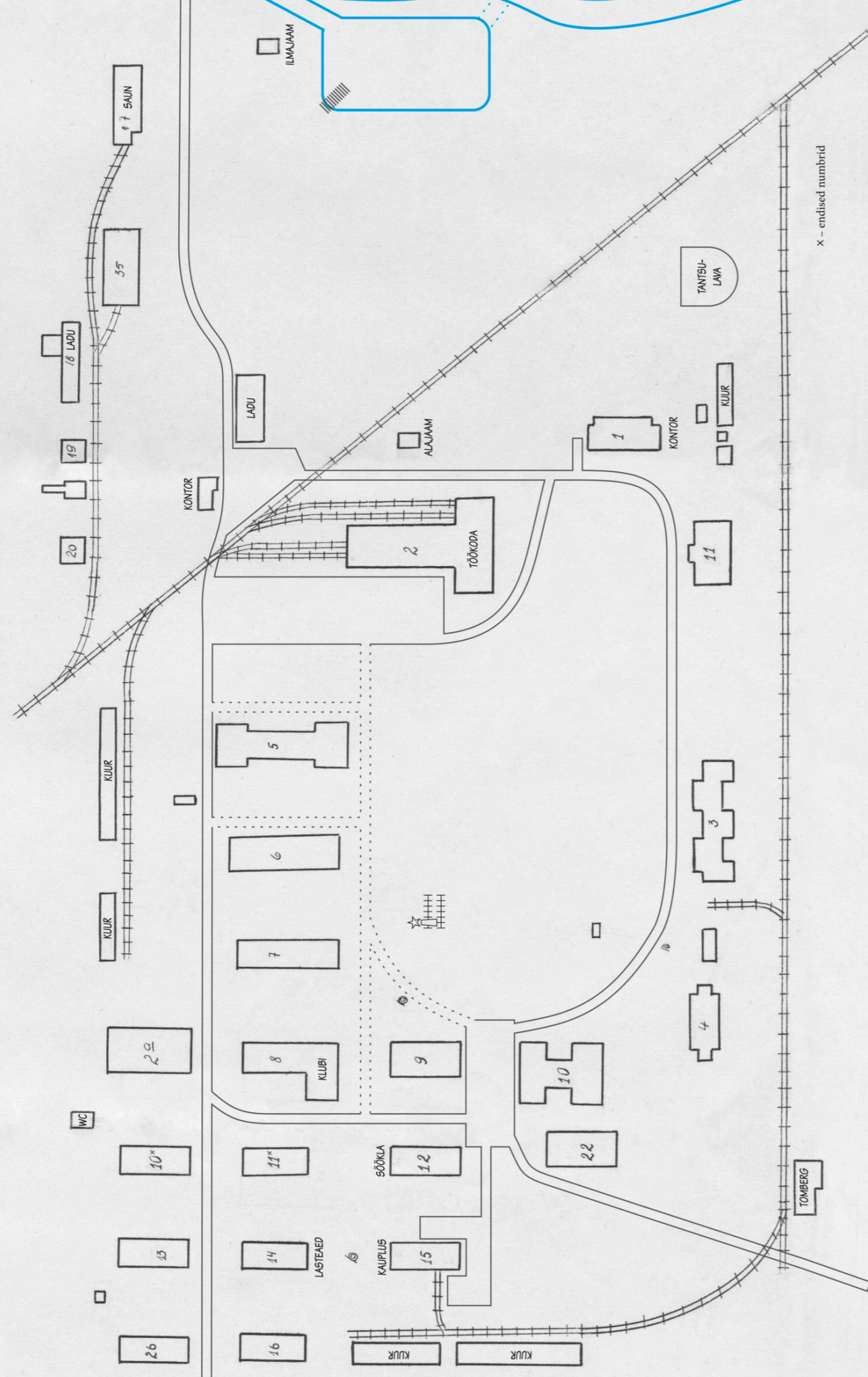
Left down: Estonia, Tartu. Estonian National Museum. Interior. Image by: Nikita Akindinov, January 2017

Middle up: Estonia, Tartu. Estonian National Museum. Facade. Image by: Nikita Akindinov, January 2017

Middle down: Estonia, Tartu. Estonian National Museum. Photo by: Takuji Shimmura. Image source: https://www.archdaily.com/790838/project-of-the-month-estonian-national-museum?ad_source=search&ad_medium=projects_tab&ad_source=search&ad_medium=search_result_all [accessed: 07.04.2023]

Right up: Estonia, Tartu. Estonian National Museum. Photo by: Takuji Shimmura. Image source: https://www.archdaily.com/790838/project-of-the-month-estonian-national-museum?ad_source=search&ad_medium=projects_tab&ad_source=search&ad_medium=search_result_all [accessed: 07.04.2023]

Right down: Estonia, Tartu. Estonian National Museum. Image source: <https://www.campingbaltic.com/estonia/location/estonian-national-museum> [accessed: 09.04.2023]



Rabasaare village. Training military camp

01^d

Location: Rabasaare

Stage: Ghost

Population: ~300 (1970x), 0 (2021)

The main point of interest: Training military camp

Participants: State Center for Defense Investments, private organization

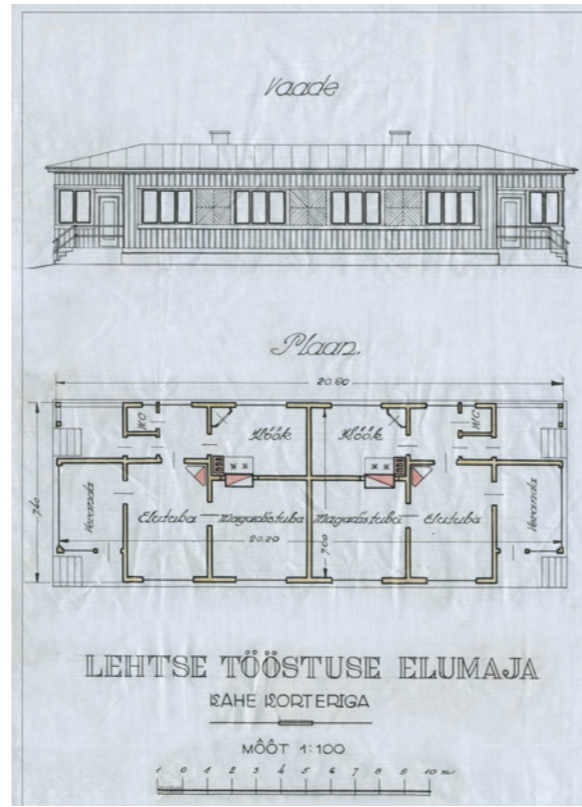
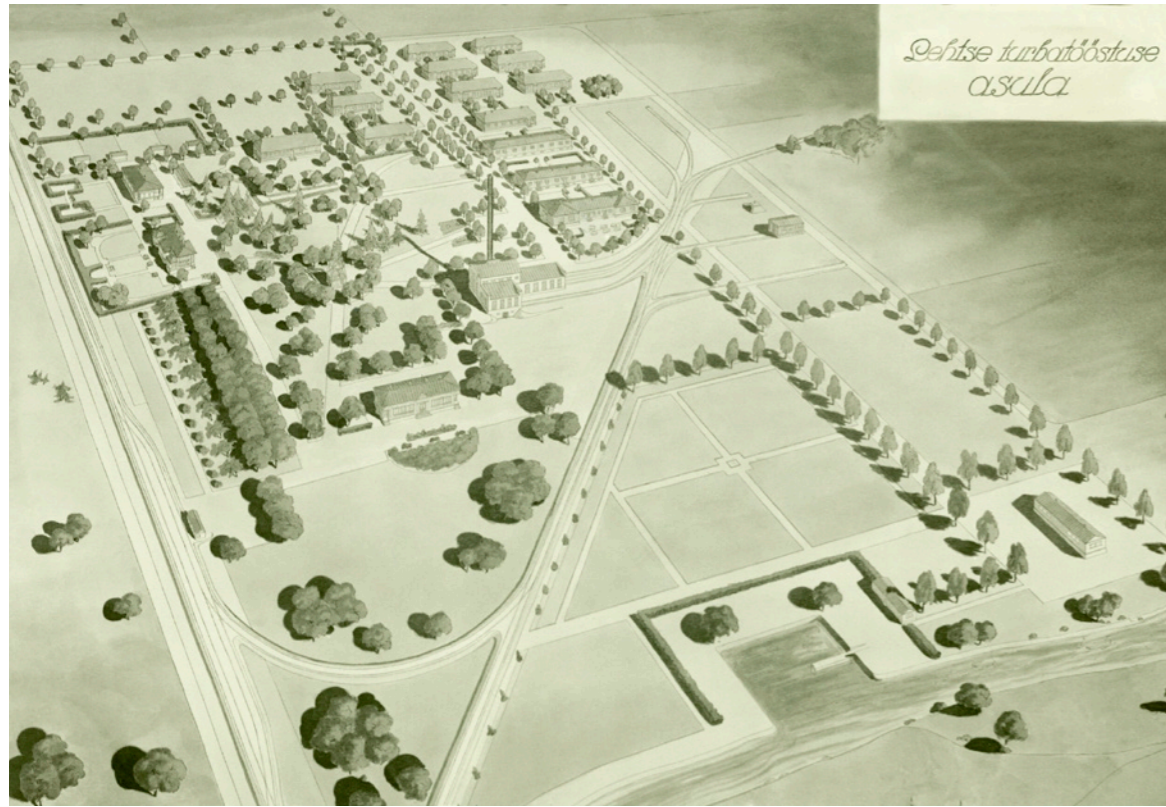
Permanent functions: training center, living camp

Temporary functions: -

Rabasaare is a ghost village which is located 54 kilometers on the southeast from Tallinn. It was one of the industrial settlements which produced peat brackets. The village was founded in 1936. There were about twenty buildings with a different function which included living houses, boiler house, canteen, market, cultural house and school. In the active periods it was filled with 200-300 people.

