Andres Sevtsuk

The Unfinished City

Envisioning 21st Century Urban Ideals in Tallinn's Post-Soviet Lasnamäe Housing District

Harvard University
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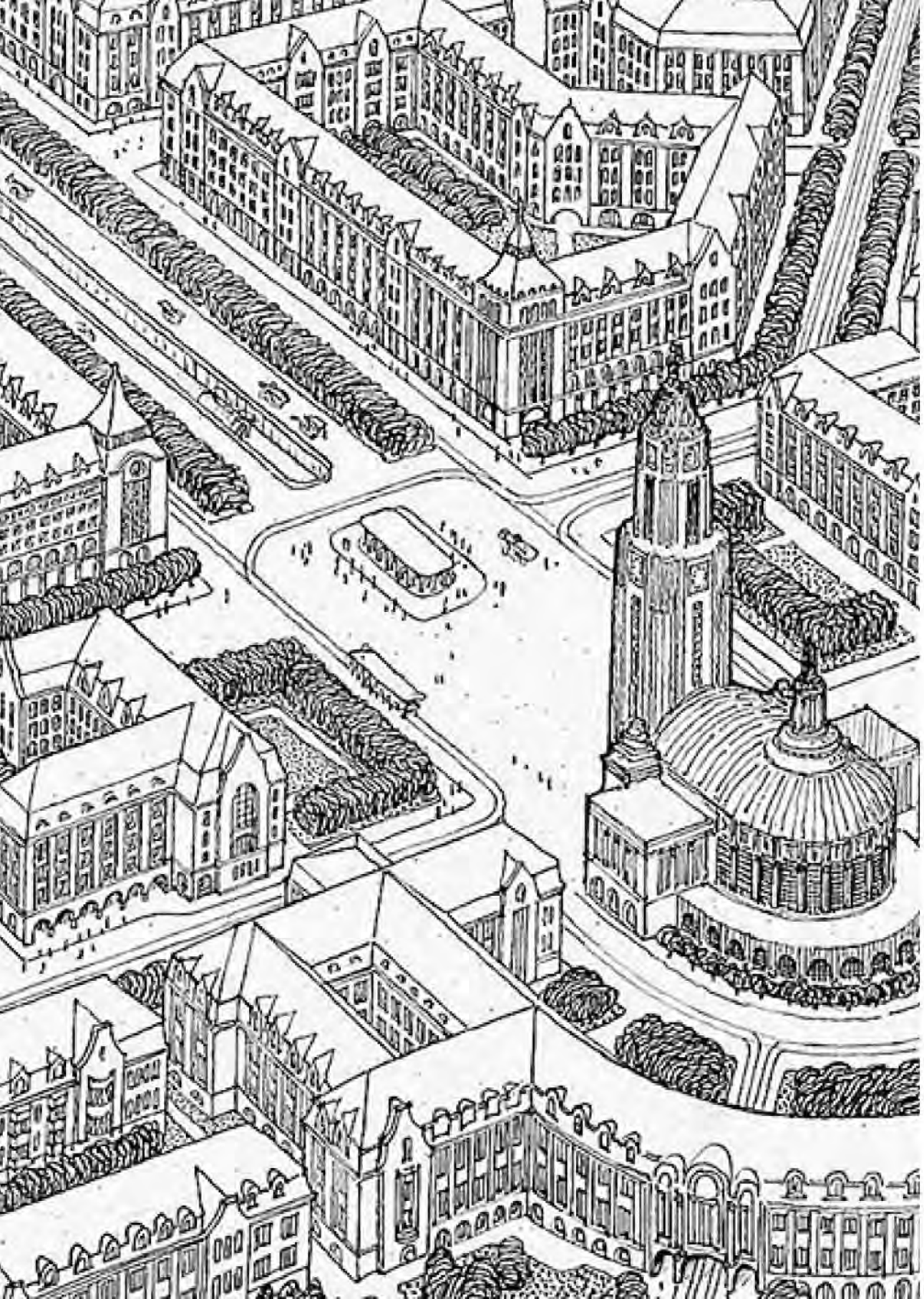

The Unfinished City

Eliel Saarinen's 1913 Masterplan for Grand Tallinn proposed a 4 mile-long sunken channel to connect the city with its eastern expansion district – Lasnamäe– via mass transit and a number of symbolic civic squares. In the aftermath of the Second World War, the occupying Soviet government picked up the unbuilt idea but shed Saarinen's perimeter blocks and bourgeois urbanism. The Soviet regime instead built out Lasnamäe as a set of eleven standardized Micro-regions, each comprising pre-fabricated 5, 9 and 16 story housing blocks along with a rationally allocated daycare, school, and commercial center. The channel, cutting through the entire length of the district, was blasted into solid limestone bedrock at such a great expense that no resources were left for the mass transit system itself. After the country regained independence in 1991, Lasnamäe's housing and infrastructure dilapidated and many of the families that could afford to, fled the housing. However, others joined and Lasnamäe became the largest housing district in the city with over 120,000 residents.

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The studio benefitted from a number of interesting presentations and discussions in Tallinn, which were generously offered by Endrik Mänd, Tallinn City Architect; Maria Jufereva, Head of Lasnamäe District Administration, Jaanus Juss, owner of the Telliskivi Creative City; Maria Derlõš, community organizer in Lasnamäe and member of the City Lab; Jaanus Riibe, Lasnamäe District Administration; as well as Matis Joab, Tanel Olek and Gert Jostov at Ülemiste Technopolis.

We are also grateful to Jordan Pilar and Alla Armstrong at the Harvard GSD for arranging all the student travel and project expenses. Finally, the Chair of the Department of Urban Planning, Diane Davis, was very supportive of the studio from the start and the faculty from the Harvard Graduate School of Design, who shared their thoughts as part of a number of studio reviews, provided a tremendously creative and supportive environment for student work throughout the semester.

INTRODUCTION

RESEARCH AND PROPOSALS

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Lasnamäe District Administration

Maria Juferova
Head of Lasnamäe District Administration

When students of the Harvard University Graduate School of Design paid an official visit to Lasnamäe District Administration, I could not have imagined their goal would be as ambitious as compiling a book about the development of Lasnamäe district. I would like to thank the supervisor and participants of this project for the publicity they are giving the largest and the most versatile district of Tallinn. This is a great honor for us.

I believe that Lasnamäe district can be of great interest to architects, urbanists and construction designers because it provides infinite opportunities for enhancement and development as well as increasing the comfort level and usability of the urban environment for its residents. I would also like to mention that some of the suggested projects have already been implemented, for instance, the design of the future Pae promenade devised by Estonian specialists, is rather similar to one concept suggested by the students of the Harvard University Graduate School of Design in this book.

So, it can be said that American and Estonian specialists think alike!

I hope the authors of this book will enjoy success in their work and that their ideas will be reflected in the development of our district.

Presentation by Tallinn City Government

Studio Trip Visiting Lasnamäe

Presentation by Maria Jufereva at Lasnamäe District Administration

Studio Trip Visiting Lasnamäe

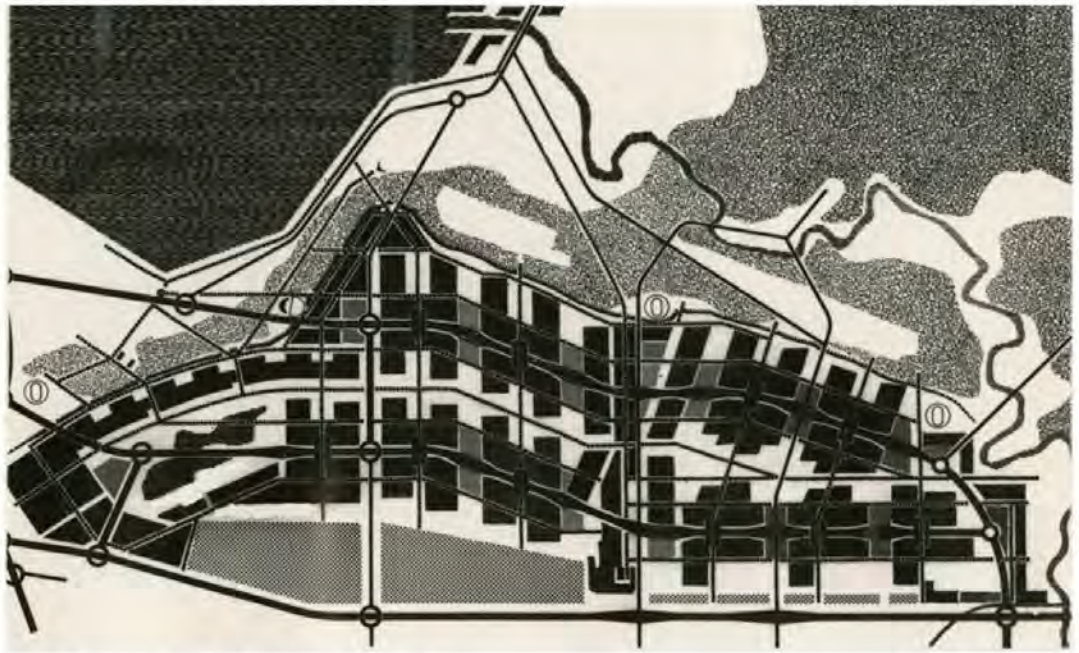
Introduction

Andres Sevtsuk
Assistant Professor of Urban Planning
Harvard Graduate School of Design

The "Unfinished City" studio at the Harvard Graduate School of Design (GSD) was implemented in fall 2017 in collaboration with the Estonian Academy of Arts (EKA) and Kapitel Real Estate. The studio involved eight graduate students from Urban Planning, two from the Urban Design and two from the Architecture degree program.

The studio's focus lay on Tallinn's largest residential district – Lasnamäe – built in the 1970s and 80s as the last of three Soviet prefabricated housing districts in the city. Even though Lasnamäe is known predominantly as a housing district comprising of over 120 000 inhabitants, our thematic emphasis lay not on housing per se, but on the regeneration of commercial, cultural and recreational sub-centers that the district direly lacks. Soviet planners, who developed Lasnamäe, saw housing for industrial workers as a priority that overshadowed the development of non-housing neighborhood amenities. Albeit part of the winning design scheme in 1971, most non-residential amenities, sub-centers as well as a district-wide center, never got built. Outdoor public areas – parks and civic spaces – were likewise deferred under Soviet development mechanisms.

The studio brief was divided into three parts. During the first month, student teams explored existing sub-centers in Tallinn, outside of Lasnamäe: the Rotermanni Center, Ülemiste Center, the Central Market, Nõmme Center, the Telliskivi Creative City together with the new Baltic Station market, and a small micro-rayon center in Mustamäe. Studying the spatial, economic and social functioning of these centers, students were asked to identify shortcomings and opportunities considering Tallinn's current and future trends. The second phase, which started with a week-long site visit to Tallinn, focused on Lasnamäe as a whole, mapping, understanding and investigating the entire system of micro-rayon centers that were intended or partially built out. During the visit, Harvard students experienced Lasnamäe on bicycles, on foot, by bus and public transit and held a series of meetings with political representatives from the city and the district, with business owners



Planning Lassnamäe 1973, Eesti Arhitektuurimuuseum

and NGOs. Students also visited Lasnamäe on their own, finding further contacts and residents to talk to with the help of EKA partners. Together with EKA Faculty of Architecture and Urban Design, we held a joint day-long workshop, where mixed teams of EKA and Harvard students came up with analyses and preliminary proposals for Lasnamäe's centers. The second phase culminated weeks later back in Boston, with district-wide proposals that identified sites and corridors where students saw the greatest potential for new civic spaces and amenity clusters, served by public transit. These proposals set up the stage for the remainder of the studio. The final and third phase asked students to develop a more detailed and granular proposal for one or several subcenters identified in the previous phase.

Six overarching issues that emerged in the course of the work are worth noting. First, students exhibited strong support for a future tram system that would better connect Lasnamäe with the city center. But as the projects that follow demonstrate, there were diverse opinions as to where the tram routes should be placed – some teams envisioned a tram in the Laagna Channel, completing an idea that Eliel Saarinen had proposed as part of his Grand Tallinn Masterplan in 1913. This option is explored in Donald and Armando's, Taka and Sabrina's, as well as Alifa and Chanel's work. Others speculated that trams are fundamentally pedestrian-friendly and should belong on the upper, pedestrian level of Lasnamäe's circulation system. Nerali and Emma's project places the tram route on the northern upper edge of the Channel, eliminating the need for passengers to descend 8-meters down to a traffic-heavy artery. Alice and Yang, on the other, proposed a totally different vision, where the tram does not follow the Laagna Channel at all, but instead snakes through the deep interiors of neighborhoods and residential courtyards, providing better access to existing inhabitants and opening the hidden sides of Lasnamäe up to visitors.

Second, several teams saw great potential in implementing new "main streets" that would connect former micro-rayon centers to each other along more substantial commercial and civic spines. Just like other districts of Tallinn have their main streets, Lasnamäe too deserves its linear community centers, complete with shops, services, cultural amenities and high-quality public space. These linear typologies stand in contrast to the original nodal micro-rayon centers, connecting the latter as beads on a necklace, so as to enable access for

Planning Lassnamäe 1973, Eesti Arhitektuurimuuseum

Lasnamäe Microrayon, 1986

Master Plan of Lasnamäe from 1970s

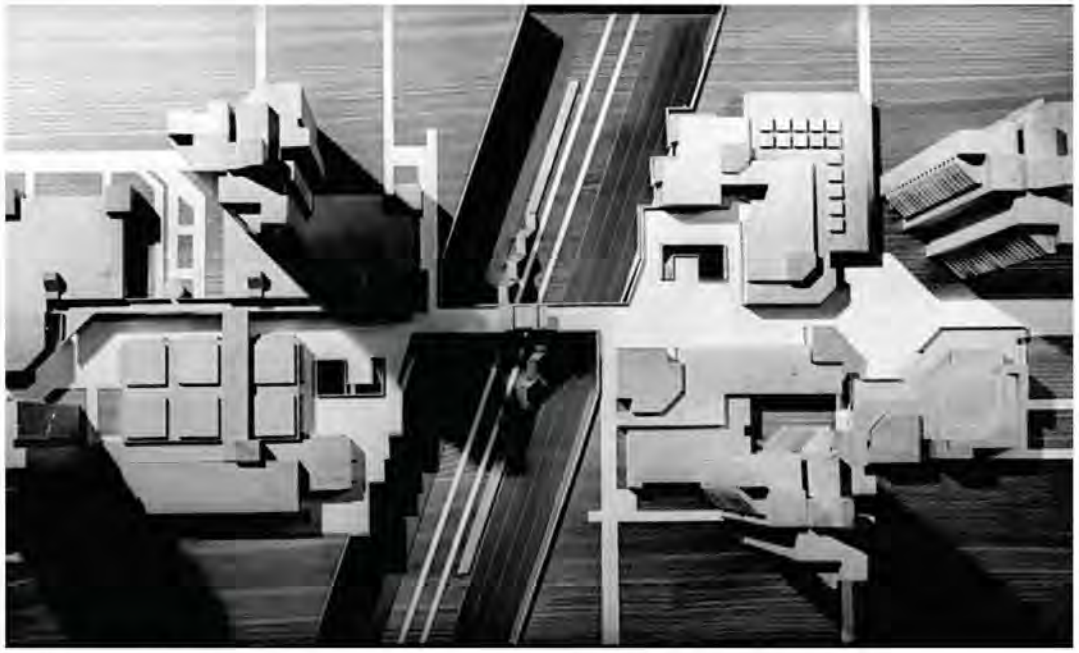
more households and to align the notion of centrality with already popular walking paths.

Third, emphasizing the need to spatially integrate Lasnamäe with the rest of the city, several teams explored opportunities to add new north-south thoroughfares through Lasnamäe, which would connect the district better with Ülemiste in the south and Pirita in the north. Chenglong and Yue's proposal, in particular, develops this idea in greater detail, routing a new public street from the eastern end of Ülemiste City, through industrial blocks and across Punane Street to the Pae Center, and from there on over the Laagna Channel to the Song Festival Grounds and the seaside. Just like Majaka Street, which the city already renovated and extended through a rail tunnel to the airport, transformed connectivity for the western side of Lasnamäe, similar transformations could result from adding more north-south connectors.

Fourth, Chenglong and Yue's project also investigates how Lasnamäe's vast Kvilia park could be knit together with Kadriorg park and Pirita River Valley to produce a connected, regional green amenity that could become home to major cultural, educational and recreational facilities in the future. Bringing museums, university campuses or monuments of national importance to Lasnamäe, would help integrate Lasnamäe with the rest of the city and improve its public perception.

Fifth, all teams investigated how future planning efforts could work with and for existing communities. Nerali and Emma's proposal, in particular, envisions new main streets as "community spines" by emphasizing public spaces, where people are most likely to interact with their fellow citizens – transit stops, community centers, markets, shared community gardens etc. Taka and Sabrina's project lays out institutional mechanisms for Area Management Institutions, while Alice and Yang's work emphasizes the role of condo associations and co-operative organizations. All redevelopment plans, these works remind us, should involve community members, affected residents and small business owners of Lasnamäe from the get-go.

Finally, our focus on Lasnamäe's centers inevitably also created questions about the eventual need to replace some of the aging and poorly



Plan for commercial center

Commercial center today

maintained building stock of the past. All new developments in Lasnamäe from the past two decades have been "infill" developments – gradual additions of new buildings amid an otherwise built out district. None of the Soviet era apartment buildings have been demolished. Taking a long-term view and tackling a complex set of issues, several teams in the studio examined how neighborhood improvement strategies and a renewed development interest in Lasnamäe could, eventually, lead to a democratic, equitable and gradual replacement of the Soviet panel structures with newer, more livable and mixed-use buildings.

Previous discussions about redeveloping Lasnamäe's residential blocks have gone in two, in our view, unproductive directions. On the one hand, a small minority of commentators in Tallinn have called for the wholesome demolition of Lasnamäe's panel structures. This studio did not consider such prospects and found them to be both undesirable and impossible to implement. The more than 30,000 dwelling units in Lasnamäe were, after all, privatized in the early 1990s and any grandiose discussions of full-fledged demolition have so far ignored the rights of this huge group of property owners, residents and communities, many of whom wish to continue their livelihoods, social and economic alliances in the district. Another, almost opposing viewpoint in Tallinn has been to leave Lasnamäe's aging residential buildings alone, arguing that they are fine as they stand on the one hand and that there are no public resources or mechanisms available for their improvement on the other. We saw this viewpoint as problematic too, because housing conditions in Lasnamäe are significantly poorer than other parts of the city and Tallinn faces sever spatial inequality issues. A sizable portion of Lasnamäe's residents lack the income and capital needed to afford alternative housing in other parts of the city – these residents are essentially trapped there. We did not think leaving Soviet-era housing blocks alone to degenerate over time was a viable or desirable choice in the long run.