Between 1977 and 1992 there was decline of the population caused by depleted peat sources and in 2011 there were only two inhabitants and subsequently it became a ghost village. In 2022 work began on the spot to create a military training center. The way of this redevelopment may be considered as a method of the possible reusing of the ghost settlement. The new project is organized by the army department.

Rabasaare village. Training military camp



Left up: Rabasaare Plan. Source: Tapa Museum. <https://www.tapamuseum.ee/lehtse/rabasaare-in-english/>; [accessed 14.04.2023]

Middle up: Rabasaare. Facade of the house. Source: Tapa Museum. <https://www.tapamuseum.ee/lehtse/rabasaare-in-english/>; [accessed 14.04.2023]

Right up: Rabasaare. Source: Tapa Museum. <https://www.tapamuseum.ee/ajalugu/endise-lehtse-valla-kulad/rabasaare/>; [accessed 14.04.2023]

Middle down: Rabasaare. Military training camp. Source: Delfi ee. <https://rus.delfi.ee/statja/91398127/video-posyolok-prizrak-v-estonii-broshennye-doma-i-opustevshiy-gorod>; [accessed 14.04.2023]

Middle down: Rabasaare. Military training camp. Source: Delfi ee. <https://rus.delfi.ee/statja/91398127/video-posyolok-prizrak-v-estonii-broshennye-doma-i-opustevshiy-gorod>; [accessed 14.04.2023]

Right down: Rabasaare. Military training camp. Source: Delfi ee. <https://rus.delfi.ee/statja/91398127/video-posyolok-prizrak-v-estonii-broshennye-doma-i-opustevshiy-gorod>; [accessed 14.04.2023]

Daugavpils. Mark Rothko Center



Location: Latvia, Daugavpils

Stage: Shrinking

Population: 90 270 (2012), 79 120 (2022)

The main point of interest: Art Center

Participants: Ministry of Culture, Municipality of Daugavpils, private firms

Permanent functions: training center, living camp

Temporary functions: -

The museum was opened in 2013 and it made the city of Daugavpils one of the most visited places of Latvia. Historically the site existed as an artillery arsenal and after 2000 was presented as a partially abandoned complex. The exposition of the museum includes temporary exhibitions of Latvian artists. In some years there are paintings of Mark Rothko but the cost of its insurance is high and for the center it is problematically to afford to pay it regularly. So nowadays it's open for visitors as a space with lectures, exhibitions, art movies and as a biographical museum Mark Rothko.

The financial aid of such a great project is supported by the Municipality of Daugavpils which is responsible for salaries and public utilities. For the cultural agenda the Latvian Ministry of culture. Additionally the big aim is coming from private sponsors Latvijas Valsts Meži, Valmiermuiža or other small firms who help to organize the process of exhibition creation. The project did not extend the population of the city but it attracted thousands of tourists who visit the place every year and leave money in the system of the region.

Daugavpils. Mark Rothko Center

01^e



Left up: Daugavpils, Latvia. Image source: <https://www.daugavpils.lv/en/city/news/culture-news/kulturvieta-2021> [accessed: 07.04.2023]

Left down: Daugavpils, Latvia. Image by: AndreasZerndl/Shutterstock
Photo by: Muhammet Fatih Orgas/ Anadolu Agency via Getty Images,
Source: <https://www.travelandleisure.com/travel-news/cyprus-varosha-ghost-town-reopen>

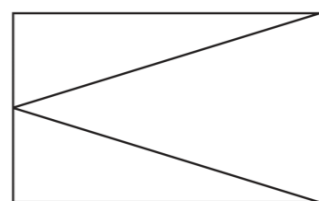
Middle up: Rothko Center, Interior. Photo by: Marina Sokolova, Source: <https://travelblog.lv/art-tsentr-marka-rotko-v-daugavpils-k-poseshheniyu-obyazatelen/>, [accessed: 07.04.2023]

Middle down: Rothko Center, Interior. Photo by: Echo Gone Wrong. Source: <https://echogone-wrong.com/daugavpils-mark-rothko-art-centre-launches-the-summer-season-of-joy/>, [accessed: 07.04.2023]

Right up: Center before the reconstruction. Photo from the archive of the Center for Culture and Information of the Daugavpils Fortress. Source: <https://chayka.lv/2023/03/04/art-tsentr-gotovitsya-otmechat-10-letnij-yubilej/> [accessed: 07.04.2023]

Right down: Image source: <https://www.rothkocenter.com/en/about-the-centre/> [accessed: 07.04.2023]

Kaunas 2022
Europos kultūros sostinė



Kaunas. Cultural Capital of EU 2022

01^f



Location: Lithuania, Kaunas

Stage: Stable

Population: 316 000 (2011), 319 790 (2023)

The main point of interest: Temporary title of the Cultural Capital of EU

Participants: Ministry of Culture, EU, city government

Permanent functions: town with all its sights

Temporary functions: events, exhibitions, performances

The Kaunas is located in the south-central part of Lithuania. The city's ambition to become a new growing and attractive spot on the map of the country made this cultural title especially significant. The year 2022 turned the town into a free space for contemporary art. Performances, exhibitions, lectures and special events saturated Kaunas with the new energies of visitors and artists. The idea to solve this small Lithuanian city in the new

art space with 600 temporary projects attracted more than 300000 visitors in 2022. Such a huge wave of people helped to warm up the interest among local businesses and investors for the new projects. With this example we can realize the scale of the influence of the decision on the European level and how it is important to share this title of "The European capital of Culture" "with smaller towns in all parts of Europe.

Left page up: Official logo of the advert. By Acid Studio, Fedderico Legio. Source: <https://www.behance.net/gallery/70869979/Kaunas-2022-European-Capital-of-Culture>, [accessed 18.08.2023]

Left page down: Image by courtesy of Kaunas 2022, see captions. By Andrius Aleksandravičius, Martynas Plepys. Source: <https://www.floornature.com/blog/kaunas-lithuania-one-three-european-capitals-culture-2022-16805/> [accessed 17.04.2023]



Archstoyanie. Festival

019

Location: Village Nikolo-Lenivets, Russia

Stage: Stable

Population: 1208 (2023)

The main point of interest: Architectural and music festivals

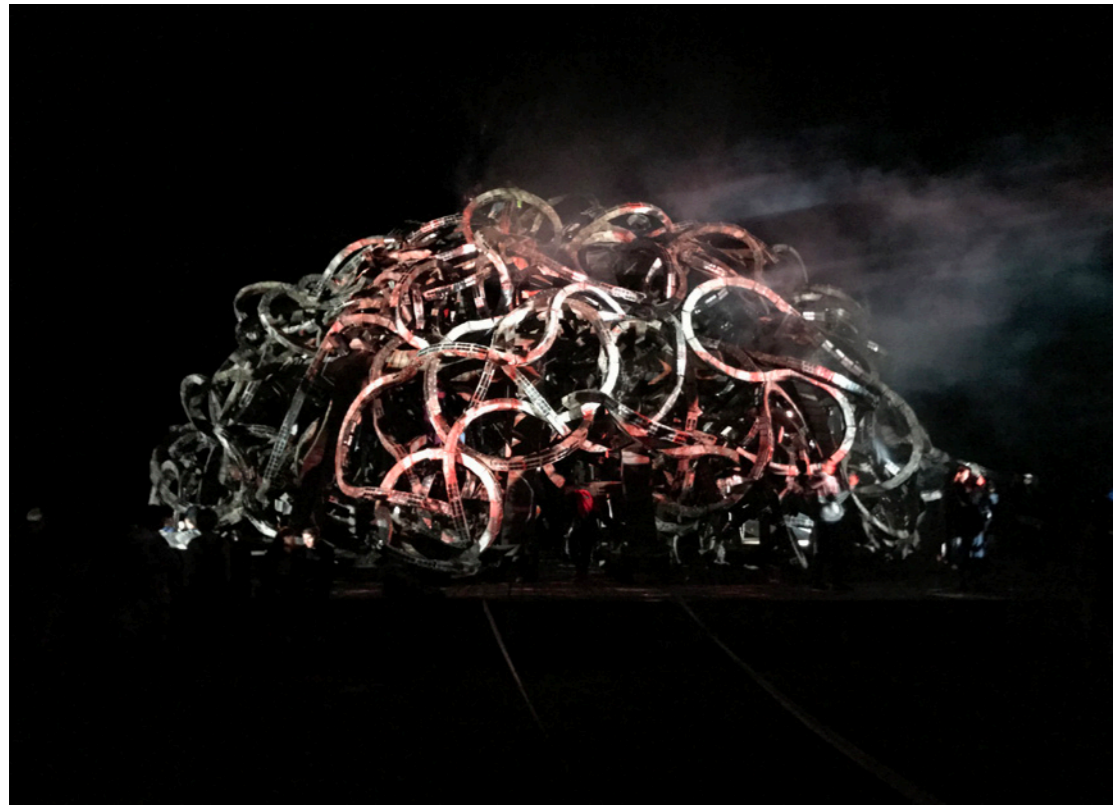
Participants: Private investor, festival organizers

Permanent functions: art installations, hotel, cafe, open air museum

Temporary functions: events and festivals

The festival takes place at the Village Nikola-Lenivets which is located 200 kilometers southwest of Moscow. The Festival Archstoyanie (translate.rus „architectural standing“) was founded in 2006 by artist Nikolay Polisski. The main goal of the festival is educational entertainment. The area was developed for the landscape architecture and art objects which form the new attractive identity of the region. The area is represented as a space where artists and architects every year build new installations according to a cer-

tain topic. Additionally to the main festival it has one summer dancing event and one winter carnival meeting. During the year people can rent a guest house for the weekend there. There are thousands of visitors who join the event every year. Many locals participate at the festival as entrepreneurs and employees. During the event they cook some food or sell local products to visitors. Archsoyanie is organized by private organizations and entrepreneurs.



Left up: Nikolo-Lenivets, Light and music performance on the exist installation which is called "Brain". Image by: Nikita Akindinov, 2017

Middle up: Nikolo-Lenivets, Installation Villa PO2 by Alexander Brodsky. Image by: archstoyanie. Source: <https://www.archdaily.com/922279/5-russian-projects-that-resignify-materials>, [accessed 01.04.2023]

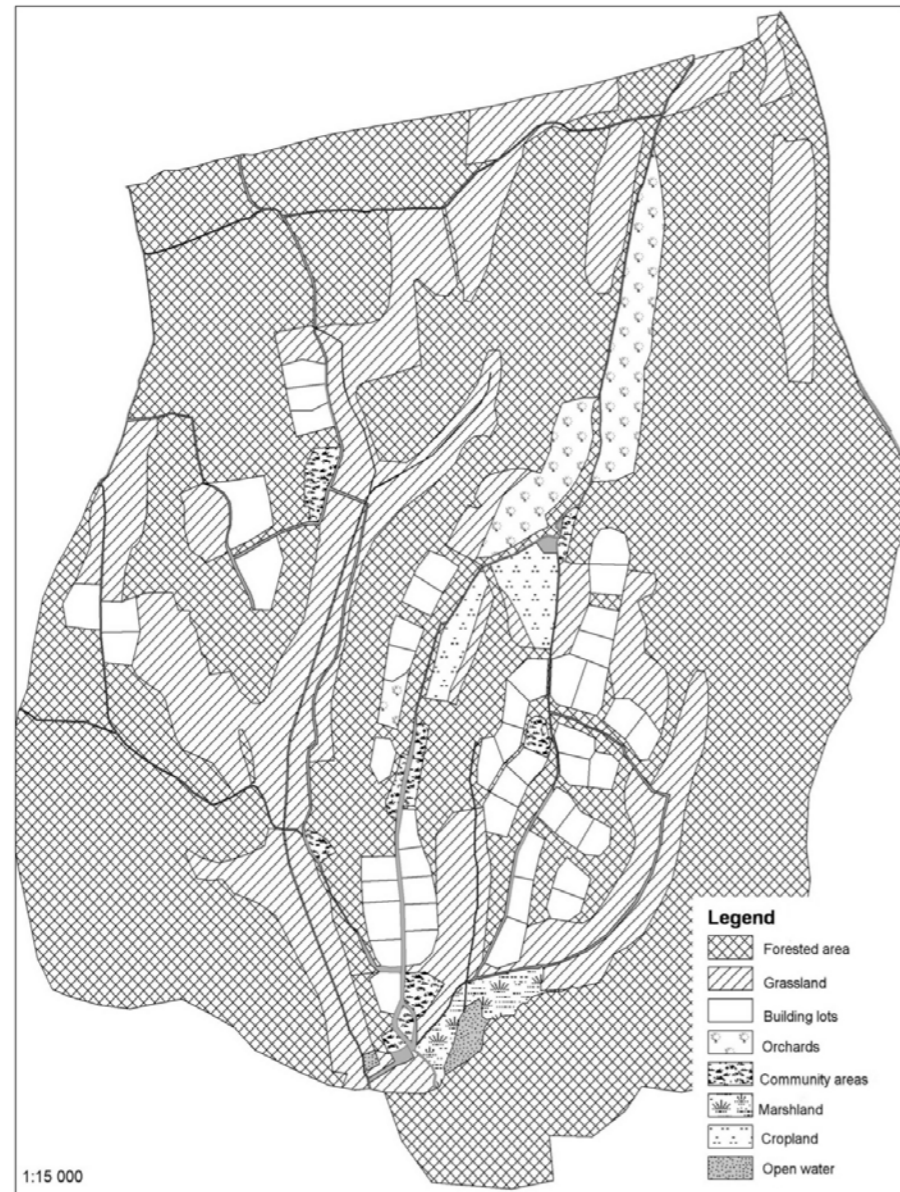
Right up: Nikolo-Lenivets, Pavillion "Rotonda" by Alexander Brodsky. Image by: archstoyanie. Source: <https://www.archdaily.com/922279/5-russian-projects-that-resignify-materials>, [accessed 01.04.2023]

Left down: Nikolo-Lenivets, Installation. Image by: Nikita Akindinov, 2017

Left down: Nikolo-Lenivets, Installation. Image by: Nikita Akindinov, 2017

Right down: Left down: Nikolo-Lenivets, Pavillion "Lighthouse". Image by: Nikita Akindinov, 2017

Gyűrűfű. Eco-village



Location: Gyűrűfű. Hungary
Stage: ExGhost. Growing
Population: 26 (2003), 33 (2012)
The main point of interest: Eco-village
Participants: Private investor
Permanent functions: farm, hotel, cafe, shop
Temporary functions: -

The Hungarian village Gyűrűfű was abandoned for a several years after its inhabitants left it. A new solution was made by the local developer who proposed to make their eco-village. This settlement now grows seasonal fruits and vegetables. Also it has a farm with livestock. This business idea attracted new workers who take care of the garden and some tourists who do stop at that location. The project may be

considered as a perfect example to the overall spatial development aspects of human societies as formulated by geographical sciences. Sustainable development became a major concept which was fully observed in the process of creating the village. The sociological connectives of its spatial planning gave the place tools to unite different groups of people.

Santo Stefano. Ghost town



Location: Italy, Santo Stefano di Sessanio

Stage: Stable

Population: 115 (2020)