To this end, we discovered an untapped resource that could help implement and finance a gradual, inclusive and democratic replacement of aging residential panel blocks – land. By mapping land ownership patterns in Lasnamäe, we discovered that most land between and around existing residential blocks is either municipally or state-owned. Several teams began to investigate how this hidden resource could be turned into a catalyst, enabling the city to develop neighborhood specific visions for a gradual replacement of aging housing stock. The publicly owned land is used as a form of subsidy that could induce private developers to build new replacement units that re-house resident associations who wish to accept a highly subsidized housing swap at sites near their current homes. Projects presented by Chenglong and Yue, Alice and Yang, and Taka and Sabrina in particular, explore this opportunity, proposing alternative mechanisms that would enable private, but clearly regulated developers to obtain land for new mixed-use housing free of charge or at highly subsidized rates, in return for rehousing the residents of nearby panel blocks that opt in to this choice. Developers could increase the housing density in the new blocks, adding market-rate housing to the replacement units. Residents who benefit from replacement housing would need to cover a portion (e.g. 50%) of the new unit cost themselves, potentially using low-interest loans backed by the state, while the remaining costs are covered by the value of public land that such developments stand on. Though myriad details of such a replacement mechanism would require careful further investigation, these students' projects point out that such a solution would enable Lasnamäe's residents to preserve social networks, daily routines, and familiarity with their neighborhoods, while gradually obtaining better houses and neighborhoods. They also remind us that Lasnamäe's full potential cannot be achieved through infill developments that create sub-centers, main streets and cultural amenities alone – a gradual replacement of old housing stock will be equally important. for improving residents' quality of life.

Pre-fabricated panel housing districts in Tallinn, Lasnamäe

Toomas Tammis
Professor of Architecture
Estonian Academy of Arts

In 2017 fall, the fourth year studio of Architecture and Urban Planning at the Estonian Academy of Arts (EAA) was implemented in collaboration with an option studio at the Harvard Graduate School of Design (GSD) and in conjunction with the City Unfinished research project – a three year undertaking for new urban development scenarios in Tallinn, financed by Kapitel Real Estate and carried out in cooperation between EAA and the City Planning Office of Tallinn.

Large-scale housing and urban planning have been for years the focus of the fourth-year studio for Architecture and Urban Planning students at the EAA. The fall studio concentrates on planning issues and must deliver an urban planning project for large-scale housing, whereas the spring studio elaborates on more detailed housing designs, continuing the work from fall at a smaller scale. Traditionally, studio topics have been closely related to urgent issues and future potentials in the local context within the framework of broader developments of the society and economy. The most recent topics have included Green Matter, Return of Labour, Shrinking of Small Towns, and Development Corridors.

The 2017 studios at the EAA and the GSD dealt with prefabricated housing districts in Tallinn, focusing mainly on Lasnamäe – the largest district in the city, housing roughly a quarter of its population. About half of Tallinn's population lives in prefabricated, Soviet-legacy housing built between 1960 and 1980, including Mustamäe (over 67 000 people), Väike-Õismäe (over 27 000 people) and Pelguranna (over 14 000 people). Even though local context and geography of these areas vary considerably, they share similar principles of planning and design, building typologies and public space, and they all lack public facilities, jobs, and amenities. They were built to offer fast solutions to a growing housing shortage after the Second World War and in response to an increasing influx of labor from other parts of the Soviet Union. Today, after a serious population decline in the 1990-s and the following period of moderate growth, much of the reasoning behind these districts have come under question, triggering a need to find new

ideas for these developments that still constitute half of Tallinn's housing stock.

As the EAA studio focused on possibilities of new housing, the Harvard GSD students focused on Lasnamäe's sub-centers that were left partly unbuilt and remain underdeveloped today. The different foci in the two studios generated fruitful versatility in tackling problematics of a large-scale urban area. One of the interesting results of that work has been the uncovering of richness and specificity, difference and underlying potential of seemingly monotonous modernist housing districts. Prefabricated panel-housing areas are largely based on repetition of a relatively small number of generic elements. They remain widely considered as dull and lifeless results of a failed planning experiment in Estonia. But the students' projects demonstrate that a closer investigation reveals somewhat surprising layers of richness, opportunity, and service to the rest of the city.

An eye-opener in the largely unnoticed and missed cultural variety present in Lasnamäe is the work of Alice Hintermann and Yang Huang. Their map of an international restaurant scene suggests that the diversity of Lasnamäe's amenities is on par with the major dining areas of central Tallinn – a fact that surprises many locals. Through clever observation and mapping, they have found ways to go deeper and propose different mechanisms that could help strengthen that diversity and allow it to blend in with the more formal and capital-intensive developments. Gradually replacing old housing stock, introducing and increasing different uses in current residential buildings, working in close collaboration with developers to improve public spaces in connection with new private developments, redirecting a small part of the public budget towards neighbourhood events and arts, adding a whole network of new tram lines rather than concentrating transit into a single major corridor, are just some examples of what can be done to start gradually strengthening the existing small-scale qualities of the district, ensuring that new developments integrate with and build on existing local specificities.

Many groups developed their work based on the structural layout of Lasnamäe. The district has a fairly specific linear character, stretching east-west for almost 7 km between a natural cliff running mainly along the seaside and a historic main road connecting Tallinn eastward towards St.Petersburg. The original modernist plan proposed two main transport corridors running through the whole district and several smaller transversal axes for local centers. One of the main transport corridors – Laagna Road – is a submerged highway whereas the other – Rahu Road – still remains an empty brownfield waiting to be developed. In between the two roads, a central green corridor was planned, running east-west through Lasnamäe. The continuous green spine was never completely realized, but it can be experienced today in smaller segments at different sites. These fragments embody a strong potential towards a new east-west connection for non-motorized traffic, forming a continuous green corridor from the popular parks of Kadriorg at the eastern side of central Tallinn to the landscape heritage area of the Pirita river valley at the eastern border of the city. The work of Yue Shao and Chenglong Zhao took clever notice of this opportunity and explored the inherent yet unused potential of developing out this green spine. They started with reconnecting the once planned central green corridor and generated it into a new civic spine with added public functions and facilities. From this powerful and fairly obvious move, they worked on the subtler and currently poorly developed north-south axes that could be developed into much greater linear main streets than Lasnamäe's original nodal sub-centers that remain incomplete. The well-designed and elaborate proposal for one of these new north-south corridors present a new potential for public spaces and developments without necessarily demolishing much of the present building stock around it.

Another feature of the original plan and the current layout of many Lasnamäe's micro-districts and unfinished centers is the missing hierarchy of streets and public spaces. The socialist plan for equal opportunity has almost subconsciously led to a monotony and redundancy of streets and public spaces. There

Studio Trip Visiting Linnahall in Tallinn

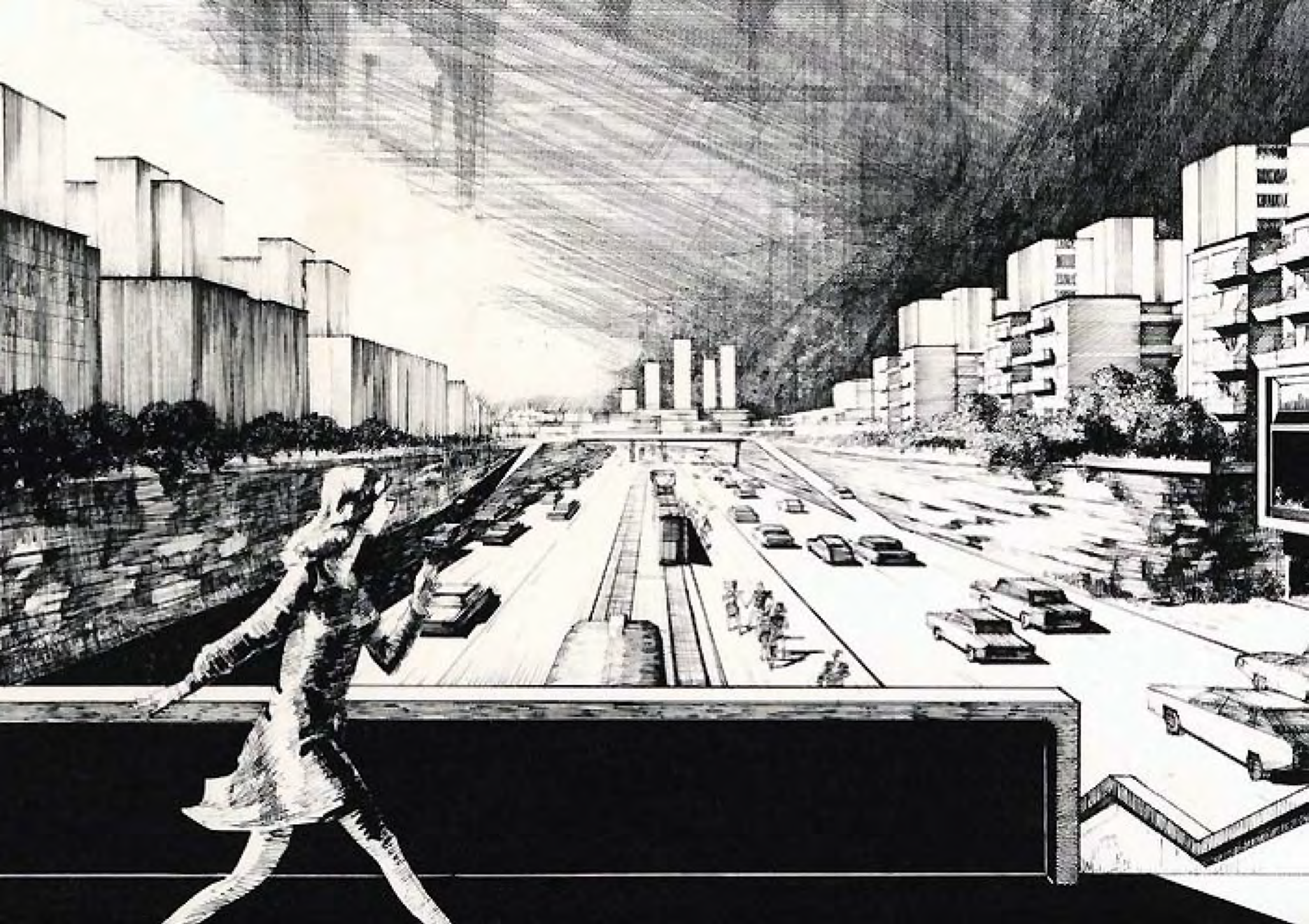
Studio Final Presentation by Alice and Yang at Harvard GSD


Perception of Lassemie

are no streets with built edges, as we have known them in traditional city environments. The work of Nerali Patel and Emma Pattiz looked carefully into existing public spaces and circulation networks and came out with a somewhat surprising conclusion that there are too many pedestrian pathways arranged into an unclear and misaligned network. Their proposal of eliminating parts of the path network, concentrating pedestrian movement into strategic routes would establish a more clear direction for future commercial developments and civic spaces that Lasnamäe's centers currently lack. The lack of clear structure and hierarchy in the existing pattern of buildings and streets is also the focus of Donald Taylor-Patterson's and Armando Sullivan's work. Their project provides decreasing scales of density as one moves further from main transportation hubs. Highest development densities are reserved for sites around transit stations, which drop to medium and low levels as the distance to stations increases. Giving different parts of the currently monotonous built fabric different building rights and street layouts enables them to generate a variety of urban qualities that are currently missing. It is a simple but potentially effective tool to rescale current car-oriented environments to more pedestrian-oriented circulation networks, turning largely monotonous block layouts into more diverse and multifaceted urban environments.

The GSD works have also tackled the often difficult and uneasy mechanisms of implementation of the proposed ideas. That is a quality not often seen in architecture schools and even in real life urban design projects. Tallinn, in this context, offers a specific case, where most land and housing stock were privatized in the 1990s. This left the city with limited possibilities to intervene and play a leading role in planning and implementation of urban developments. However, students' careful analyses show that in Lasnamäe, in fact, only small plots of land under and next to residential buildings have been privatized, leaving much of the surrounding land between modernist housing blocks still in municipal or state ownership. This publicly owned land is a potentially powerful tool for achieving a gradual replacement of prefabricated housing stock from the 1970-s and 80-s, which is slowly degrading and does not allow enough flexibility for different uses. Several projects demonstrated potential redevelopment interventions based on this specific land ownership opportunity.

To conclude, Lasnamäe with its population of 120 000 inhabitants and a huge land area does not need a single, big-scale and top-down plan that would resemble the original Soviet-era project. From a relatively simple plan, Lasnamäe has developed into an interesting mix of living conditions and public spaces full of potential. The underlying large-scale structural layout of the original plan, it's context in the local landscape together with surrounding urban districts, and the current everyday uses of existing spaces need to be understood and taken into account together with a clear understanding of institutions, stakeholders, and mechanisms that can trigger and carry through realistic and positive interventions in Lasnamäe. The student works have shown a vast and interesting field of potentials inherent in the currently monotonous urban pattern and indicated possible ways of activating them, thus opening up different pathways for an urban future in Lasnamäe.



REINTEGRATE RESTRUCTURE

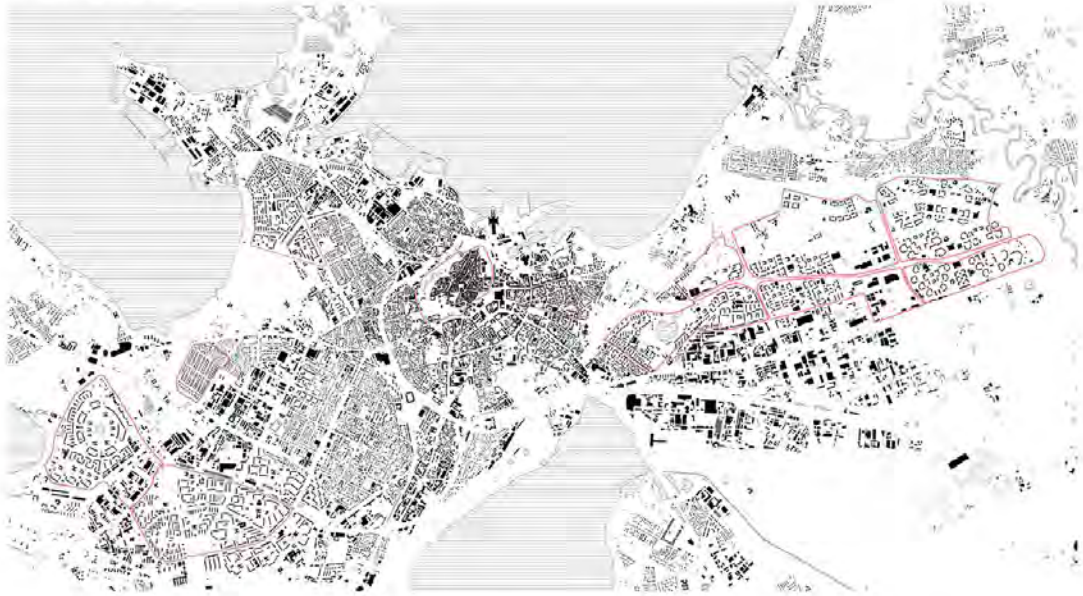
Vision Planning and Urban Design for 21 Century Lasnamäe

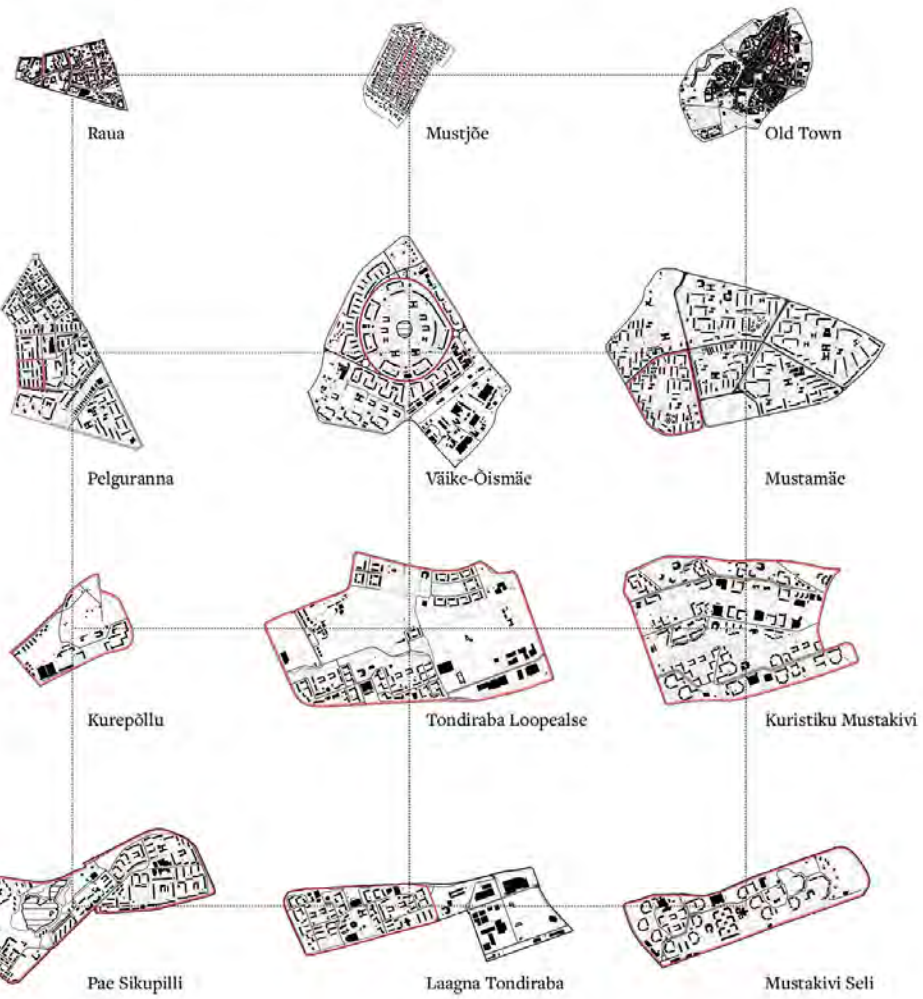
Yue Shao
Chenglong Zhao

Today's Lasnamäe is perceived with the social stigma as an undesirable neighborhood or event, not as a part of the city, it faces a number of urgent issues. The low construction quality and the lack of maintenance of the housing blocks compromise residents' life quality. The original "Big Box" type of commercial center doesn't meet people's demands. There are large areas of unmanaged and undefined open space that are currently in the state of wildness. The fragmented land ownership structure of the neighborhood prevents major redevelopment from happening.

Our strategy to deal with the open space is to define a civic spine by extending the current cultural center of Tallinn to the open space of Lasnamäe by placing cultural amenities and implementing landscape improvements. The space between different micro-regions is defined as the green spine in which landscape and transit infrastructure are enhanced. Within the neighborhood, the "Big box commercial centers are refined to commercial main streets that run in the middle of neighborhoods and connect the existing public amenities. The main street is defined by public realm enhancements as well as mixed-use development with ground floor retail and housing on top. The housing blocks away from the main streets will be partially redeveloped as new courtyard tower housing typology. A new set of road network will be defined to accommodate development parcels. All the new developments are carefully implemented with implementation mechanisms such as a heavily subsidized land swapping mechanism and a Business Improvement District policy.