The main point of interest: Benefits for migrants

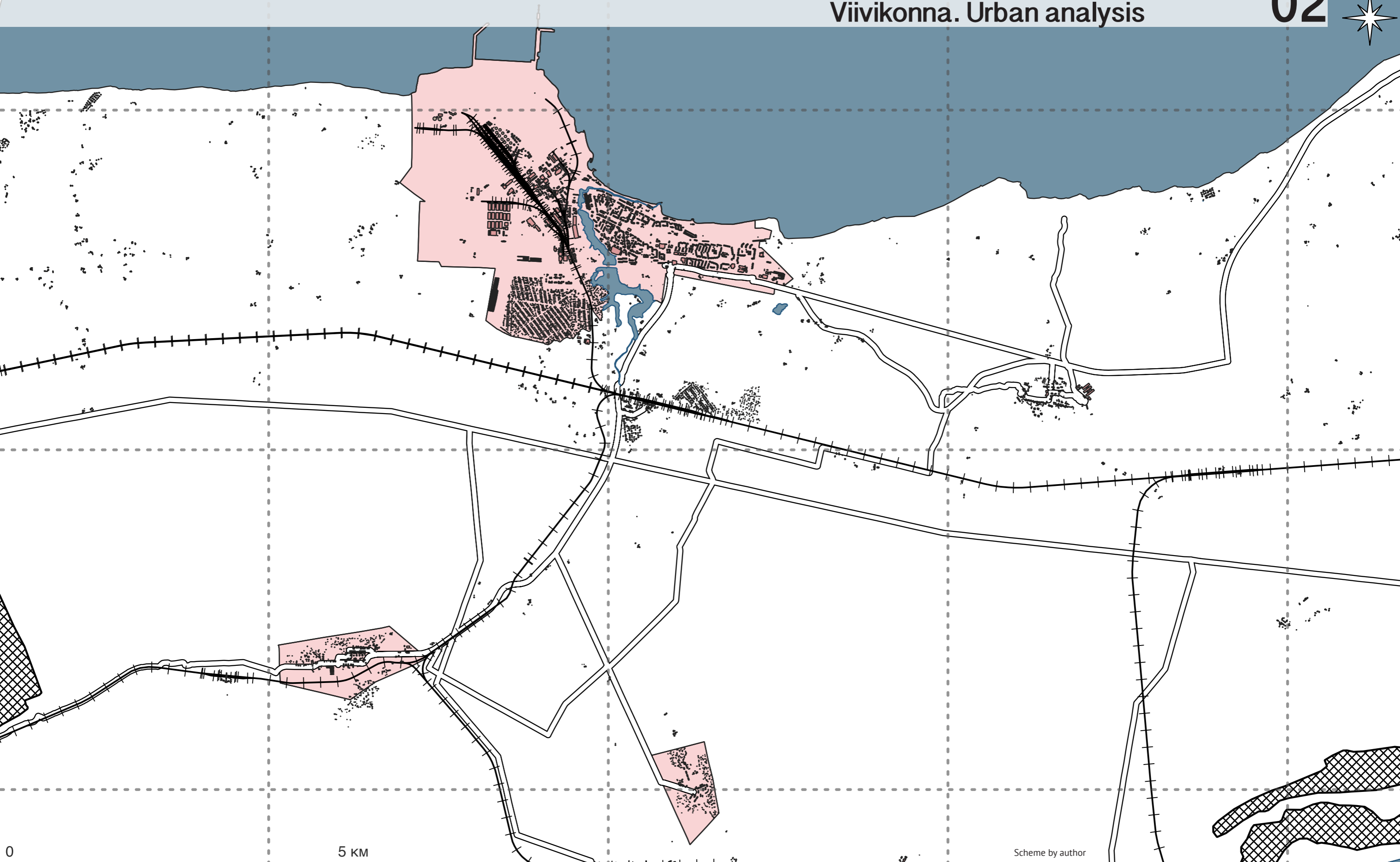
Participants: Local authorities

Permanent functions: small town and its functions

Temporary solutions: three years pay, grant, house for a nominant rent

The commune is located in the south of Italy and in some sources it is considered as a ghost settlement. It had an aging population with no youngsters. Local government decided to react to this issue with a special solution with extra payments for people who decided to move in this town. The project

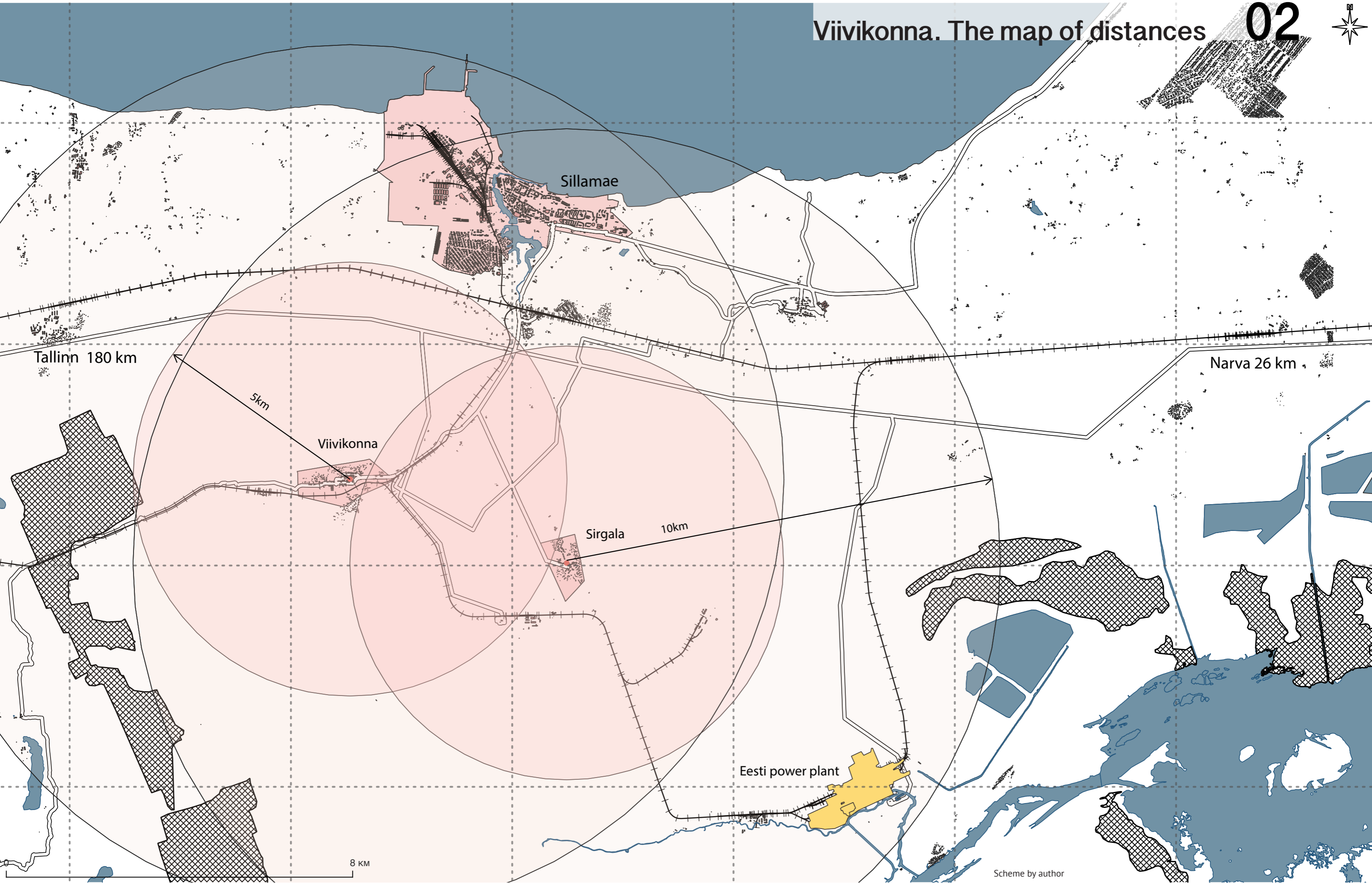
includes a grant with an every month payment for three years, one-time grant of 20000 euros for a start of the business and a low rent house. All these steps in 2020 warmed up interest among young entrepreneurs who decided to start to live there.



5 km

Scheme by author

Viivikonna. The map of distances 02



Tallinn 180 km

Narva 26 km

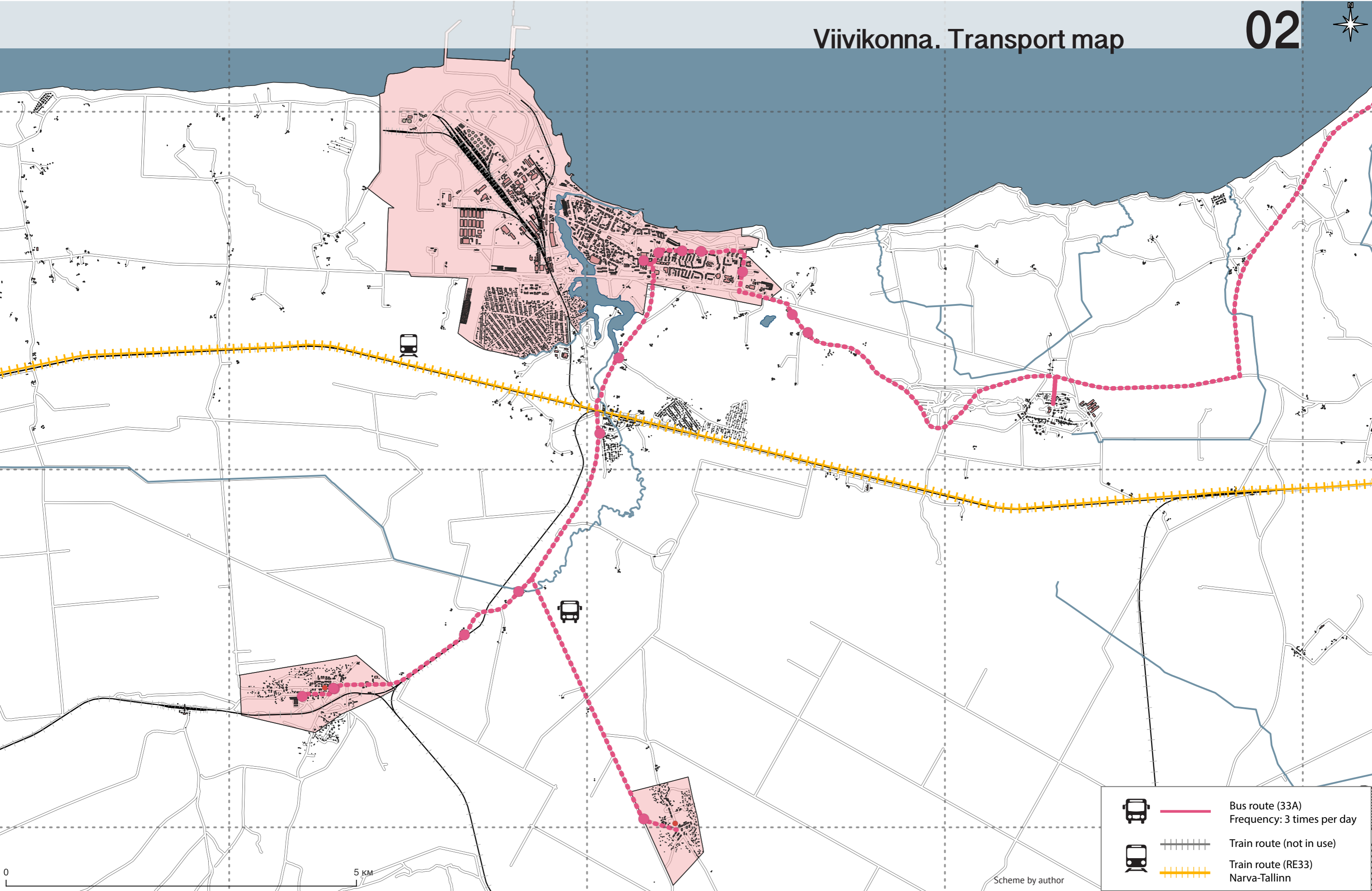
Viivikonna

Sirgala

Eesti power plant

8 km







Scheme by author



0

5 KM

Scheme by author

		Bus route (33A) Frequency: 3 times per day
		Train route (not in use)
		Train route (RE33) Narva-Tallinn