Urban Block Scale Study





Edge Condition Study

Neighborhood Division in Tallinn

Sõle

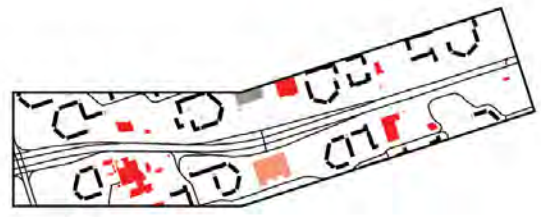
Neighborhood Division in Lasnamäe

J. Smuuli tee

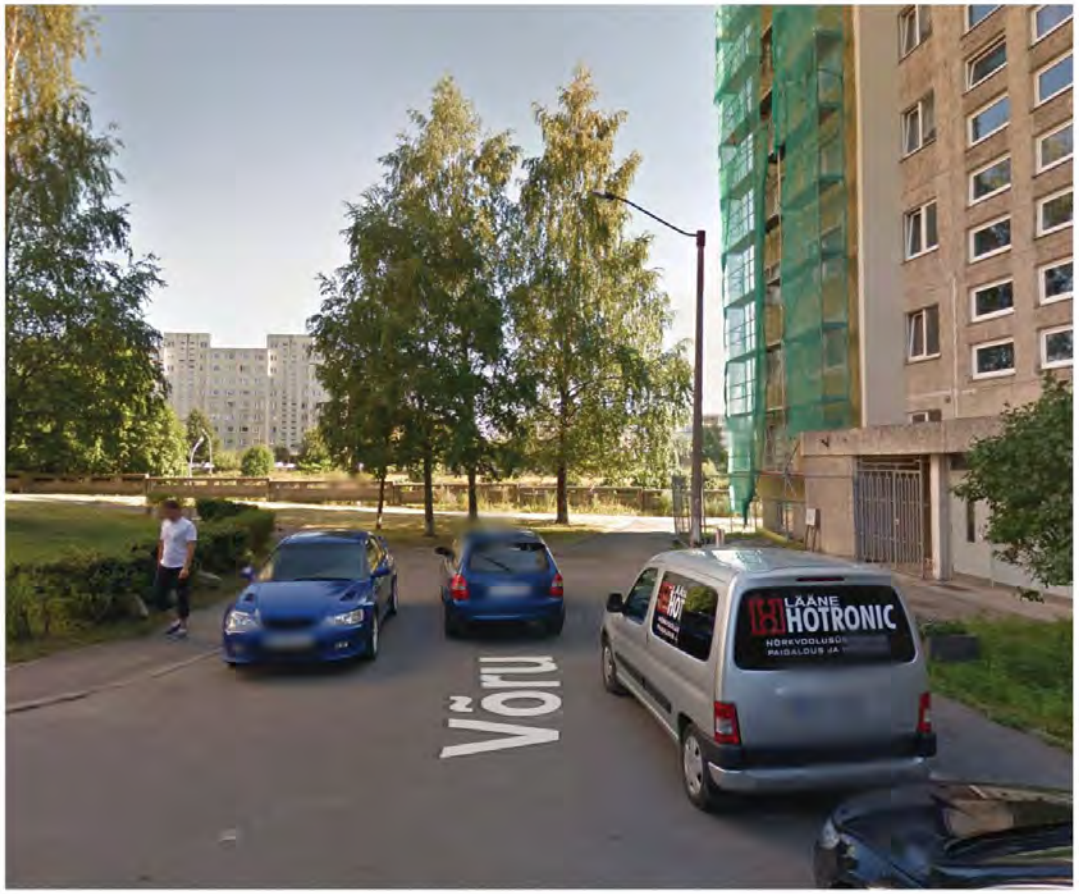
Narva Maan tee

Laagna tee

Sõpruse puiestee

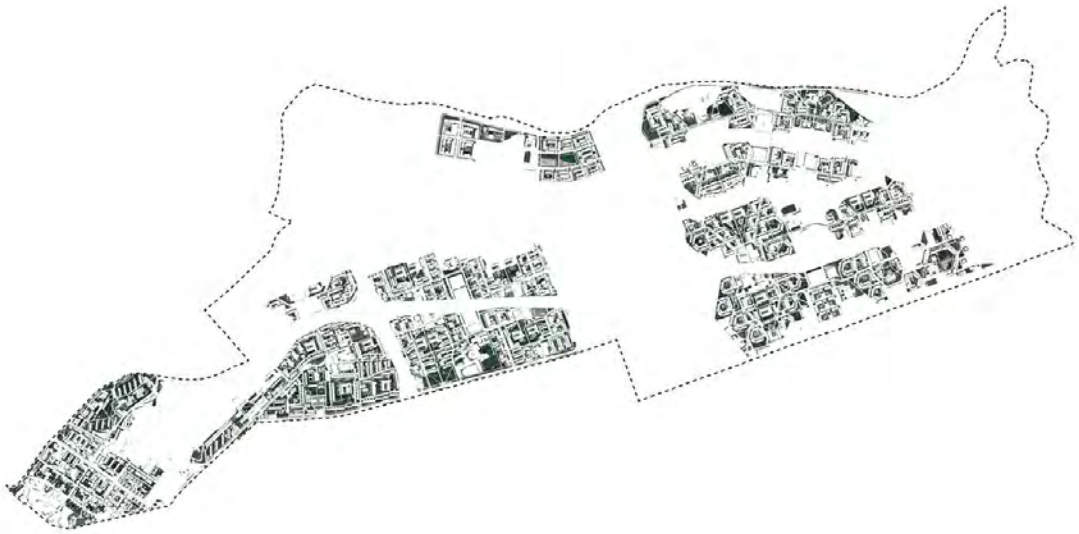


Laagna tee



Incomplete network and dead ends: The block size within Lasnamäe is considerably huge compared to blocks in city center or other housing districts in Tallinn. What makes those huge urban blocks even more challenging is the lack of subdivision of neighborhoods. In Lasnamäe, the infrastructure that defines the urban block effectively also defines a neighborhood, which is out of scale. In other parts of the city, smaller subdivisions can be found within the urban block to create a more human-scale neighborhood.

Lack of effective commercial centers: As a key feature in the Soviet Union era masterplan, each microregion has its own commercial center which serves the neighborhood in a radial pattern. Such commercial centers are similar in each micro-region. Most of them adopted the big box typology with one major chain supermarket and several chain restaurants. As the capitalist economy develops, such commercial centers can no longer sufficiently serve their communities.



Underutilized community space: There are large areas of unmanaged and undefined open space which can be categorized into two types. The first type is large area of unmanaged open space in between microregions. It was intended as a linear park which unfortunately was never realized. The second type is underutilized community open space around panel housing, such as courtyards. With a lack of landscape design and proper management, such open spaces are mostly used as parking lots or even abandoned.

Large areas of unmanaged open space: A high percentage of land in Lasnamäe is publicly owned, including municipally owned land and state land. However, publicly owned land is often intertwined with privatized land, which prevents large developments from happening.

1. Presidential Palace

2. Song Festival Grounds

3. Kadriorg Stadium

4. KUMU

5. Lasnamäe Orthodox Church

Kadriorg Park

①

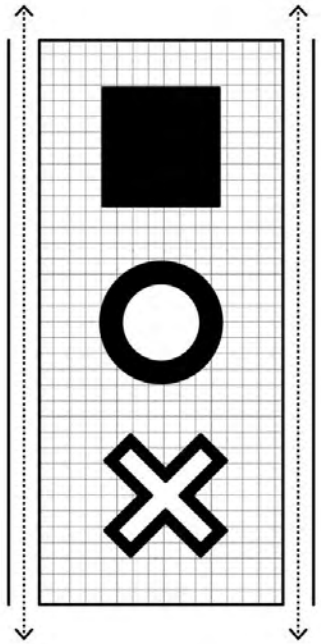
②

③

⑤

0 100 1000m

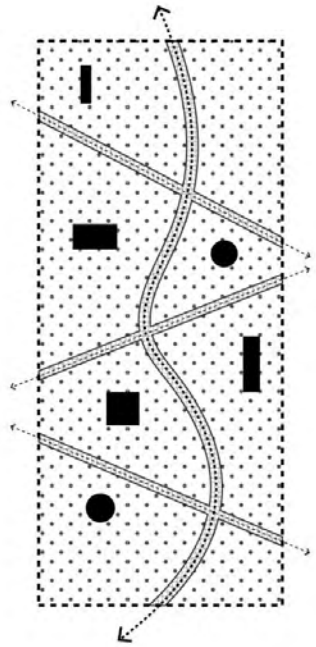
Reconnect Lasnamäe with Tallinn: The first aspect is to reconnect Lasnamäe with Tallinn through physical connections. As mentioned earlier, there is a large area of open space in the northern part of Lasnamäe. To its west lies the Kodriog Park which is the most important civic center of Tallinn, and even of Estonia. It accommodates a series of cultural and civic buildings and facilities, including the Presidential Palace, the Song Festival Ground which is a national gathering place for large events, and the KUMU art museum.



Civic Spine-Cultural Spine: Take advantage of the residual central green belt. It is bound by north south vehicular traffic on the edges. Within the edges, large civic programs take place. The negative space in this zone is subject to pedestrian pavement improvements and landscape improvements. This zone serves communities on both sides of the spine by pedestrian access as well as other communities via vehicular traffic or public transit. The financing mechanism is that city can sell off development rights on the transit nodes and provide additional development bonuses for those who invest in landscape and infrastructural improvements.

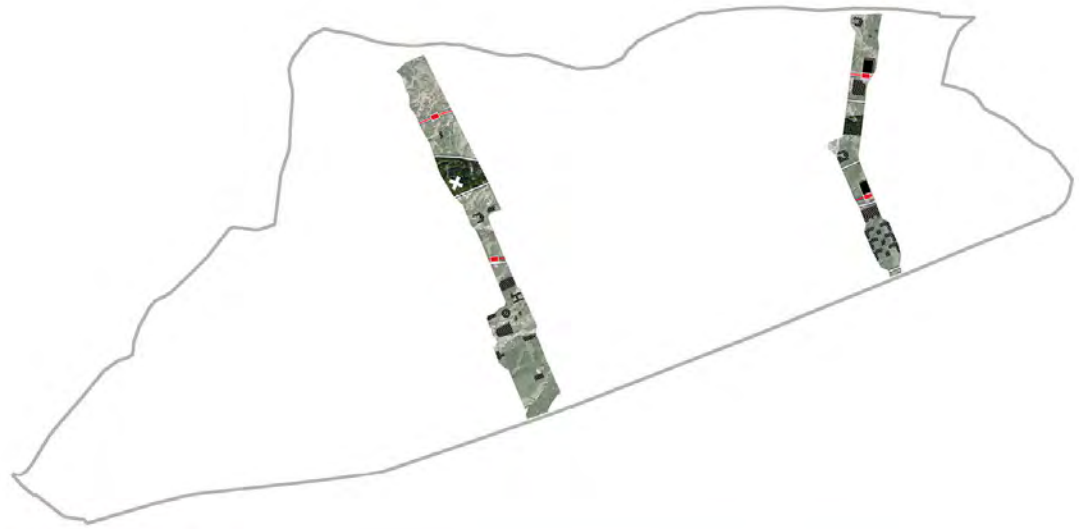
Civic Spine-Cultural Spine

View Towards the Civic Spine

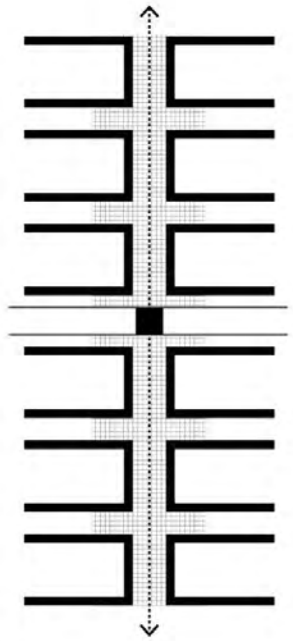


Green spine: The second aspect is to reorganize residual open space. Currently there is a large area of residual space spanning between microregions. Such residual space contains large unmanaged green area, big box type mixed-use parking houses, as well as streets with little street design. At the same time, the Pae Park in the western part of Lasnamäe provides a great example of how to turn residual space into a stimulus for future development. The developer transformed the stone quarry into an artificial lake accompanied by a series of landscape improvements.

Green Spine



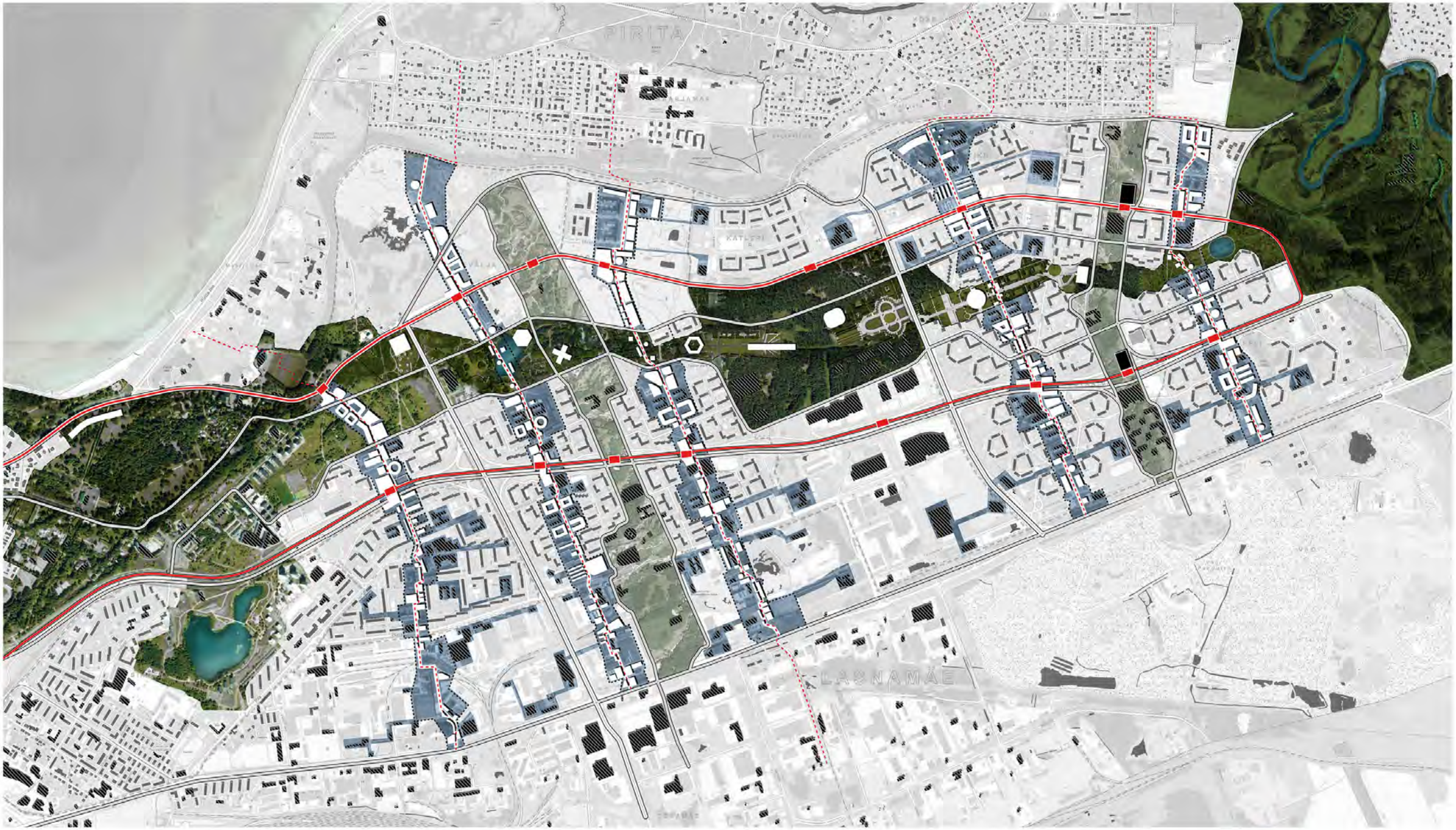
Render Towards Green Spine



Commercial Spine: The third aspect is to recreate commercial centers. As mentioned earlier, mono-functional big box commercial centers dominant type of commercial centers in Lasnamäe, which serve the neighborhoods in a radial pattern. Instead, we would like to introduce a series of south-north running multi-purposed commercial main streets as Neighborhood Spines, which connect through two or more existing commercial centers.

Commercial Spine

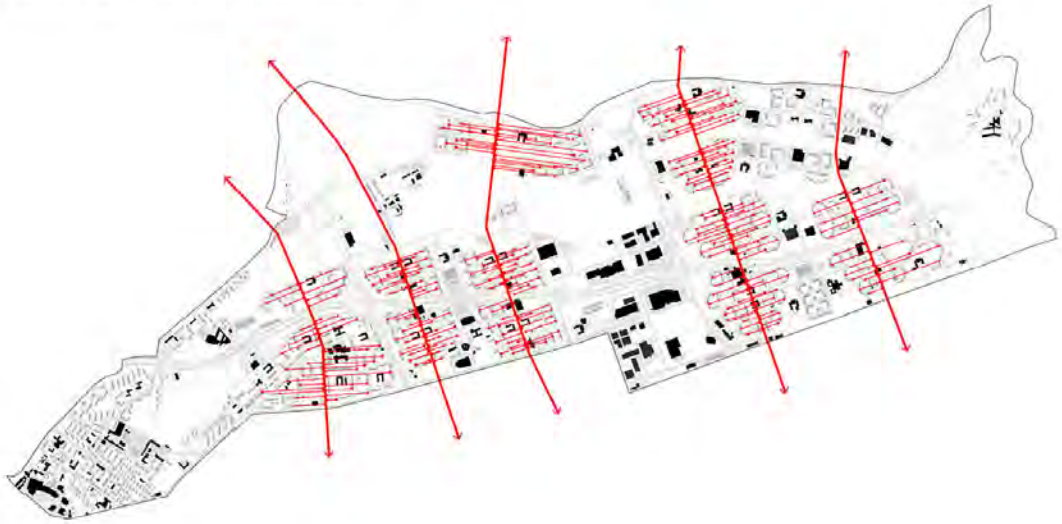
View Towards Commercial Spine



50 Year Plan: Overlaying the Civic Spine, Green Spine, and Neighborhood Spine together, a long-term development plan is envisioned for the entire district. But where to begin?