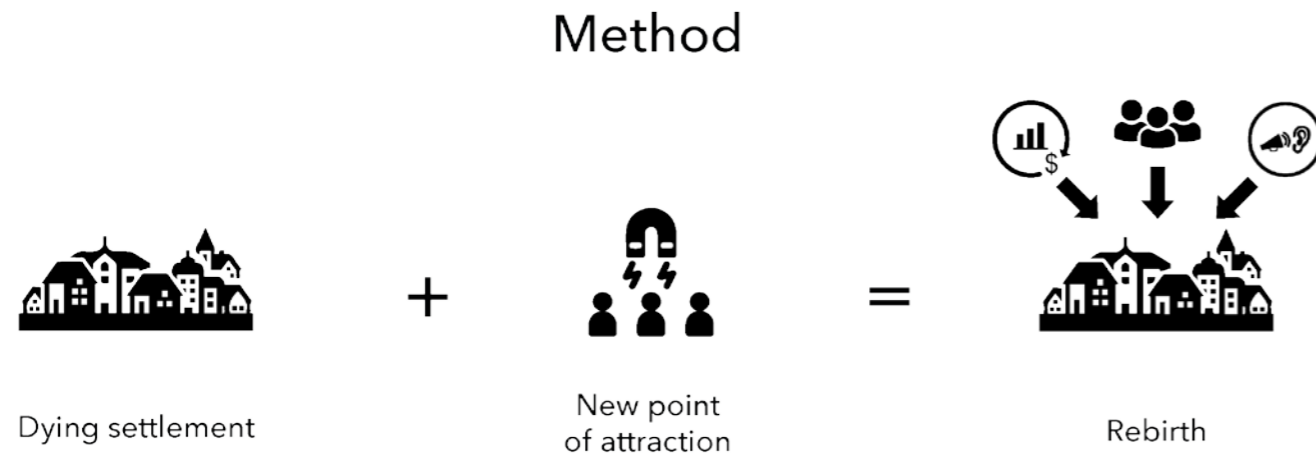
Viivikonna. Bicycle accesibility



Considering the location of the Viivikonna it is necessary to emphasize its distance to the Narva city which is located on the border with Russian Ivangorod. Ida-Viru county in 70 percent has a russian speaking population. The distance from Viivikonna to Sillamäe, Narva, Kohtla-Jarve may be easily crossed by bicycle. For instance one of the main existing routes goes

along the seaside and it connects Narva with other cities. Another cycling path is going from Sillamae through Johvi to the south part of the Estonia. On the map we can see the closeness between all these parts. The possible reconstruction of Viivikonna may follow this network as an additional stop on the map.

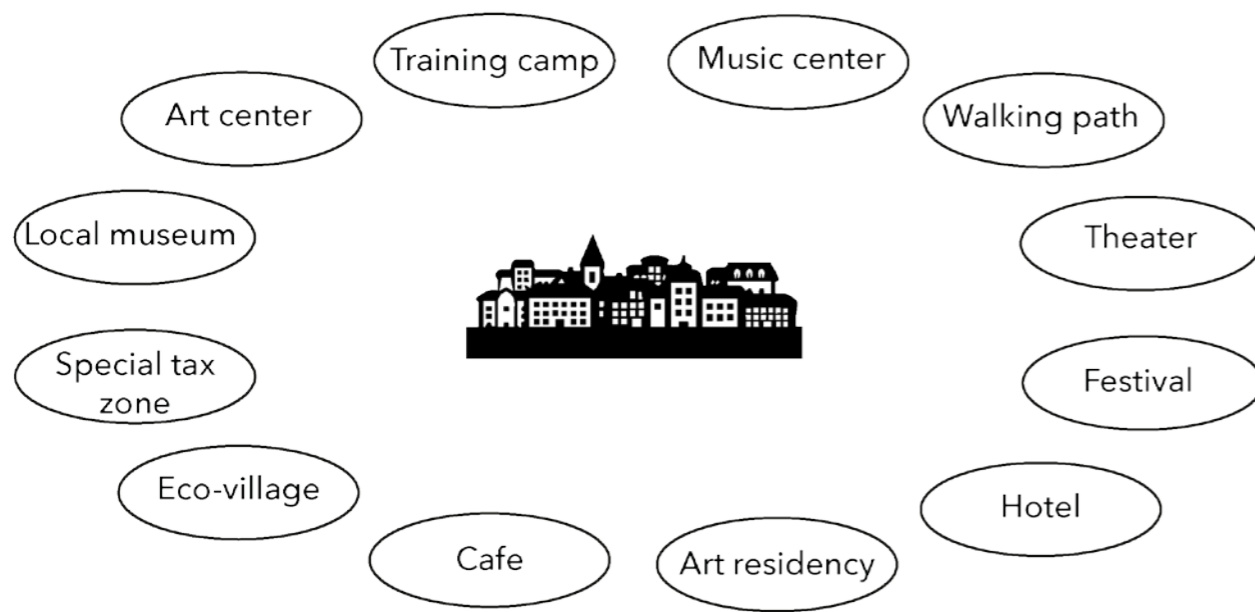
Strategies of dealing with dying settlements



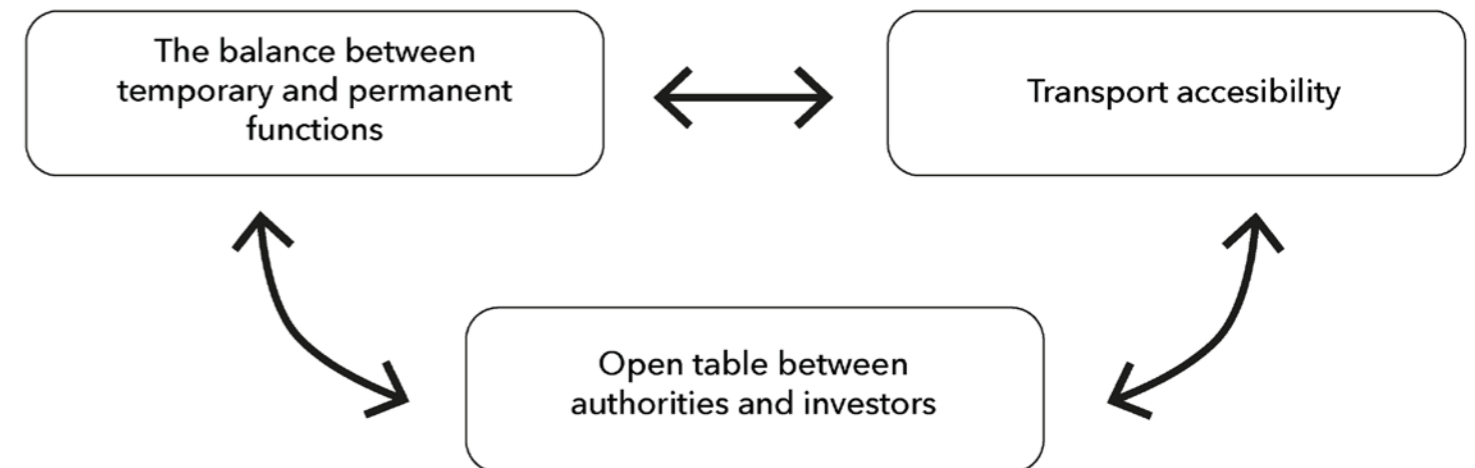
The future of the ghost villages and cities can take different directions in its development. Some of the examples did not find any options to continue its existence. However today we can also describe some positive attempts to get a rebirth by using a new attractive spot (p.44). The whole idea of the new strategy considers participation from all sides - authorities, investors and inhabitants but only in case the settlement is not completely ghost (p.47). Mediators in this dialogue should be regulated by professional urbanists, architects and designers who can give some understanding of certain solutions. Authorities may be considered as a state department or local municipality and the private investors may be represented by businesses, small entrepreneurs, foundations and organizations. The previous chapter of the research was dedicated to the certain examples of the cultural spaces, museum, events which helped