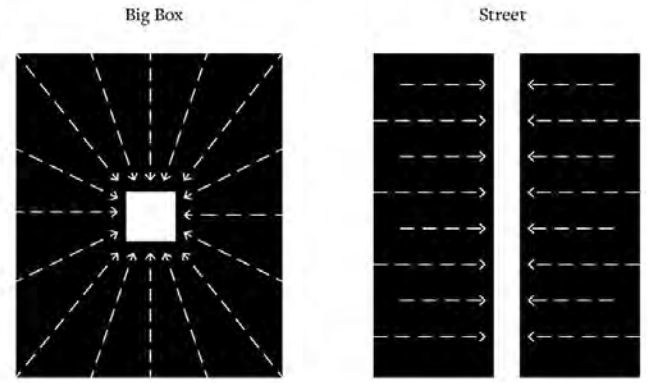
Existing Commercial Centers - Radial Pattern

Proposed Neighborhood Spines - Linear Pattern

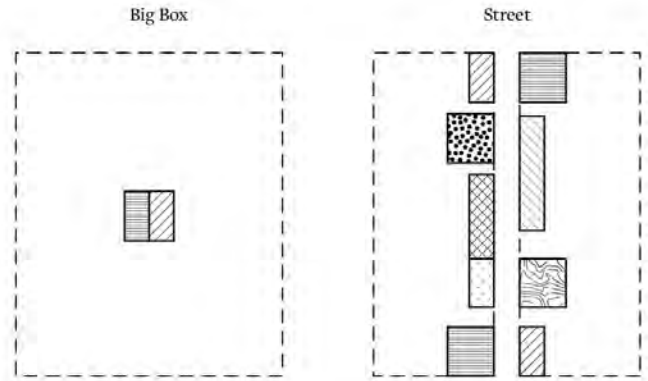


Commercial streets hvave a distinctive advantages over big box type commercial centers. For big box types, accessibility to users is unevenly distributed, program diversity is restricted, and public space surrounding it is mostly used as parking lots. Commercial streets, it improve accessibility to neighborhood residents, allow smaller and varied developments to take place, as well as future expansion, and at the same time provide a continuous public leisure space, along with ample opportunities for future expansion.

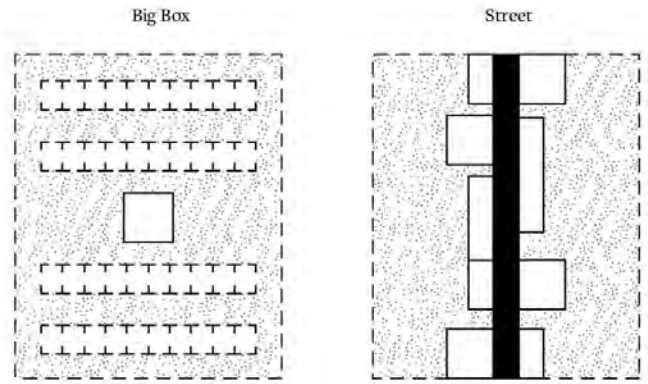
Big Box Vs. Street Type Comparison



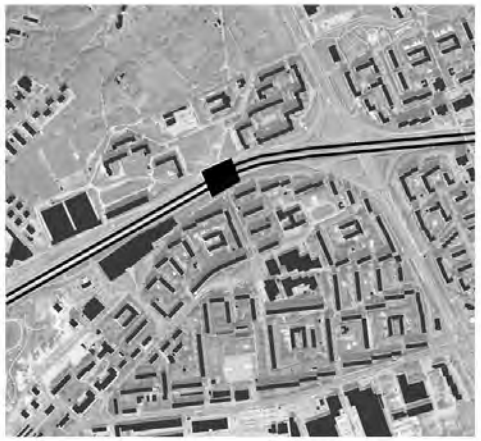
Improved Accessibility



Diversity of Programs



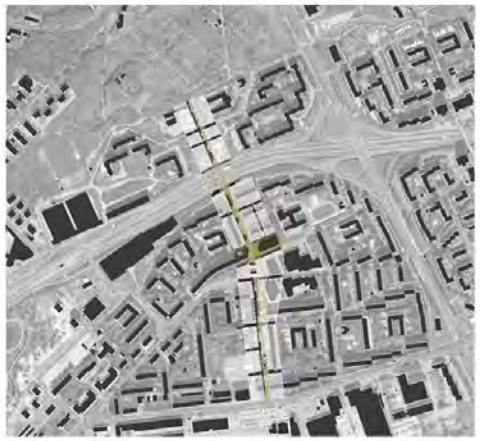
Public Leisure Space



Step1: Introduce the new tram line connecting to the city center, and the new tram station at the intersection

Step2: Government-funded main spine infrastructural improvement concerning pavement, greenery, street furniture, street lighting, public plaza, etc.

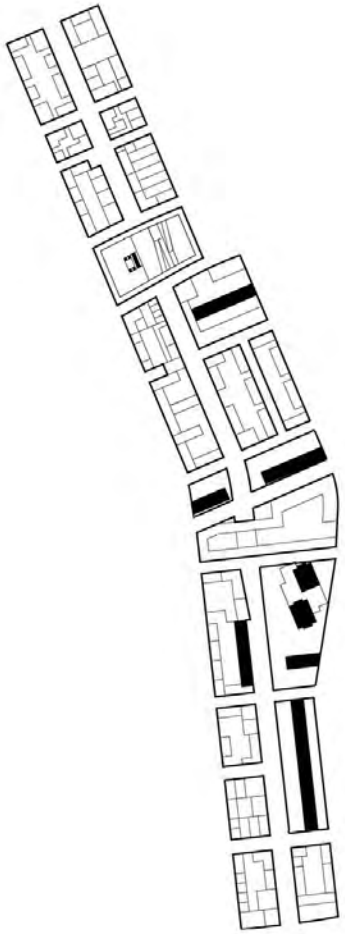
Step 3: Formation of a defined public space as the stimulus for developments along the main spine.



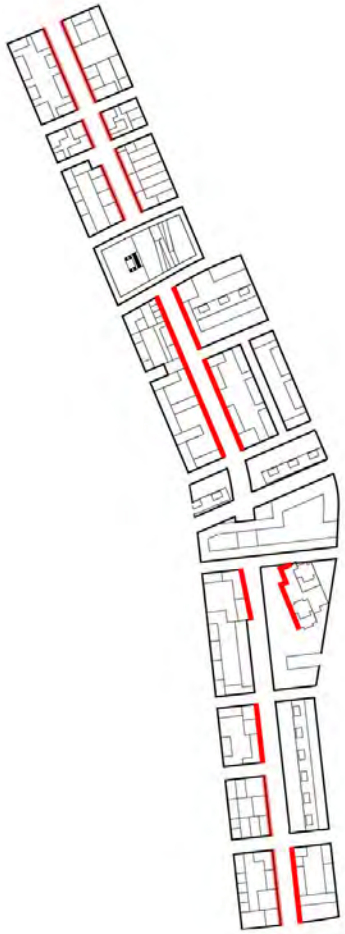
Step 4: Divide plots as the framework for both infill developments and new developments.

Step 5: Give publicly-owned empty plots to developers for free in return for first batch infill developments.

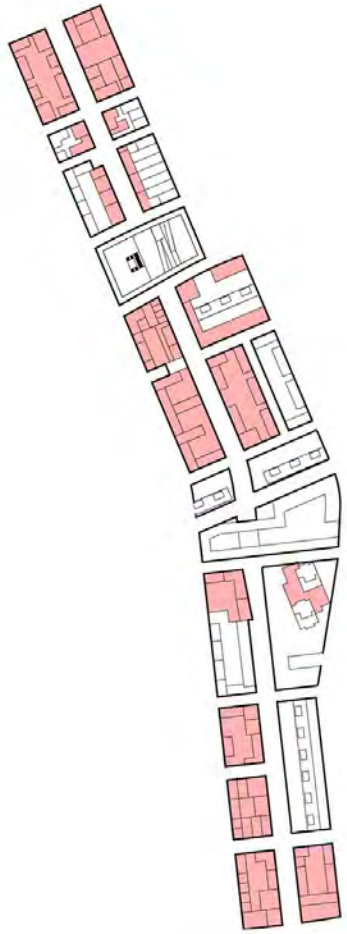
Step 6: Selectively demolish some existing buildings for new development. Infill developments and new developments together form the main spine with a consistent street frontage.



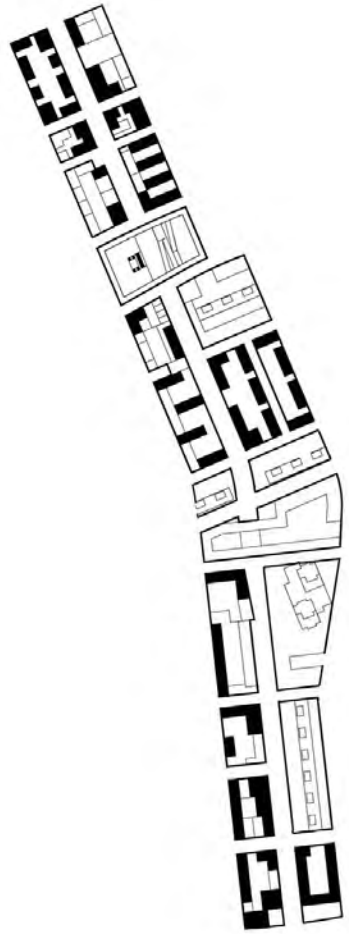
Preservation of Existing Buildings



High Shopfront Coverage



Commercial Podiums



Mid-rise Residential Components

Landscape Design

Section

View 1

View 2

View 3

Detailed Floor Plan

The ground floor plan drawing shows a part of neighborhood spine, floor plan of the existing apartment buildings, new courtyard apartment buildings, green space inside the courtyard as well as the improved public space. A juxtaposition between the old and new is illustrated in this drawing.

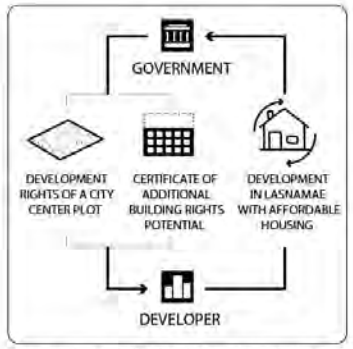
District Masterplan

The district master plan highlights the new road network and the neighborhood spine that is defined by the new mixed-use new typologies. The differentiation between the height of different parts of new building is represented by the different shades of grey. A new tram station is being implemented as an anchor to increase the land value.

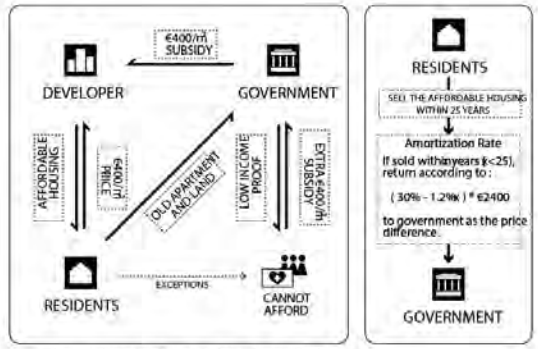
Aerial Rendering

The aerial view illustrates the neighborhood spine and its connection with the Tallinn Song Festival ground, a place with national importance. The connection reaches all the way to the waterfront and activates it. The buildings along the neighborhood spine adopts a variation of uses, which is down by different designers to create a rich urban environment. Existing structures is preserved and renovated to allow better connectivity and quality of life.

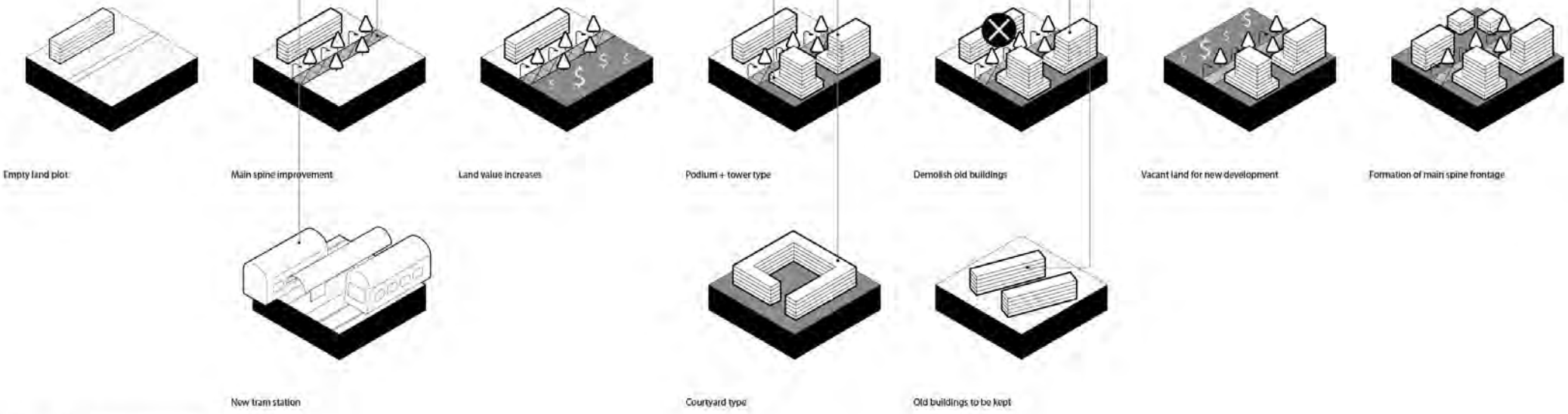
The public space in the neighborhood spine is a critical component in terms of binding the community together. The fees collected from the "business improvement district initiative" could be use continuously improve the communal space in the neighborhood spine. The community space contains public sculpture by local artists, temporary structure that have the capacity to host farmers market during the weekend. The neighborhood spine public space improve the quality of the public realm in the district and improve the land value.



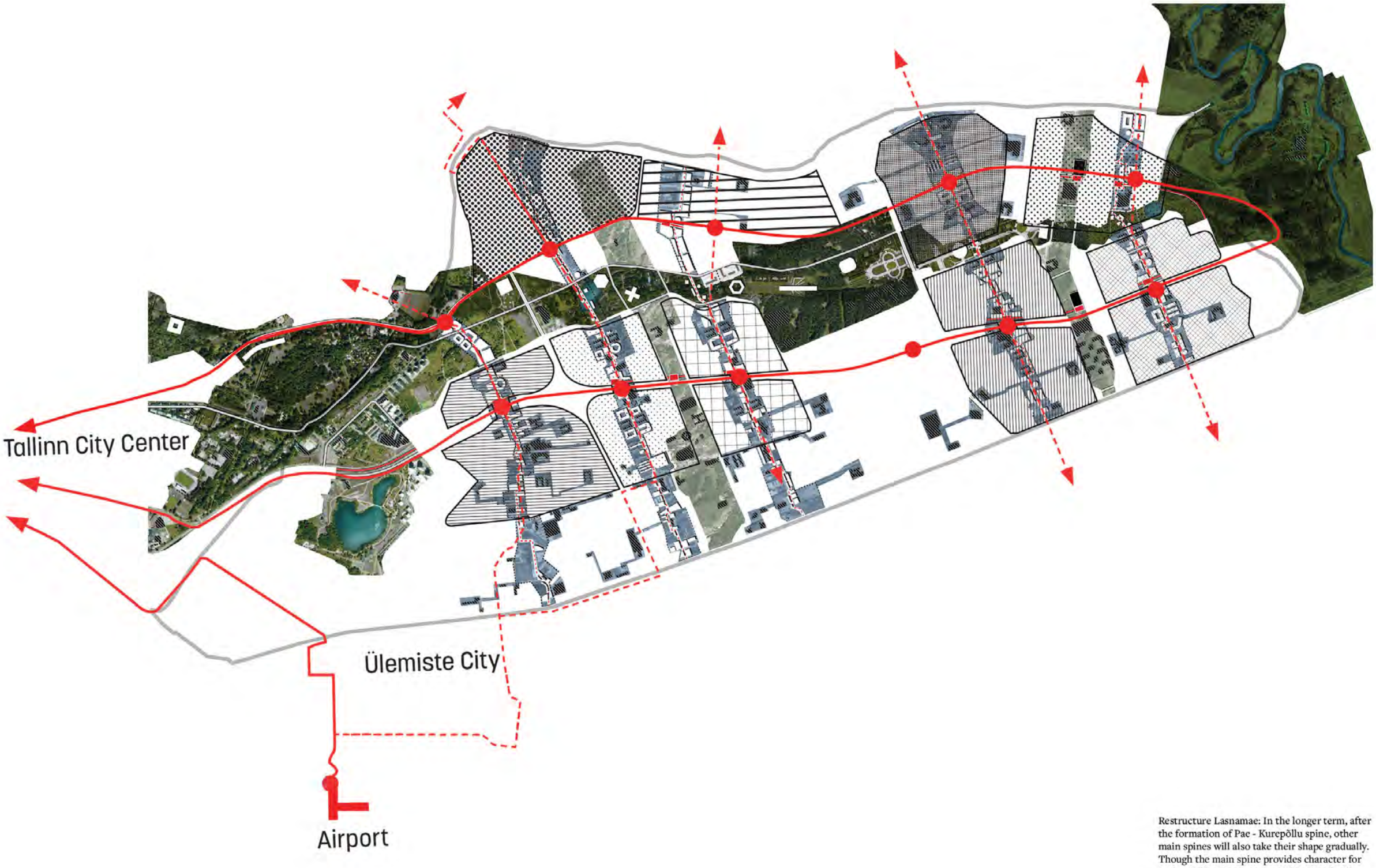
CITY CENTER - LASNAMAE JOINT DEVELOPMENT MECHANISM



HIGHLY SUBSIDIZED LAND SWAPPING MECHANISM



Implementation Toolkit: An implementation plan is designed to facilitate the process. A series of implementation strategy in highlighted in a sequential manner. Policy and designs come first and transportation and public space improvement follows to ensure the initial public expenditures stays low. Various of incentives are provided to attract private investment to make this process sustainable. It is a positive cycle, the public funds and policies were used to kick start the process which the private investment continues to improve the land value of the district and in return attract more private investments.