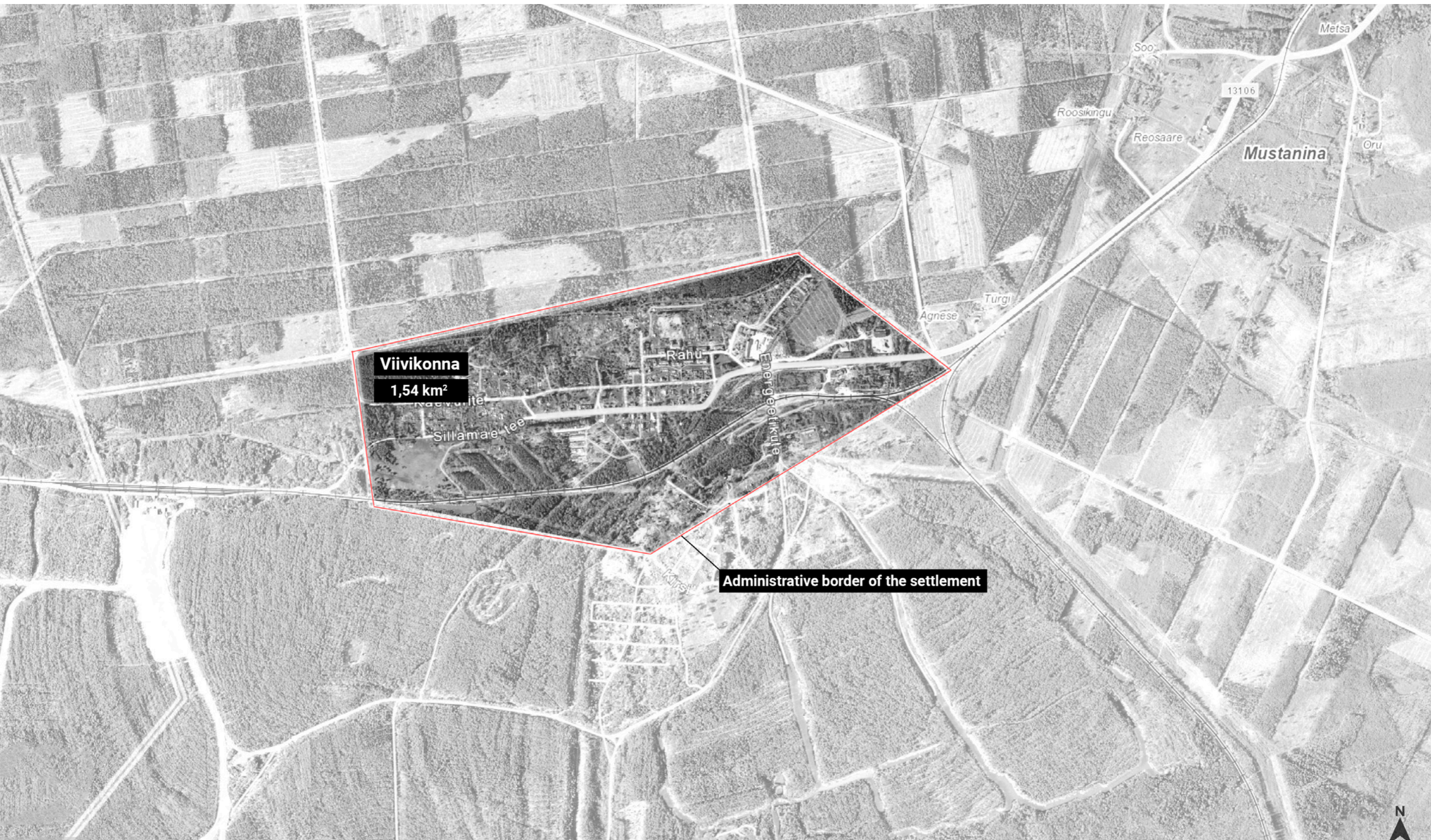
to attract more visitors and exist ghost settlements which were reanimated by certain decisions. Based on this part here can be considered the method which could be applied in other dying or ghost towns. It uses the way of building the new spot or space. This new supplement should be filled with certain healing tools such as an art center, special event, local museum, hotel, cafe etc (p.46). At the same time it should always consider the balance between temporary and permanent functions. With this principle it is possible to keep the interest of the site among visitors during the whole year. Transport accessibility should be one of the main strategies in the redevelopment process. Free accession equals a bigger wave of people. At the same time all processes should be the result of the open table between authorities and investors.

Healing Tools



The Main Strategies





The main areas of abandonment



Ruins

Core of the village

Field

Ruins

Sort facility/Ruins

Ruins

Garage

Warehouse

Mining field/Recovering



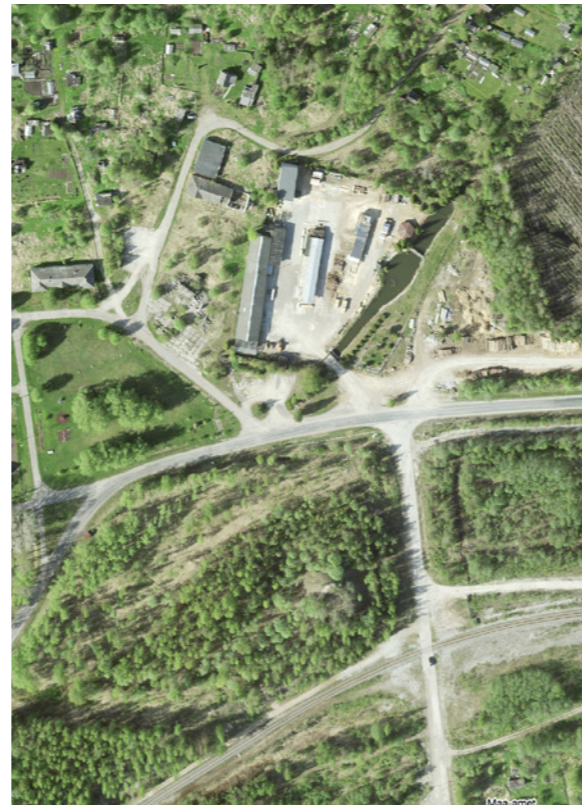


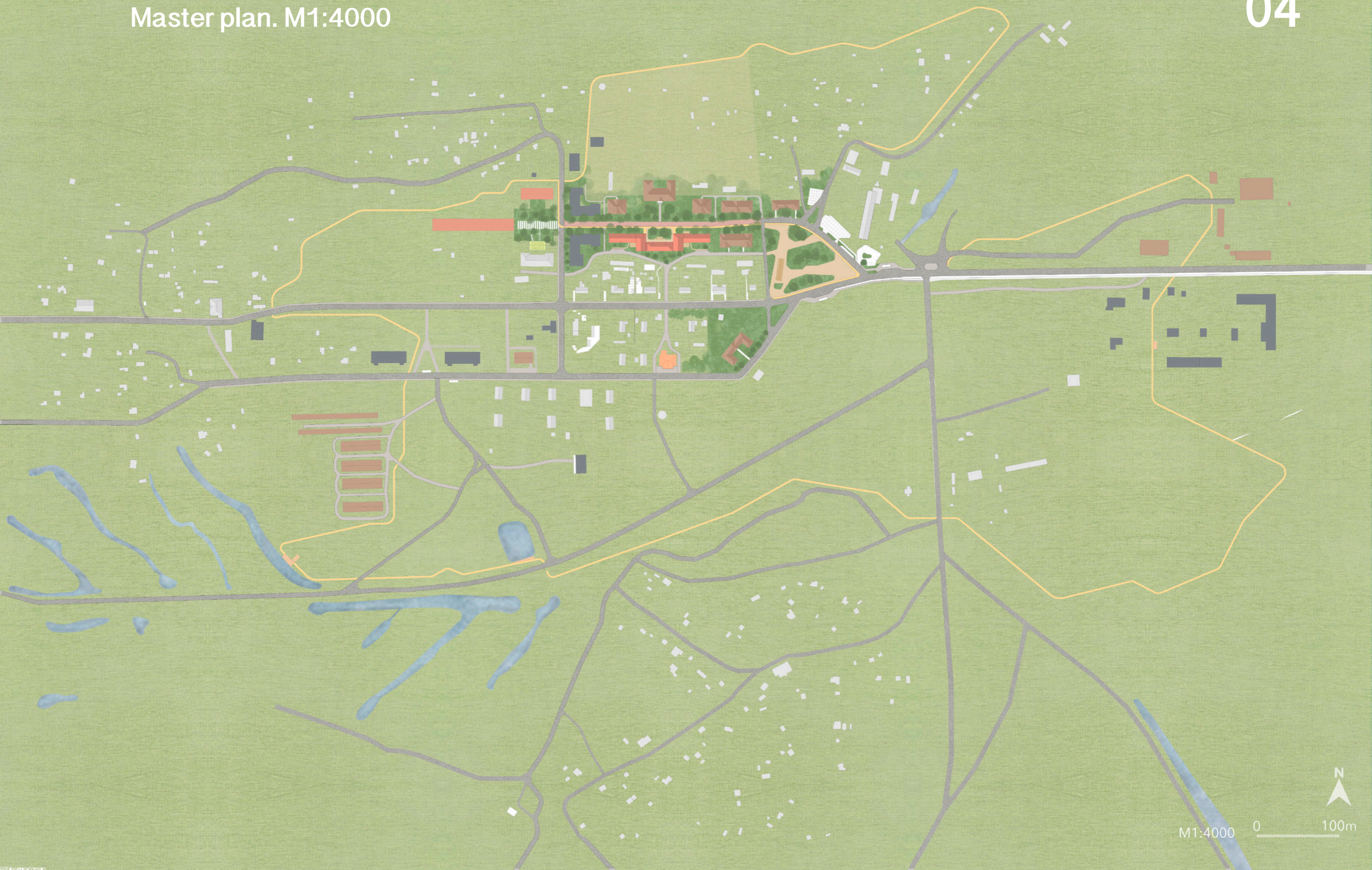
Historical map of the site. 1884

Historical map of Estonia. Source: <https://xgis.maaamet.ee/xgis2/page/app/ajalooline>; [accessed 02.05.2023]