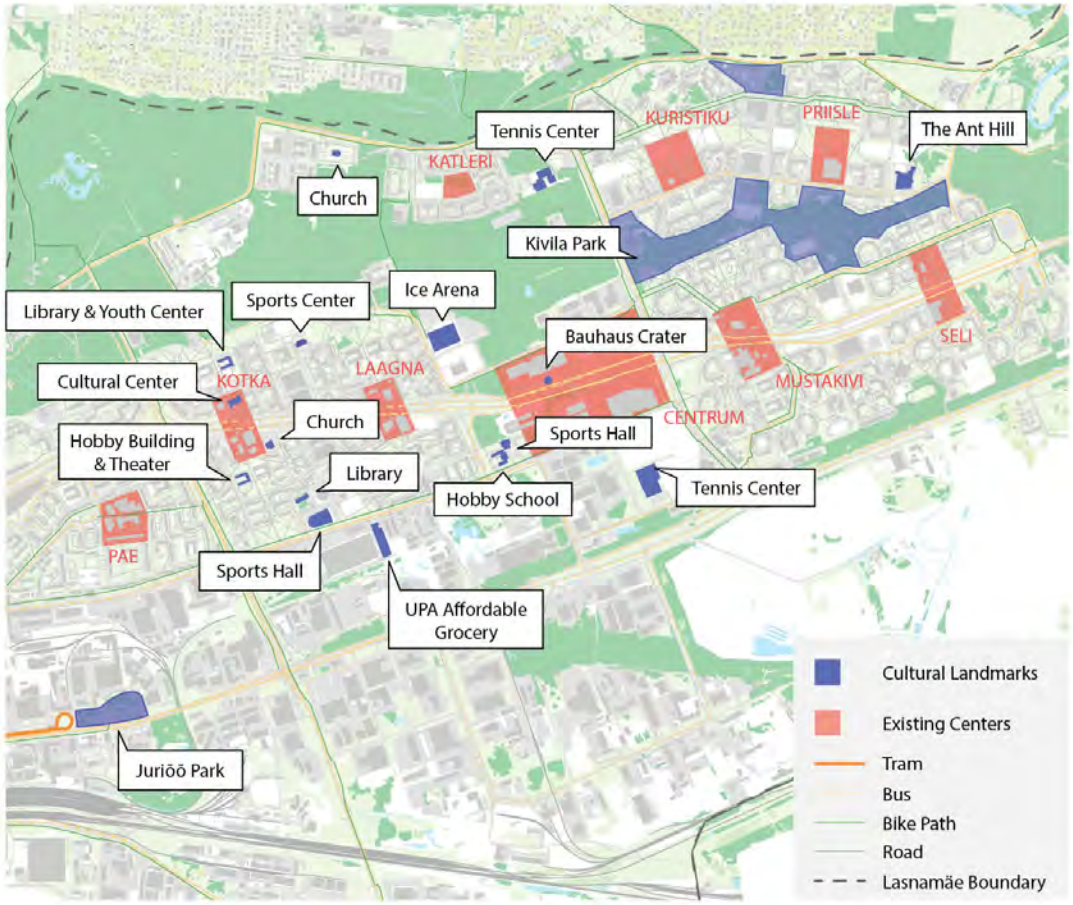


Restructure Lasnamae: In the longer term, after the formation of Pae - Kurepõllu spine, other main spines will also take their shape gradually. Though the main spine provides character for each neighborhood, each neighborhood will have its own masterplan for redevelopment, and each main spine will have its own urban connection to define its own character. We envision Lasnamäe in the future being no longer a segregated part from the city of Tallinn, but a series of energetic living communities firmly integrated with the rest of the city.

LASNAMÄE CULTURE

Alice Hintermann
Yang Huang

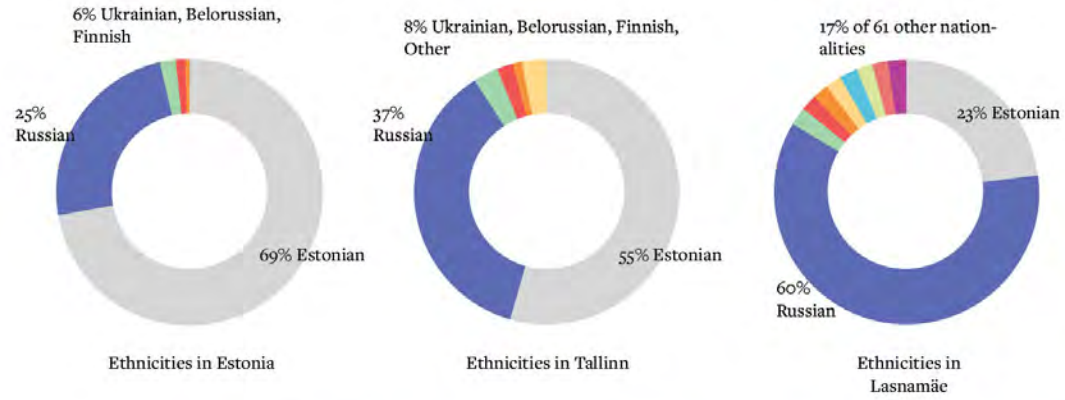
Tallinn is known for its old town, which is a UNESCO World Heritage site that many tourists visit every year. By contrast, Lasnamäe, home to 120,000 residents--a quarter of the city's population, is little known to tourists. In fact, during our trip to Tallinn, we met many locals who had never been to Lasnamäe. Although many choose to live there, the district has the reputation of being a place with few opportunities and resources. It is known for monotonous architecture, underused space, and deteriorating conditions. In fact, "Stop Lasnamäe" was a slogan and a popular song during the Estonian Liberation Movement in the early 1990s. People considered Lasnamäe a symbol of the Soviet Era. Lasnamäe is known for having a large Russian-speaking population. What many people don't realize is that there are many ethnicities represented within that group and that many other ethnicities live in Lasnamäe as well. Besides Estonian and Russian, there are people from 61 other nationalities living in the district. It is much more diverse than Tallinn or Estonia as a whole. This is reflected in the great diversity of restaurants one finds in Lasnamäe. Lasnamäe also has a wide variety of cultural facilities that cater to its diverse population. So we began to think about how the diversity and heritage of the neighborhood, these characteristics that make Lasnamäe special and different, could be leveraged to benefit its residents and the city as a whole.



Cultural Amenities Map: We mapped important cultural facilities in Lasnamäe and how these relate to the districts existing centers. Lasnamäe has a wide variety of cultural amenities that cater to the diverse population that lives there. These amenities include: a new ice hall, parks, gyms, libraries, churches, and other community and cultural centers.

This proposal for Lasnamäe takes a bottom-up approach to expose this neighborhood's cultural richness to the rest of Tallinn and include it as a key component of Estonia's capital city. The proposals goals are to:
1: Celebrate Lasnamäe's culture and open it up to the rest of the city.
2: Use new interest to create positive development and infrastructure improvements.
3: Retain population, affordability, and heritage as the area evolves.
In the following, we explain how the public sector can initiate six mechanisms involving private sector, condo associations, and co-operative organizations in order to advance these goals. We then zoom in on three distinctive centers of Lasnamäe: an existing commercial center, a typical Lasnamäe residential courtyard, and a large park. We show through site plans, axons, and vignettes how these goals physically materialize on the ground in each of these three contexts.

Lasnamäe's Existing Assets (Above, clockwise from top left): a Greek Restaurant in the ground floor of a residential building, large swaths of largely unlandscaped open space, active uses in some existing centers, existing buildings with the potential for new uses.

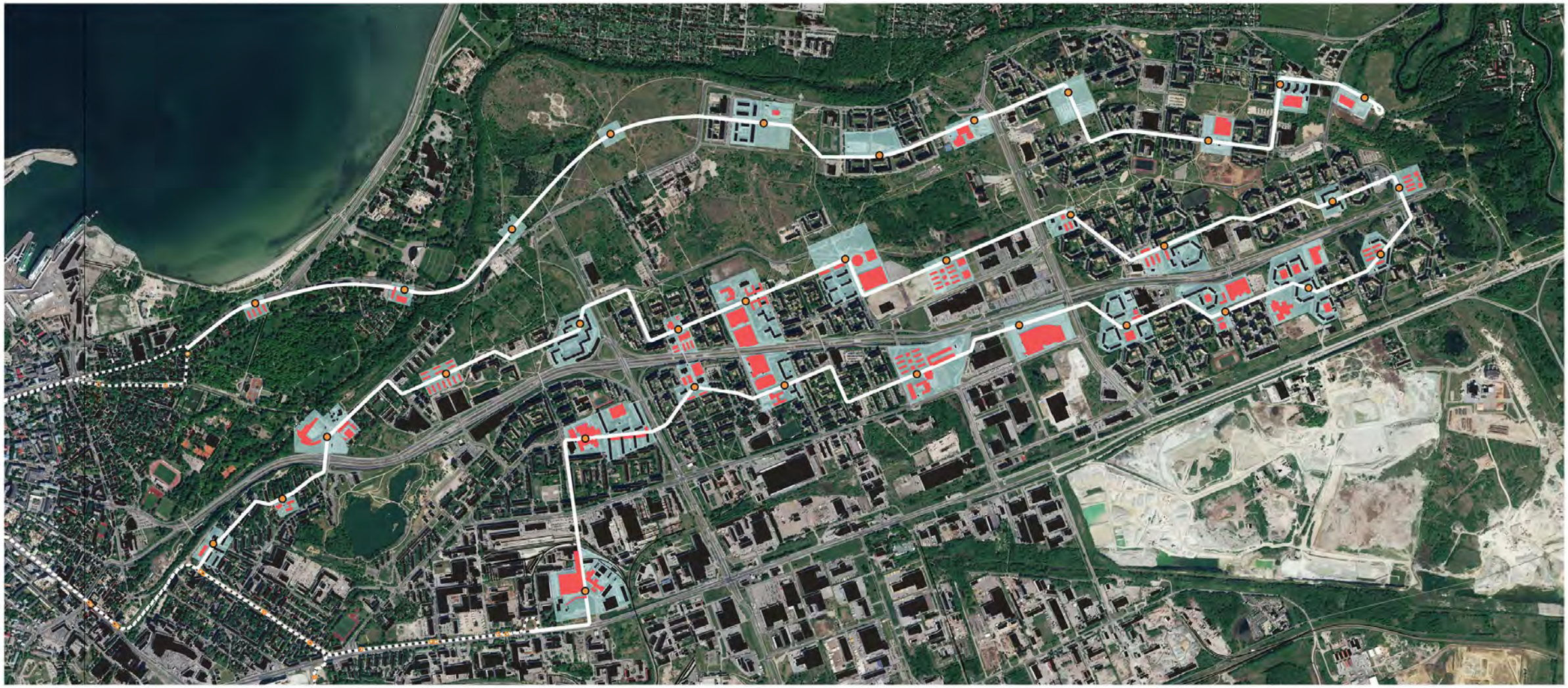


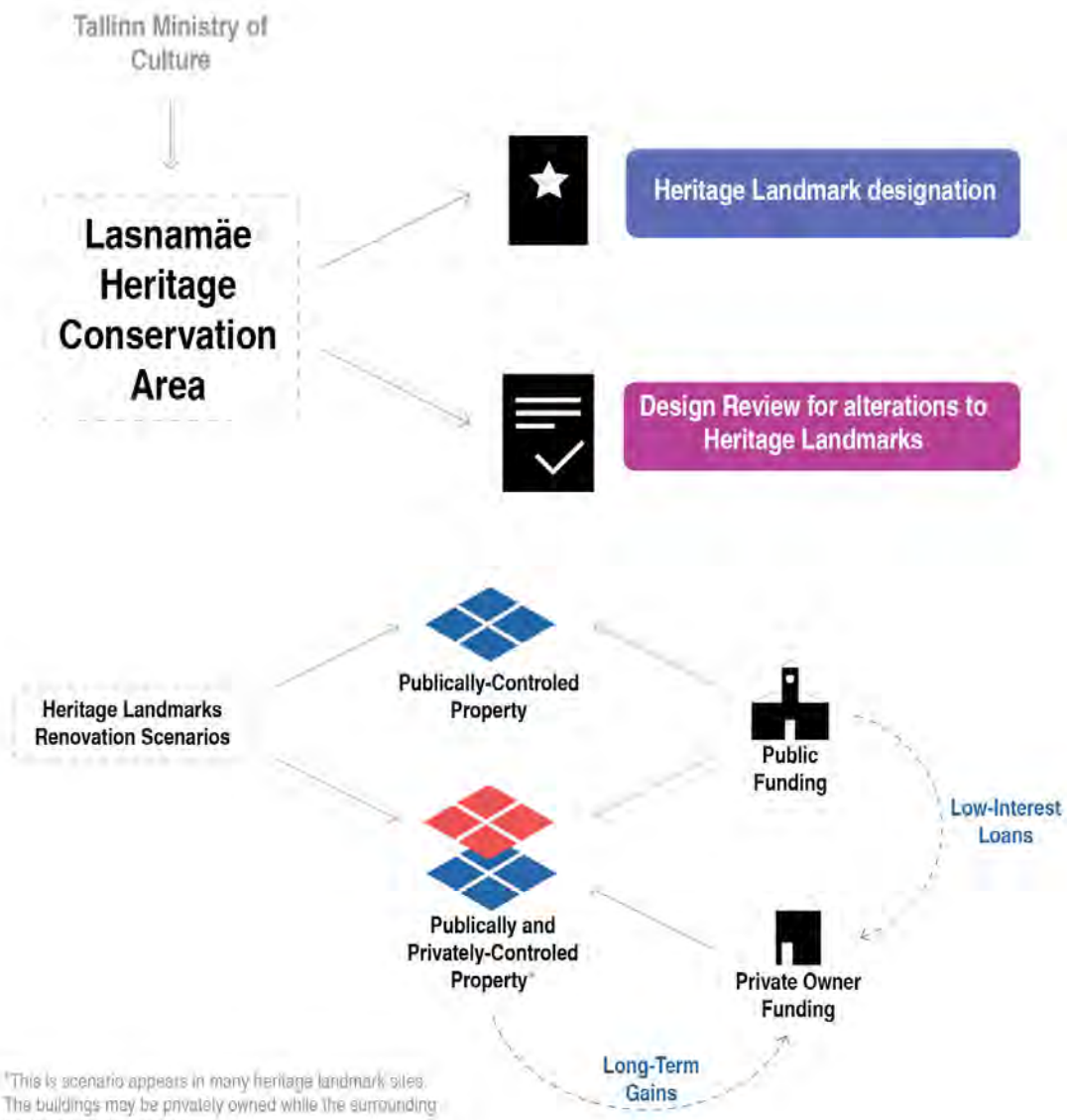
Ethnicities in Estonia, Tallinn, and Lasnamäe (Above, top): Lasnamäe is more ethnically diverse than either Estonia or Tallinn as a whole. In addition to a large ethnically Russian population, the district is also home to people of 61 other nationalities. Lasnamäe's International Restaurant Scene (Above, bottom): Lasnamäe has a wide variety of restaurants offering many different international cuisines.

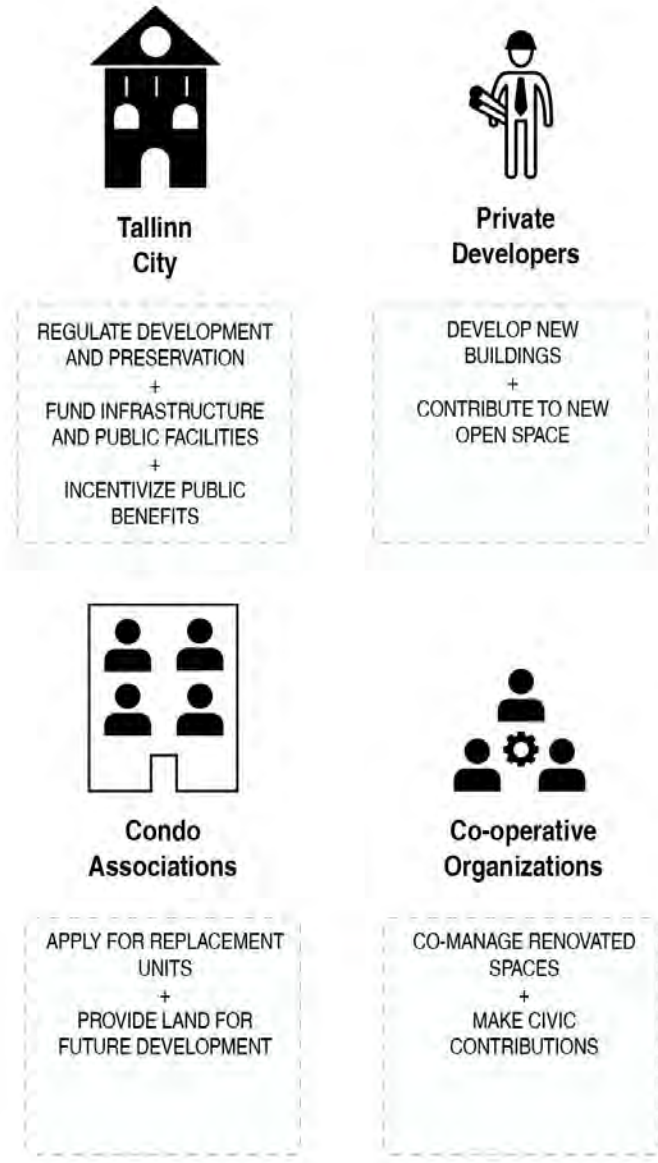
LASNAMÄE IS THE MOST DIVERSE NEIGHBORHOOD OF TALLINN THAT CELEBRATES DIFFERENT CULTURAL ACTIVITIES FOR EVERYONE IN THE CITY (AND POTENTIALLY TOURISTS) WHO WANT TO EXPLORE AND EXPERIENCE SOMETHING NEW.

Goals and Mechanisms Diagram: The three goals for this proposal are shown in the center of the diagram. The six mechanisms for advancing these goals are shown encircling the goals around the outside of the diagram.

In order to leverage Lasnamäe's assets for the benefit of the district and the city, we identified the following three goals:
1: Celebrate Lasnamäe's culture and open it up to the rest of the city.
2: Use new interest to create positive development and infrastructure improvements.
3: Retain population, affordability, and heritage as area evolves.
Next, we identified six mechanisms to advance these goals. These strategies vary in scale and in the length of time it would take them to be accomplished. The idea is that positive outcomes don't rely too heavily on any one strategy and multiple strategies can work together at once.
In the next pages, we describe how each of these mechanisms functions.

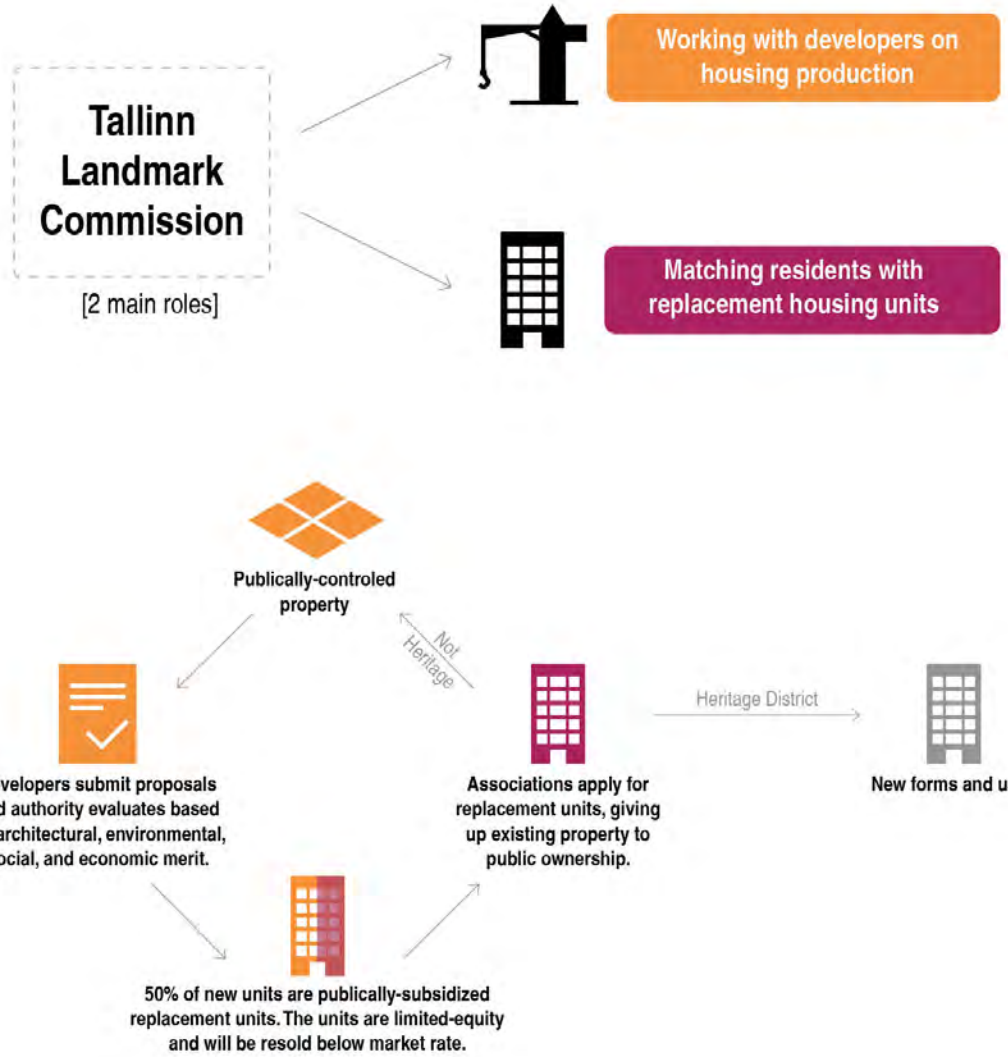






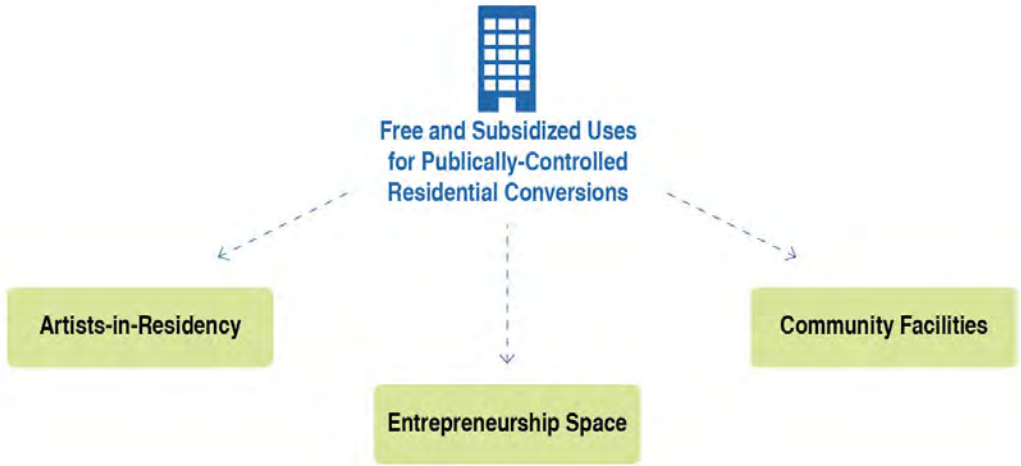
Heritage Sites: On our visit, we learned about how the arches and market in Priisle Center, Lasnamäe had been a local icon until they were demolished 3 years ago and replaced with a big box grocery store. Heritage site preservation would help Lasnamäe keep important sites of collective memory. Preservation would take various approaches:
1: Restoring landmark structures
2: Facade preservation
3: Renovation for new uses
4: Retaining active uses--like the market in Priisle
Heritage sites in Lasnamäe would be designated as they are elsewhere in the city. Depending on who controls the heritage site, there are different funding mechanisms for its maintenance or renovation. Participating private owners would have access to low-interest loans and would ultimately benefit from the improvements.

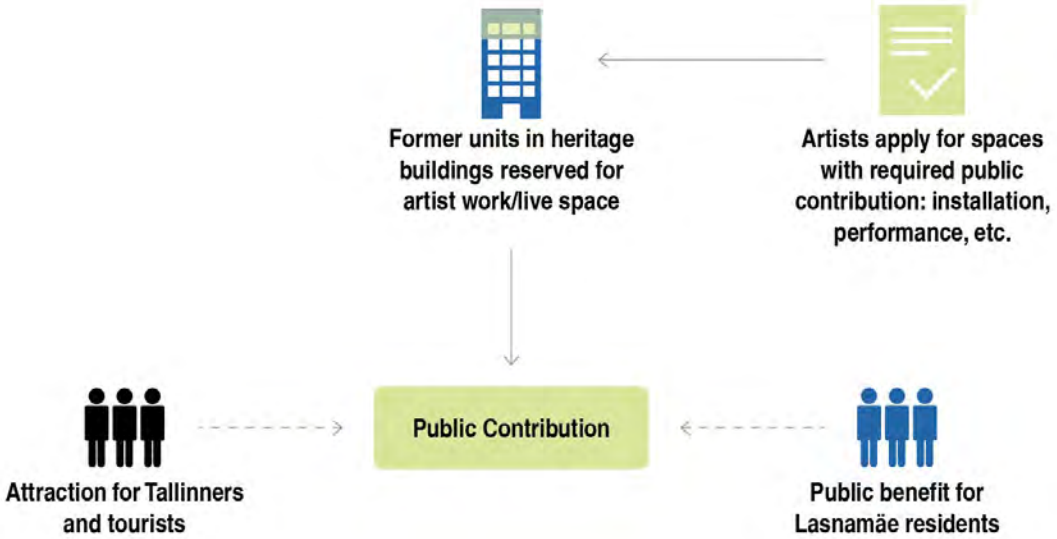
Major Actors: Each of the six mechanisms relies on a combination of the following major actors, playing various roles:
1: Tallinn City
2: Private Developers
3: Condo Associations
4: Co-operative Organizations
For a couple of the mechanisms, the public sector would be the primary actor. The tram is the strongest example of this because the public sector would be providing the funding and doing the development for it. However, for other mechanisms, it is up to the public sector to create an environment that encourages other actors and then ensures positive outcomes through regulation. Examples of these kinds of mechanisms include: creating incentives for developers to build replacement housing and finance open space, for condo associations to give up current properties in exchange for others, and for artist co-operatives to take up residence in converted buildings and manage them.



Replacement Housing: Lasnamäe has an aging housing stock, which will have to be replaced at some point soon. But we want to make sure that this can happen without the existing populations being displaced. We looked at Vienna's social housing model which uses private development on public land to achieve high ratios of affordable units.
We envision a Tallinn Housing Authority that oversees the public-private development and matches residents with replacement units. Unlike in Vienna, most Lasnamäe residents own their apartments. So rather than rentals, the new units will be limited-equity ownership and eventually sold below market rate back into the pool of replacement units. In exchange, building associations turn over older buildings to public control, either for new residential development or for preservation and new uses.

Replacement housing will allow for some new residential typologies to be built, such as townhouses and non-panel high-rises. In the background of this view, you can see in the back a preserved former residential building. We'll get into next how that could be reused next...

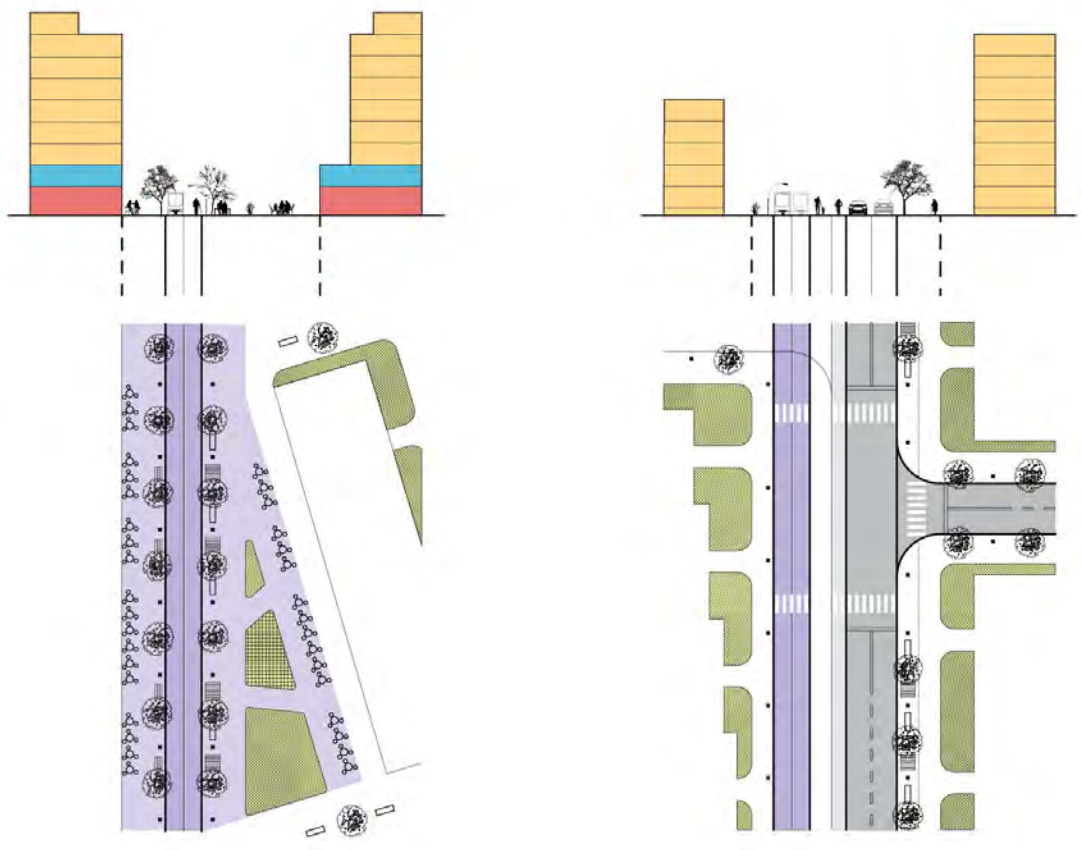




New Uses: Heritage buildings that become vacant after former residents move into replacement housing could have a variety of new uses. These uses could include space for artists-in-residency, entrepreneurship, and community facilities. In order to encourage these uses, these publicly-controlled buildings would be affordable for the new tenants: either free or subsidized.
Walking through an example of one new use: an artist in residency program would offer live/work space for artists making a public contribution, like installations for performances. For inspiration of how a program like this could work, we looked at Boston's ArtistSpace program which provides free work/live space to artists and artist coops.

A typical prefabricated Lasnamäe residential building like this one will find a second life as a totally mixed use building, with new programs like co-working space, workshops, commercial, and more.

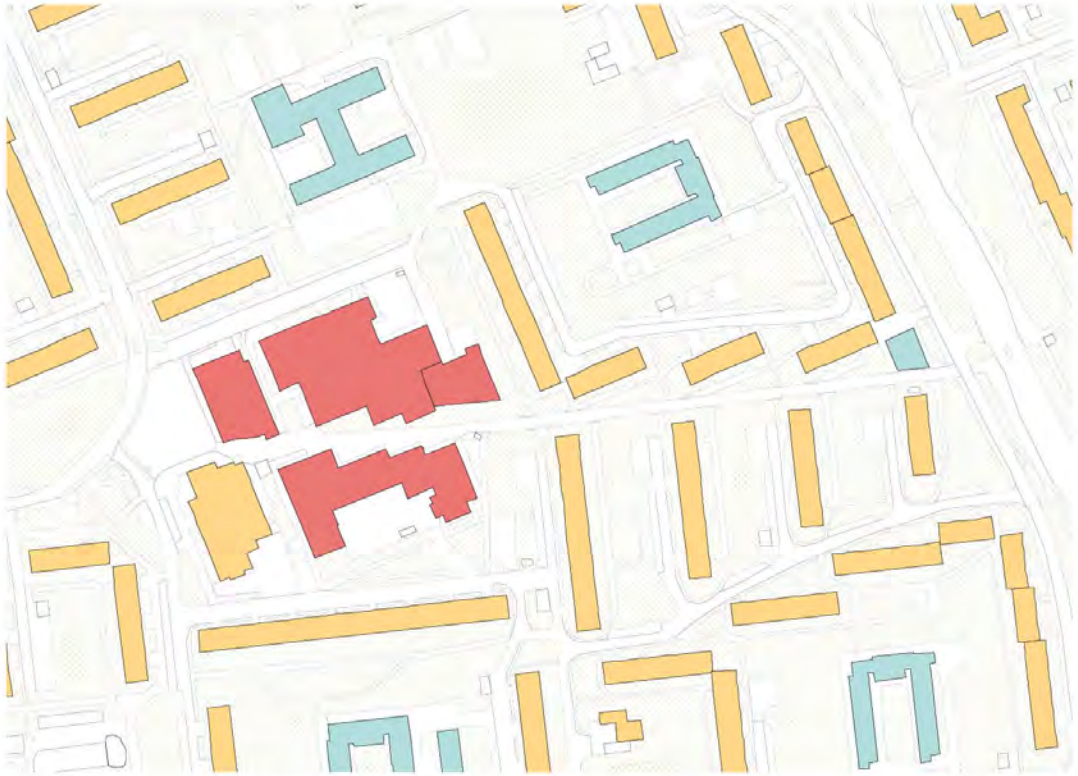
Tram: Right now, Tallinn's trams only reach a small part of Lasnamäe. We suggest three new tram lines that could connect Lasnamäe's centers and comprehensively provide access to the district. Instead of putting the tram into the channel, as in the original Soviet plan, these trams weave through the neighborhood, bringing passengers directly into Lasnamäe.
This project does not rely on the building of trams in Lasnamäe; however, it would create the following benefits:
1/ Linking centers in Lasnamäe to one another
2/ Allowing the rest of the city (including the millions of tourists arriving at the port every year) better access to Lasnamäe
3/ Raise land values there (much of which is publicly-owned) to attract developers of replacement housing and other forms of development.



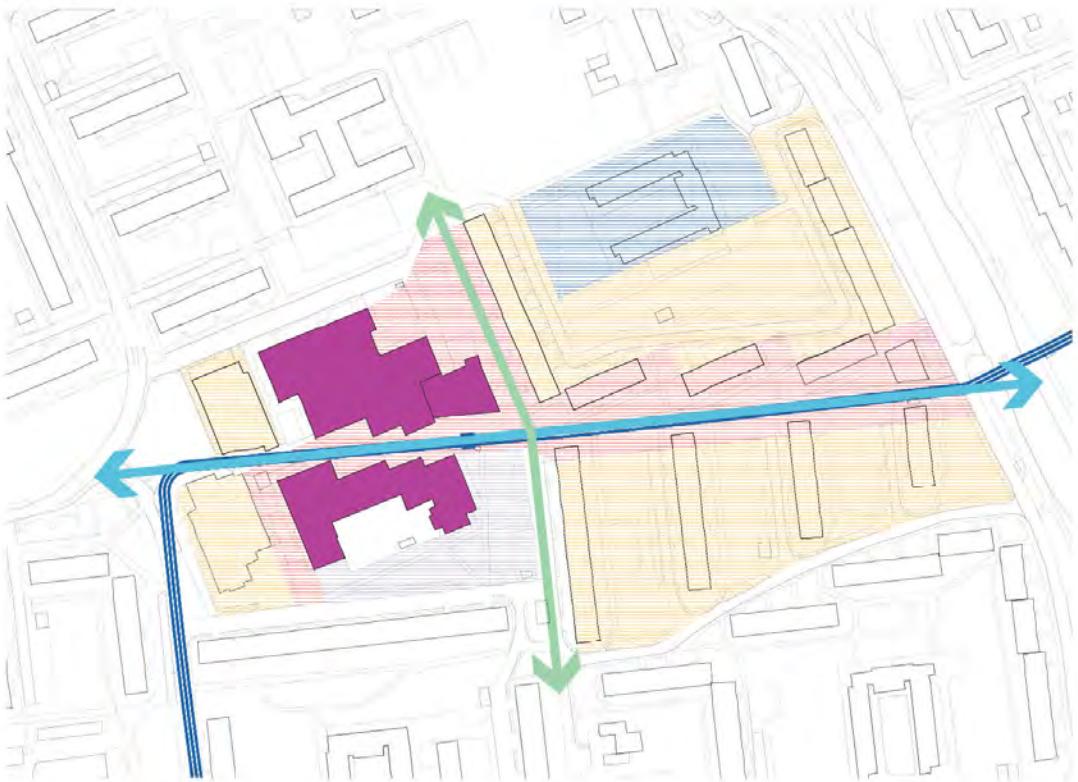
Tram Sections: The sections show two examples of how the tram would navigate through Lasnamäe: a pedestrian way through Pae Center (left) and on a residential street (right). In centers like Pae, the tram is part of the pedestrian street and easily crossed from both sides. On residential streets, a street diet reduces the number of cars and creates new bike and pedestrian ways.

As Lasnamäe's trams weave through the neighborhood, they creates opportunities for mini-centers to emerge. Some underground shops can occupy ground floor space and businesses can occupy space in the tram stops.