Archstoyanie. Festival

019





Master plan. Functions M1:4000



Phase 0	Art Residence	Public greenery
Phase 1	Ruins	Fields
Phase 2	Hotel	Forest
Phase 3	Abandonment	Museum/pavillion
Phase 4	Public greenhouses	Reconstructed pavillion
Phase 5	Parking type 1	Walking path
M 1:4000	Parking type 2	

Phase 0.

Master plan. M1:2000

04

One of the most important phases of the Vhivikonna development starts with a place advertising company. It includes work with social networks, media and influencers. At the same time it may be supported by temporary open air festivals like the Arhstoyanie in Russia. This 0 Phase considering the warm up of the interest among visitors. Buildings which should be renovated in the next steps are open to the public. People can walk there, have a bar or observe installations prepared by artists. Financial aim for the festival purposes should be covered by private organizations and sponsors. People can walk aroundd the town, speak with locals and observe the ghost settlement.

This phase can be completed in one summer



Phase 1.
Master plan. M1:4000

The first Phase for the grand process of development includes work with infrastructure. Bus stops, parking places and roads around them should be reconstructed. Additionally in this period all dangerous ruins should be analysed by specialists and in some cases prepared for a possibility to enter there for visitors. At the same area the place starts to work with three old buildings which should be developed into an art residence.

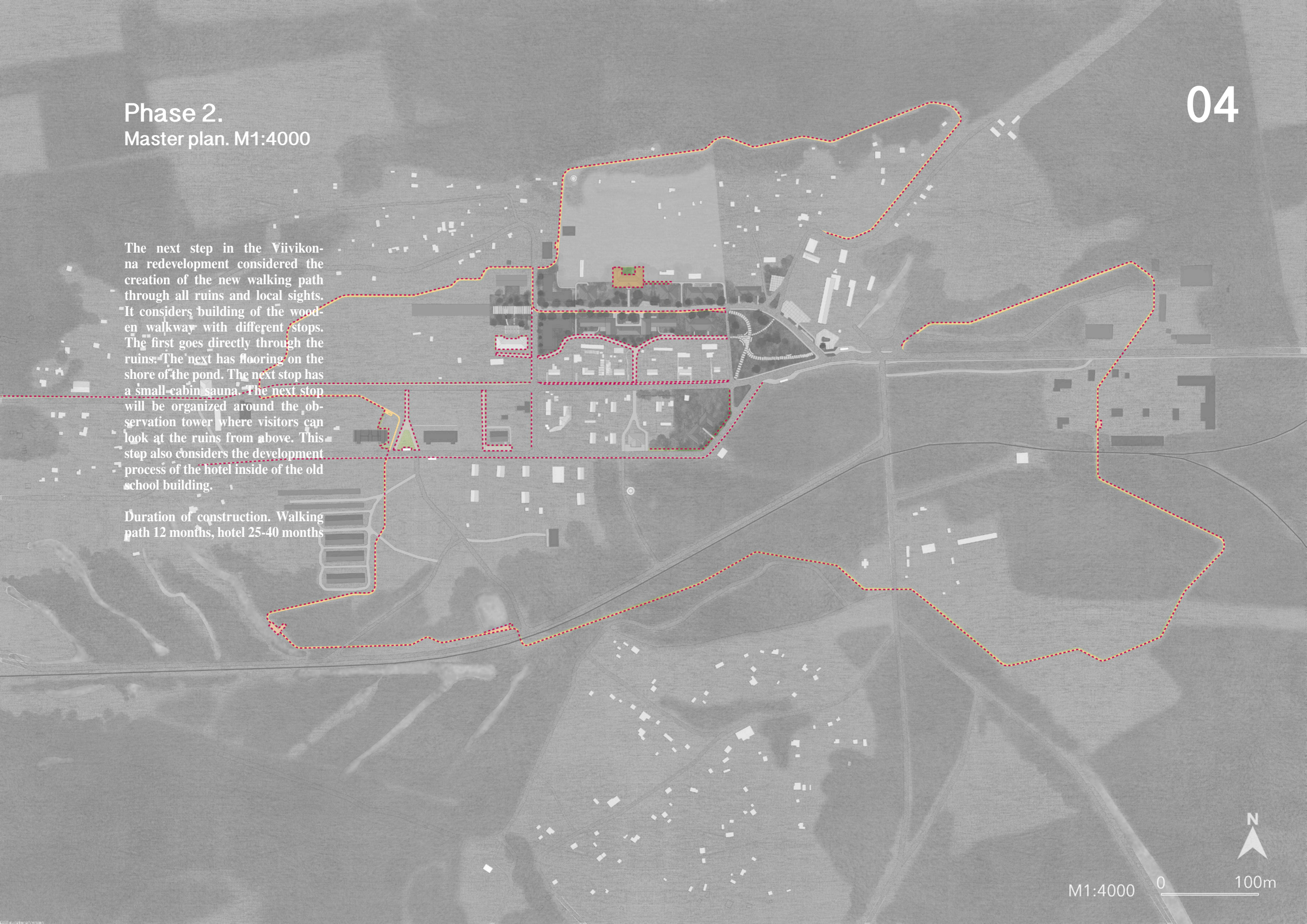
The whole process may be carried out in 20-30 months depending on the financial support. The residency may be considered as a summer base for the artists from the Estonian Academy of Arts.



Phase 2.
Master plan. M1:4000

The next step in the Viivikonna redevelopment considered the creation of the new walking path through all ruins and local sights. It considers building of the wooden walkway with different stops. The first goes directly through the ruins. The next has flooring on the shore of the pond. The next stop has a small cabin sauna. The next stop will be organized around the observation tower where visitors can look at the ruins from above. This step also considers the development process of the hotel inside of the old school building.

Duration of construction. Walking path 12 months, hotel 25-40 months



Phase 3. Master plan. M1:2000

The process of the organisation of the new public space on the main street takes place here together with a reconstruction of the historical building where people still live. Small abandoned building starts to be a summer pavilion for artist installations.

Duration of the constructions 12-16 months



Phase 4.
Master plan. M1:4000

This phase includes the important process of the organization of the new squares. The east square becomes a new point of meeting for people who start their walking way. Additionally it will be open for competition among artists and architects who can build their ghostly monument. The west square has open public greenhouses and the new pavilion which should be designed during another competition.

Duration of the constructions 12-20 months



Phase 5.
Master plan. M1:2000

The last phase of the redevelopment process has a competition for the new museum building. The exact function and concept will be determined after discussions. However some scenarios may consider the full preservation of the area without any big projects.



Duration of the construction 40-50 months.



The new strategy of the village erases the border between nature and art. Sustainable way of living and doing art is the new agenda of the site. Side by side artists, ecologists, farmers and activists will react to the past of the mining village Viivikonna and they will try to create the new space to which the problems of nature and its fragility are especially important. Open discussions, exhibitions, small eco-farms, eco-festivals will take place here.