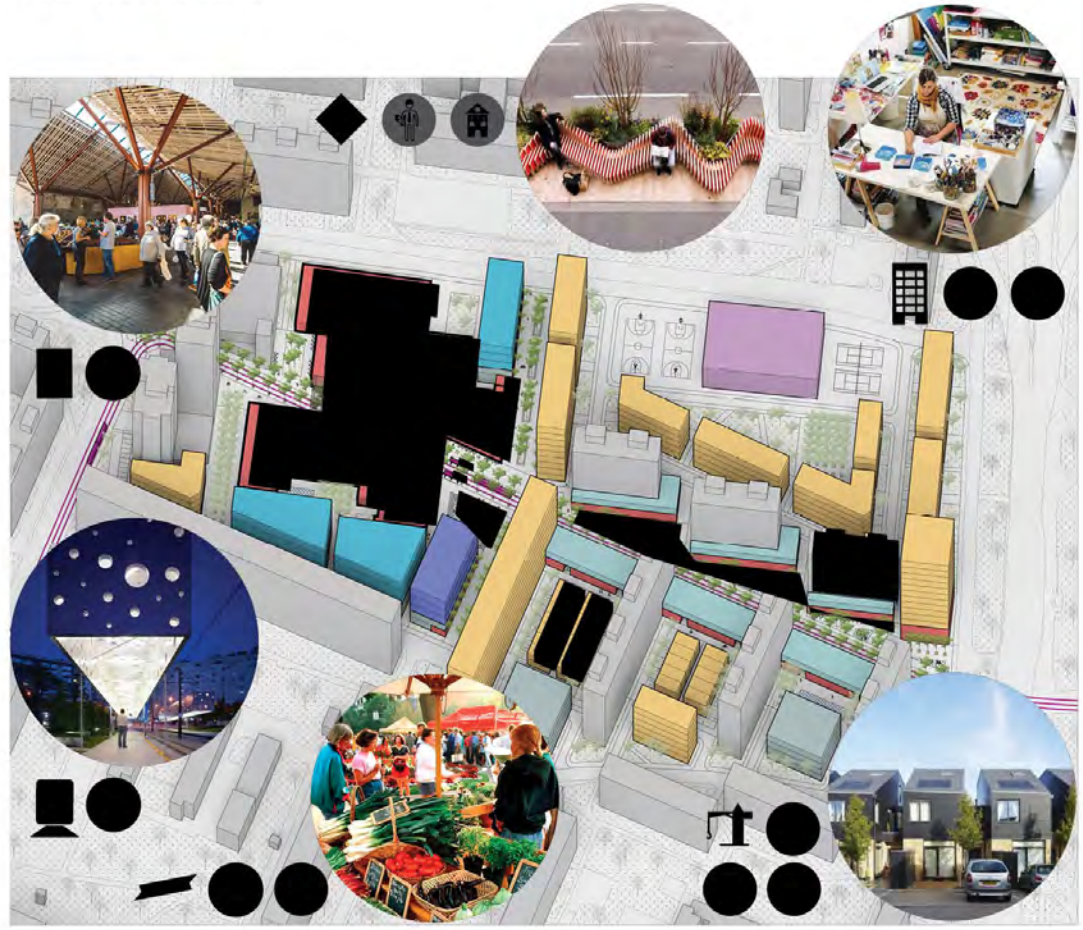
Pae: Existing



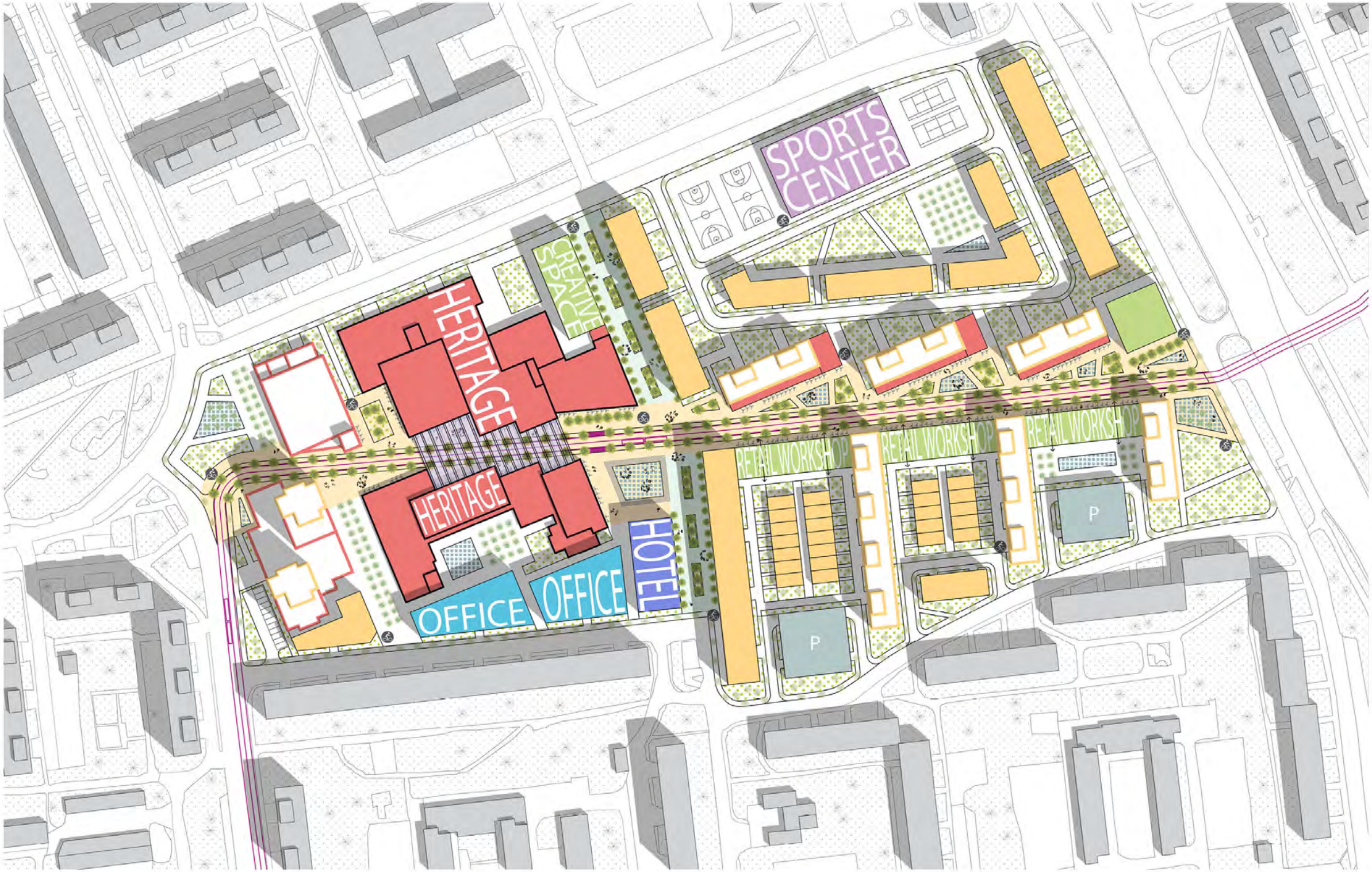
Pae: Center Structure



Pae Center Axon & Mechanisms



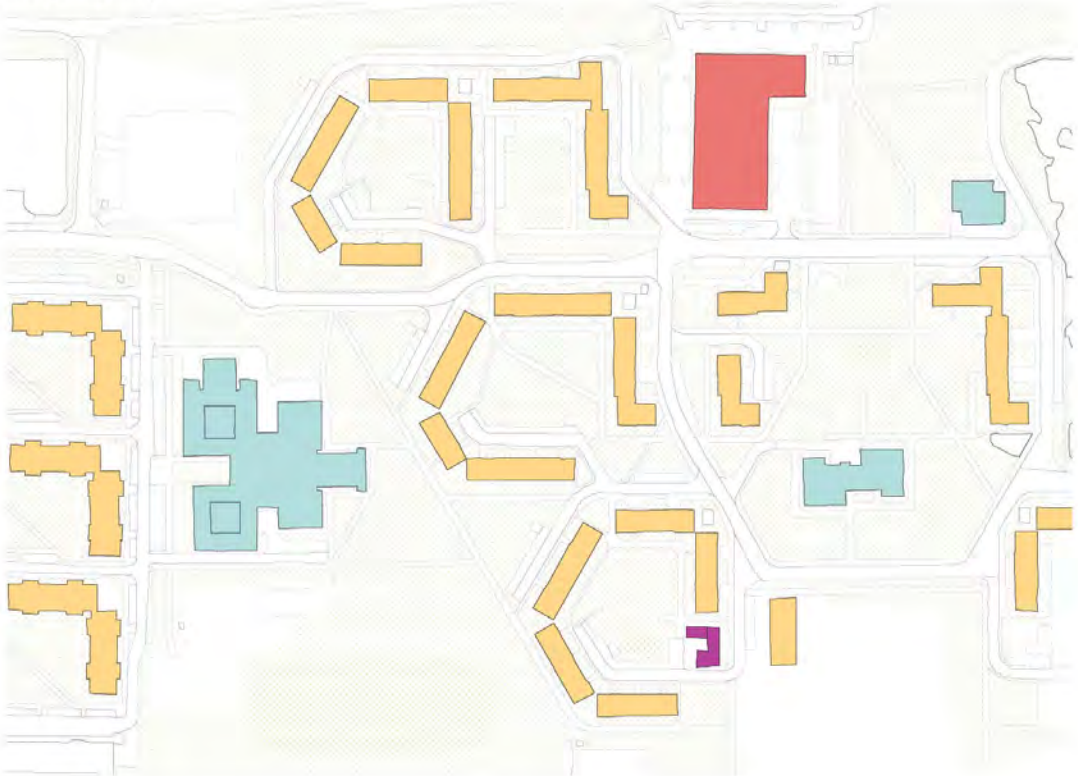
As described, there are four main actors in the mechanisms used in each center: Tallinn city, private developers, condo associations, and co-operative organizations. For the development of each piece of our design, we envision each actor will play certain roles.
Tallinn city will take the responsibility for renovating the heritage site with collaboration with the private owners who control parts of the site. A roof is added to the shopping center, creating a covered market. For many infill buildings and replacement housing, private developers will be the main actor with some public incentives provided. The new housing uses new typologies like infill townhouses. Condo associations will also play a role in these developments by moving into the replacement housing and freeing up their current properties for heritage preservation or redevelopment. Heritage apartment buildings are used for workshops and other subsidized uses. Podiums are built around them, used for retail and office space. Tallinn city and co-operative organizations will mainly participate in the creating these new uses.
The tram lines with tram stops designed by Tallinn architects will be a public investment. In Pae Center, the rails go through the pedestrian street, so pedestrians can easily cross it. The pedestrian street is improved with street furniture, planting, and small plazas. The city will incentivize private developers to create these open space improvements. Civic groups can use local grants to run programs in the open space, like farmers markets.



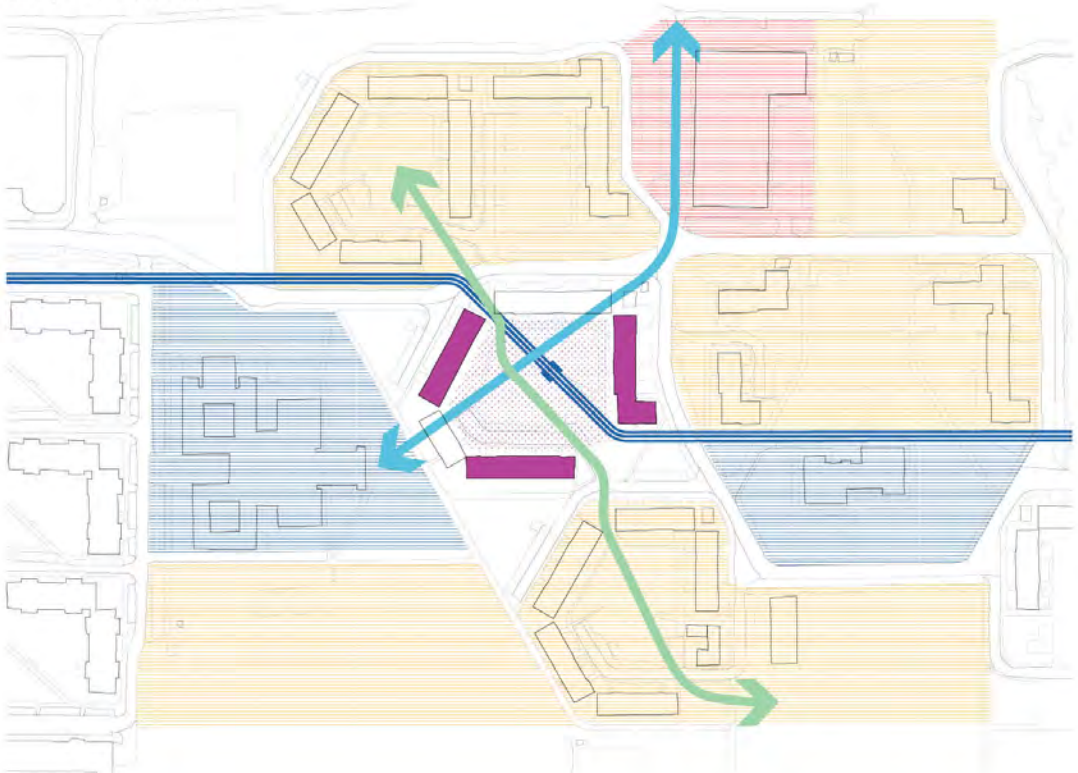
Pae Center Plan: Pae is an existing commercial center. It has a pedestrian street, and it is surrounding by residential buildings. In terms of the design, we identified the commercial center as an important heritage site. The center is organized on two axes: a public access and a leisure access. Office space is planned for this area and so is a sports facility where an unused school is located. Our plan renovates the site and creates potential for positive development.

Pae Center View : This is a view of the covered walkway through the shopping center at Pae. Creating a covered market area like the one we envision takes public/private collaboration. Private owners would ultimately benefit from this vivid, walkable atmosphere, and transit accessible environment.

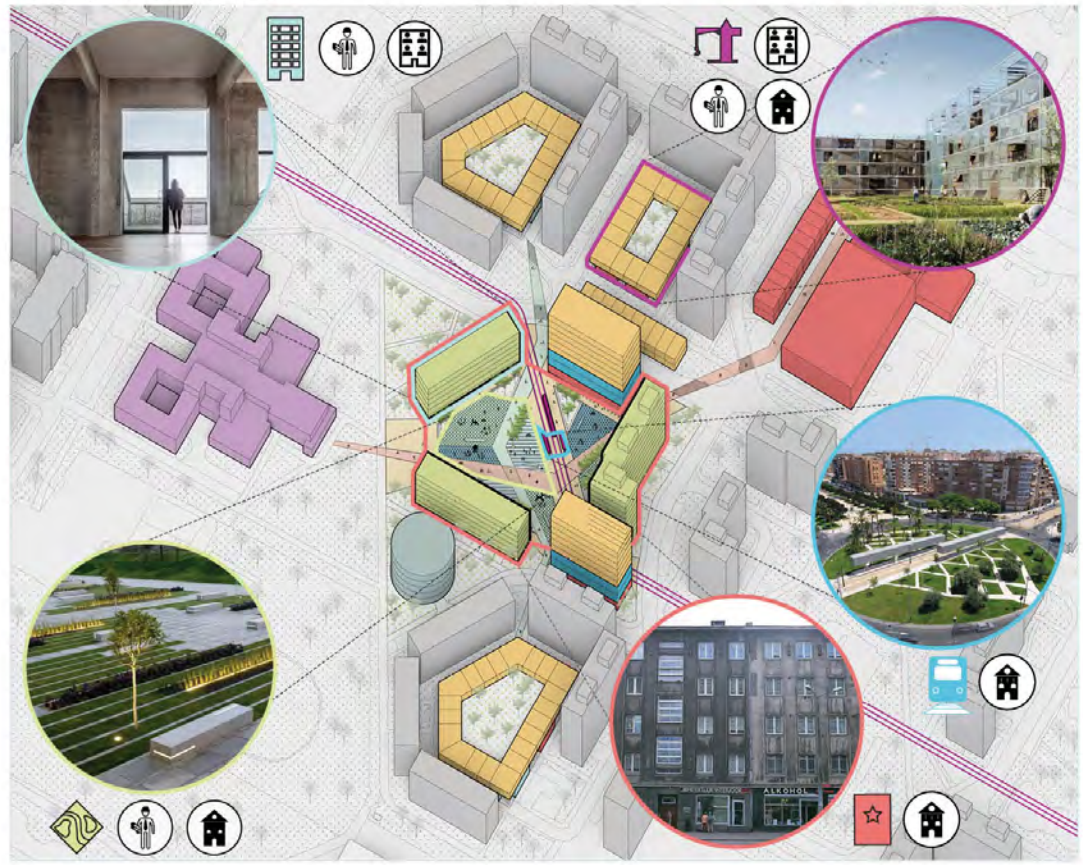
Courtyard: Existing



Courtyard: Center Structure

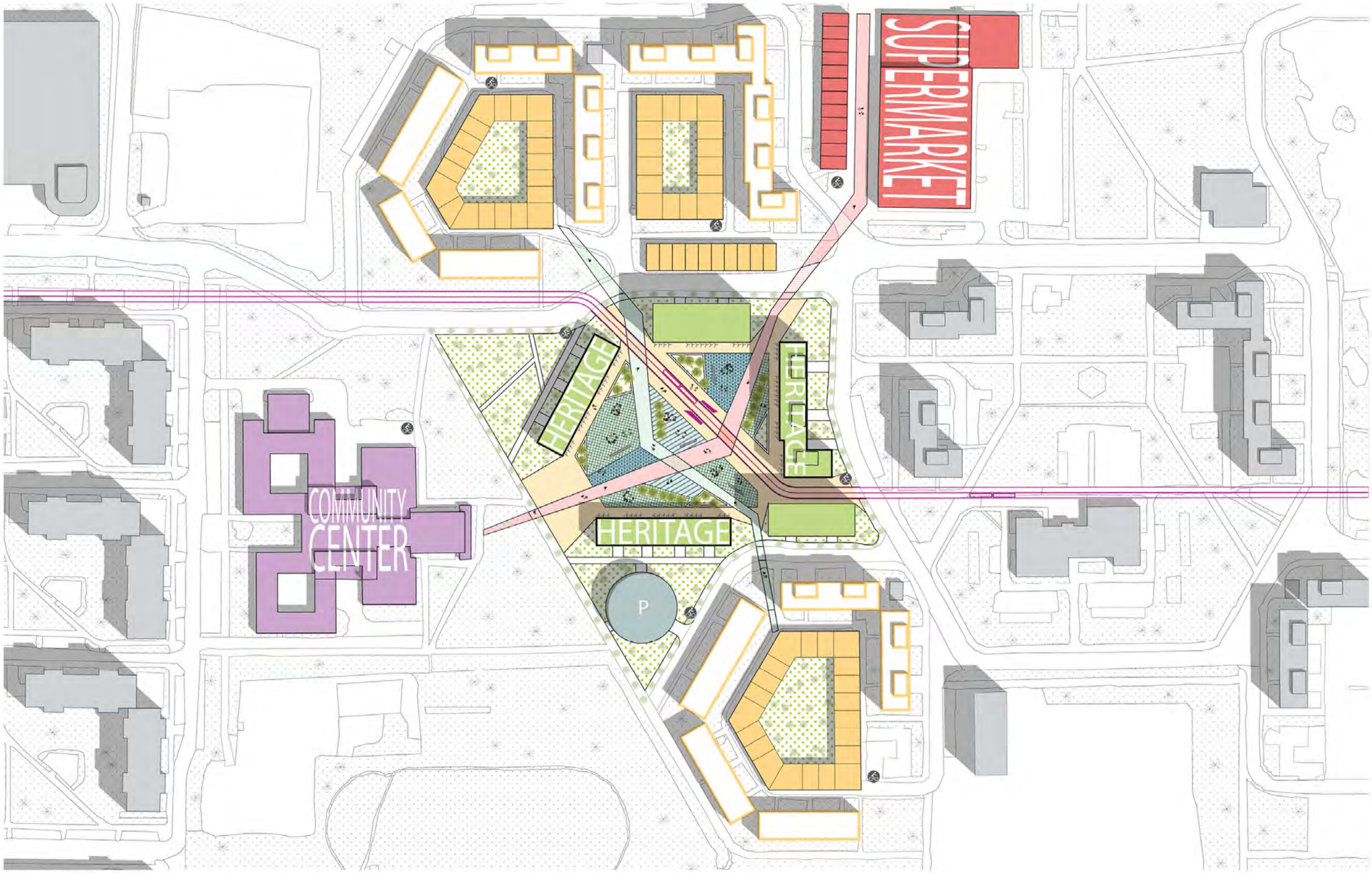


Seli Courtyard Center Axon & Mechanisms



Here, we see new uses in a heritage building: the former apartment building becomes gallery space. As a heritage site, some classic examples of panel housing are preserved. Even after the rest of this area is redeveloped, an example of housing at this time will remain. New replacement residential development is built in the courtyards. The tram goes through the courtyard with another distinctive tram stop. The plaza's interesting landscaping is an attraction of its own.