Axonometry. Existing and new trees



Street frame. Section M1:250



Art residency and the main public space

04

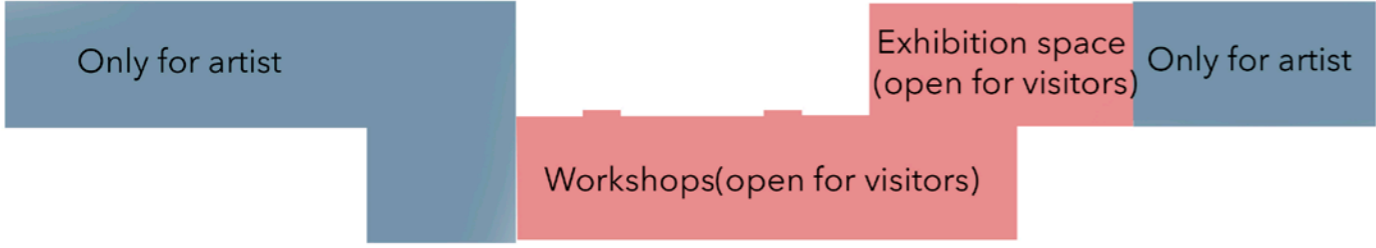


Walk through the ruins

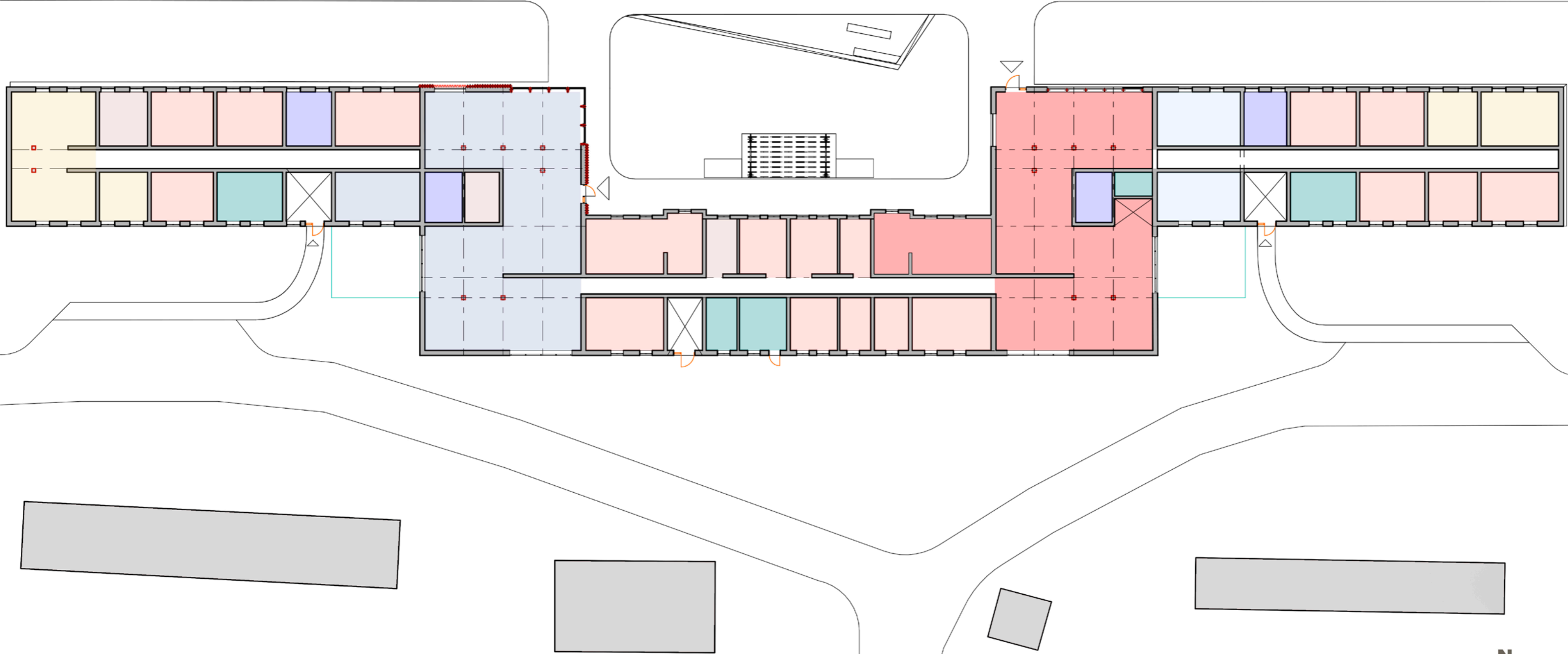


Sauna on the lake





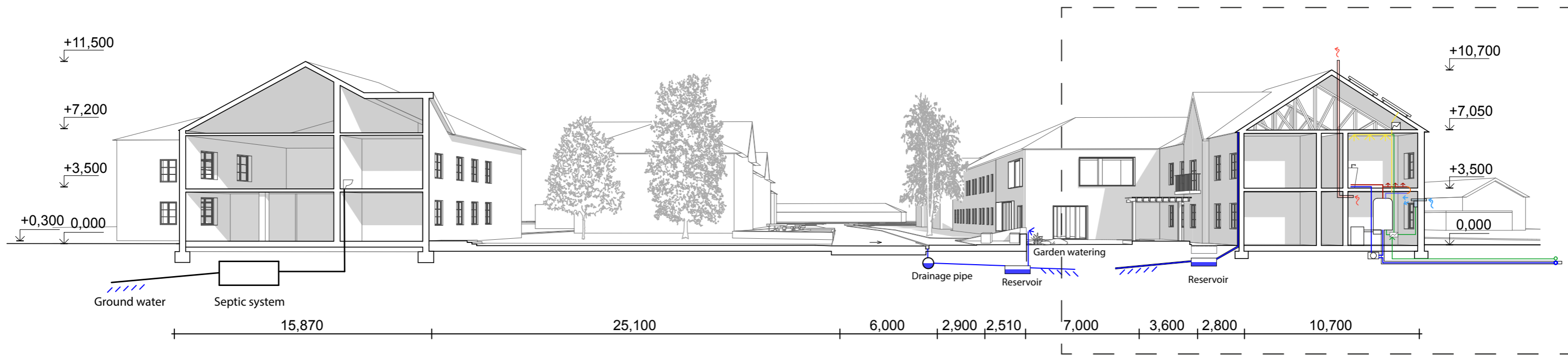
Plan of the Art Residence. M1:300



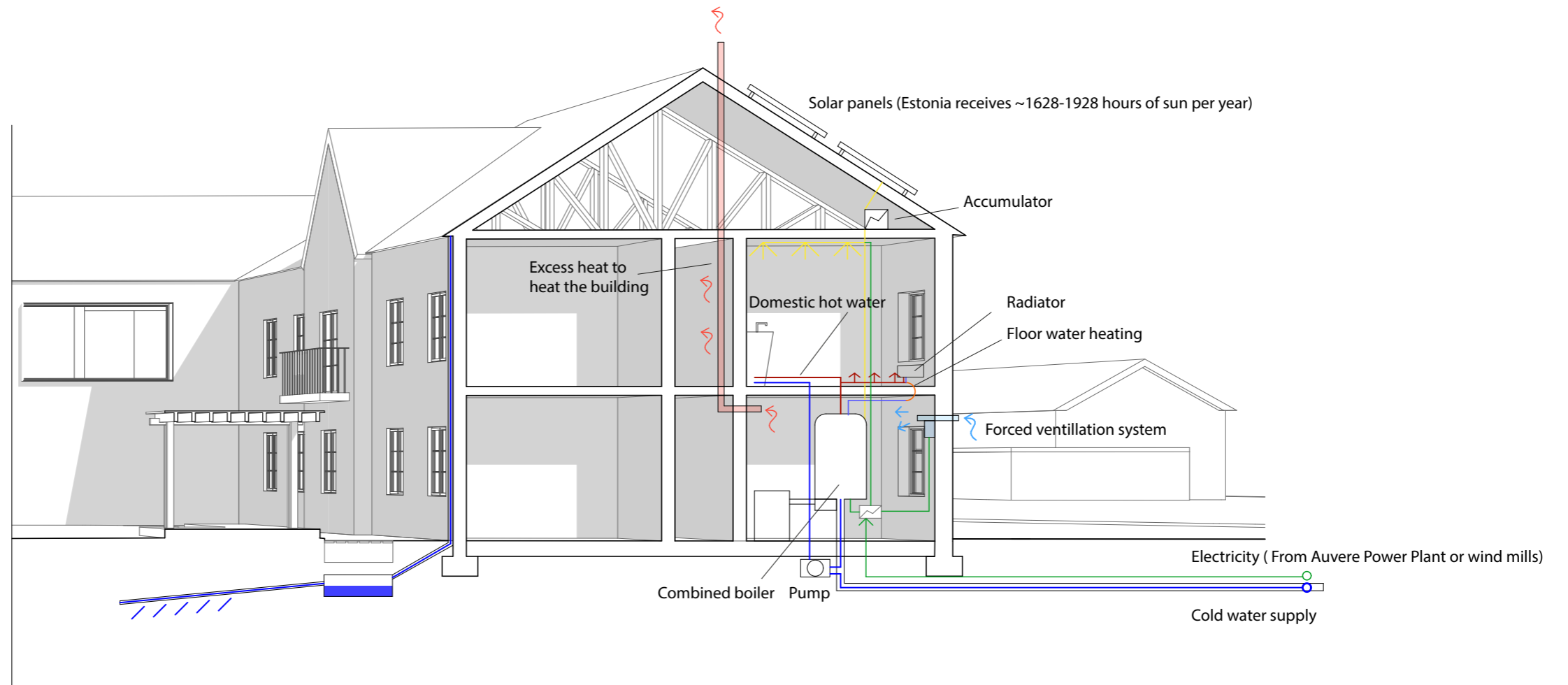
Legend			
Exhibition space/ open for public	Workshops	Toilets	Living room
Technical room	Kitchen/Dining room	Storeroom	Cafe



Technical supplement of the buildings



M 1:250



M 1:125

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