Again different combinations of the four major actors are involved in creating this new space.

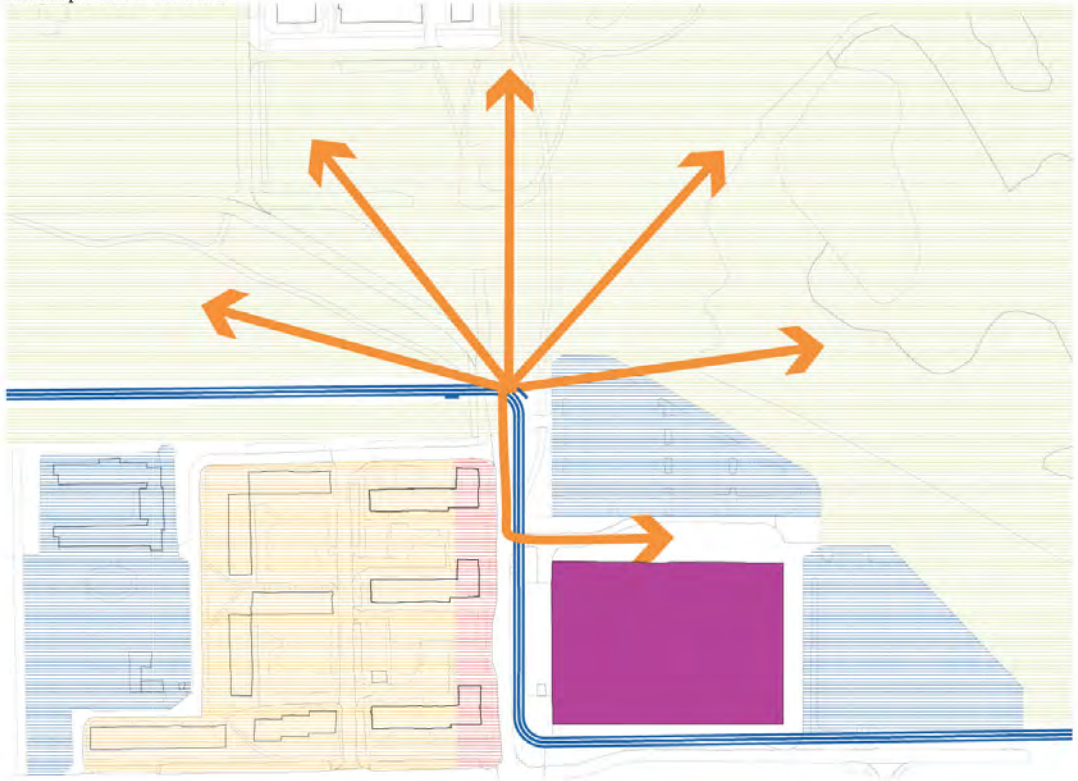


Seli Courtyard Center Plan: This center shows how our approach works in a typical residential site. There are residential courtyards, a former public building, and a store. In this center, the heritage preservation site is the residential courtyard: the buildings and the plaza. The leisure access goes next to the tram, and the public access connects the store space and the public building. The plan preserves a typical Lasnamäe courtyard and allows tram passengers to ride through it.

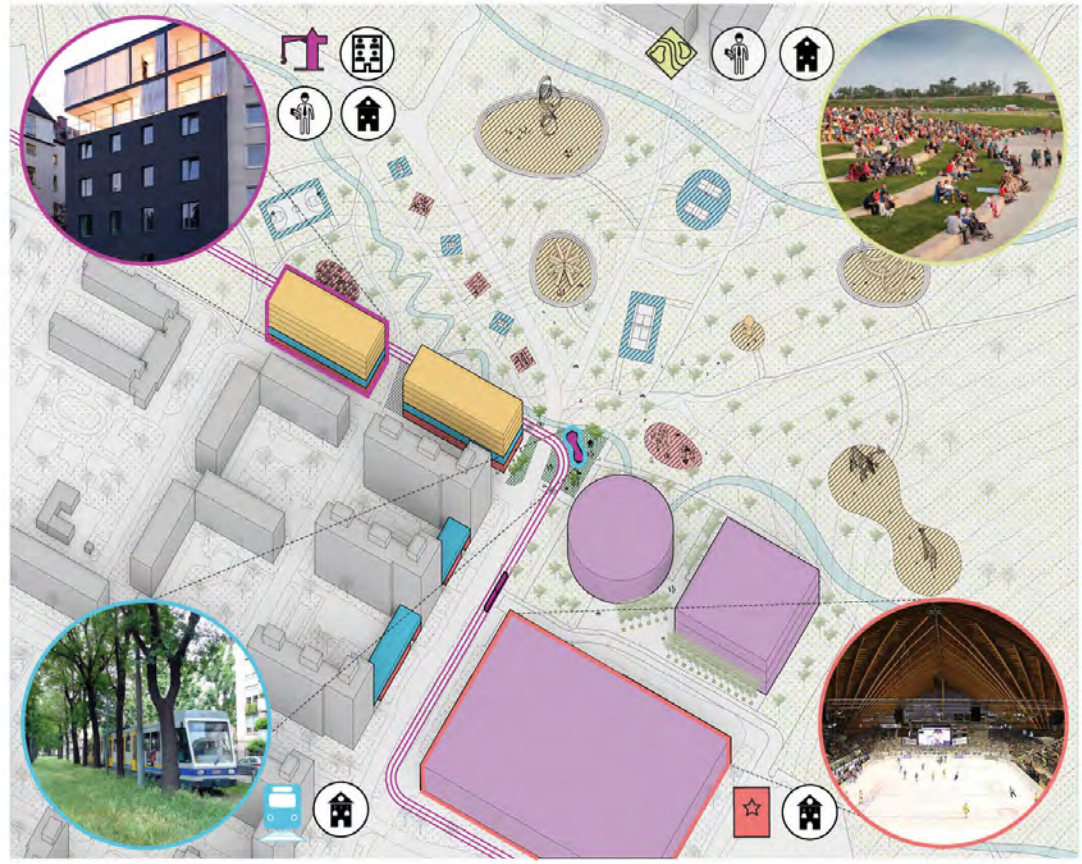
Seli Courtyard View: Around the courtyard, there are preserved, renovated, and new-built buildings. The courtyard itself is an attraction and gathering space.

Landscape: Existing

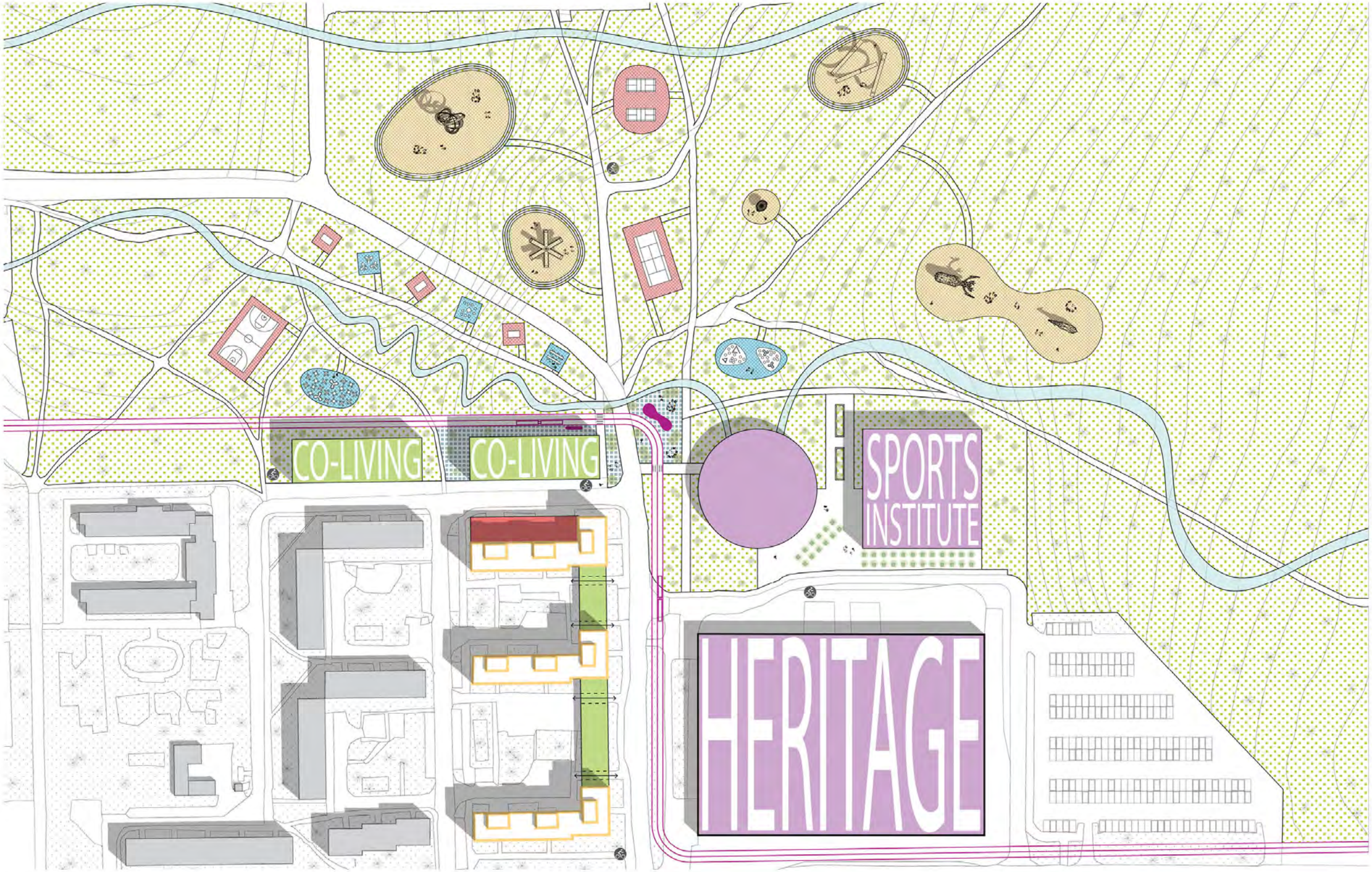
Landscape: Center Structure



Tondiraba Landscape Center Axon & Mechanisms



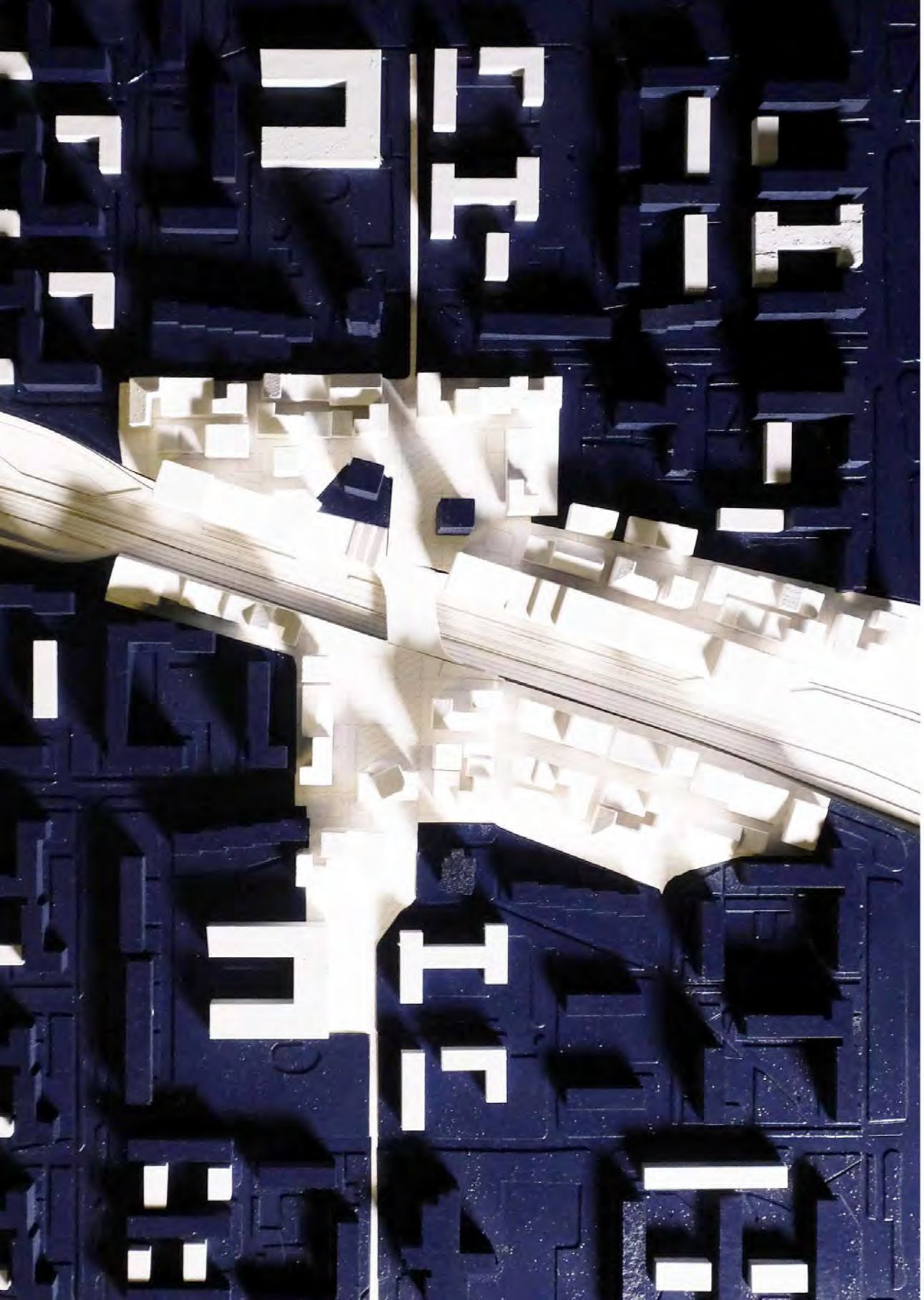
Tallinn City will mainly invest in the tram and sports facilities. Partnering with the city, developers will invest in major landscape improvements. In return, they can take advantage of land parcels which are close to the landscape and tram stops. As in other centers, this center creates opportunity for more replacement housing.



Tondiraba Landscape Center Plan: This center is next to a big, unlandscaped park. A new ice arena is also there: called "the most beautiful cement building in Tallinn." The tram goes next to the park, and a recreation access goes between the ice arena and the park.

The plan shows some new developments near the arena which help with form a sports park. In the landscape, art installations, sports fields, and outdoor leisure spaces are introduced. Moreover, the blue pathway which is a jogging route during summertime, and a countryside ski route during winter time is designed to emphasize

Summer Landscape View: In the summertime, citizens and tourists can visit art installations in the landscape.



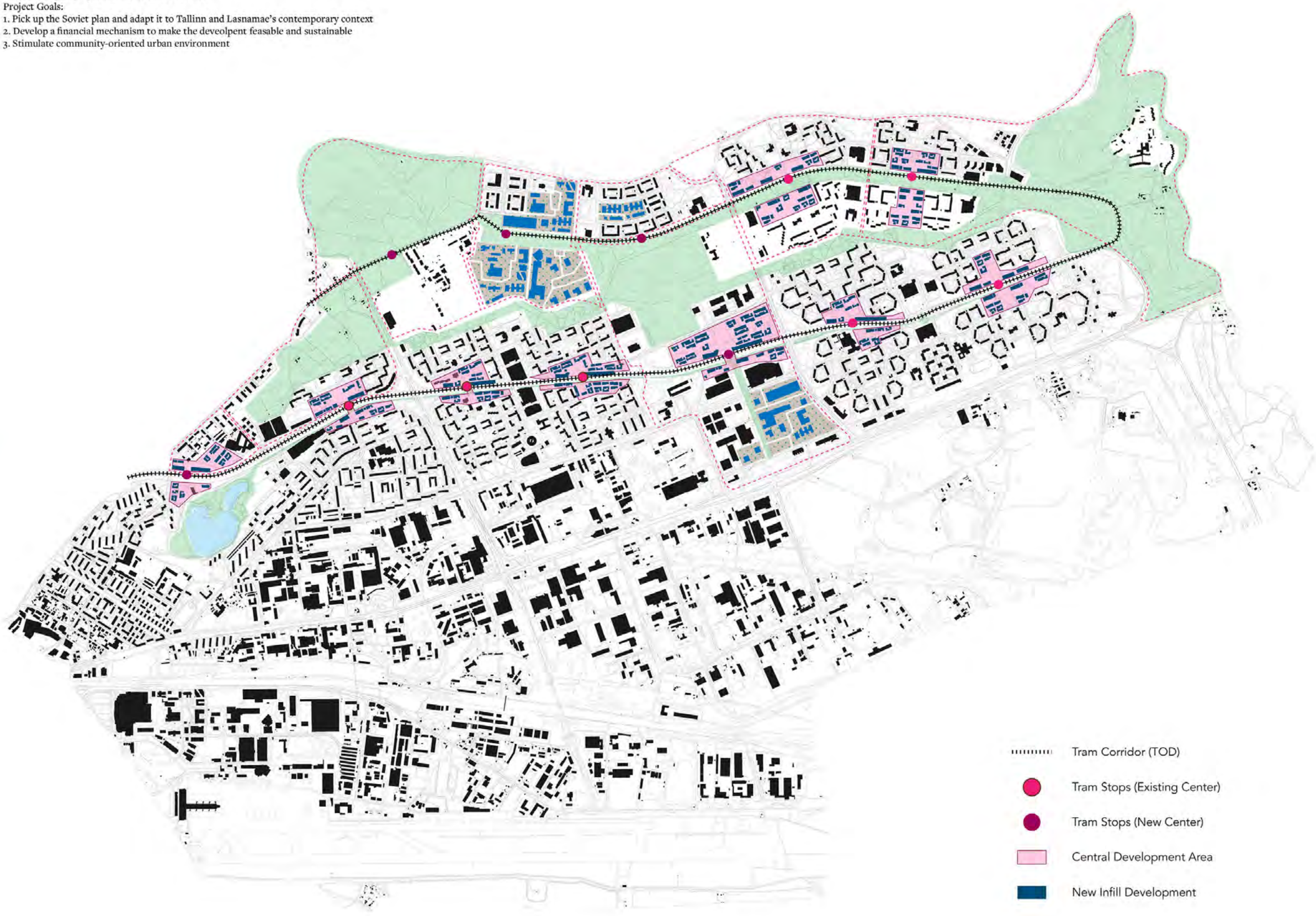
REVISITING LASNAMAE:

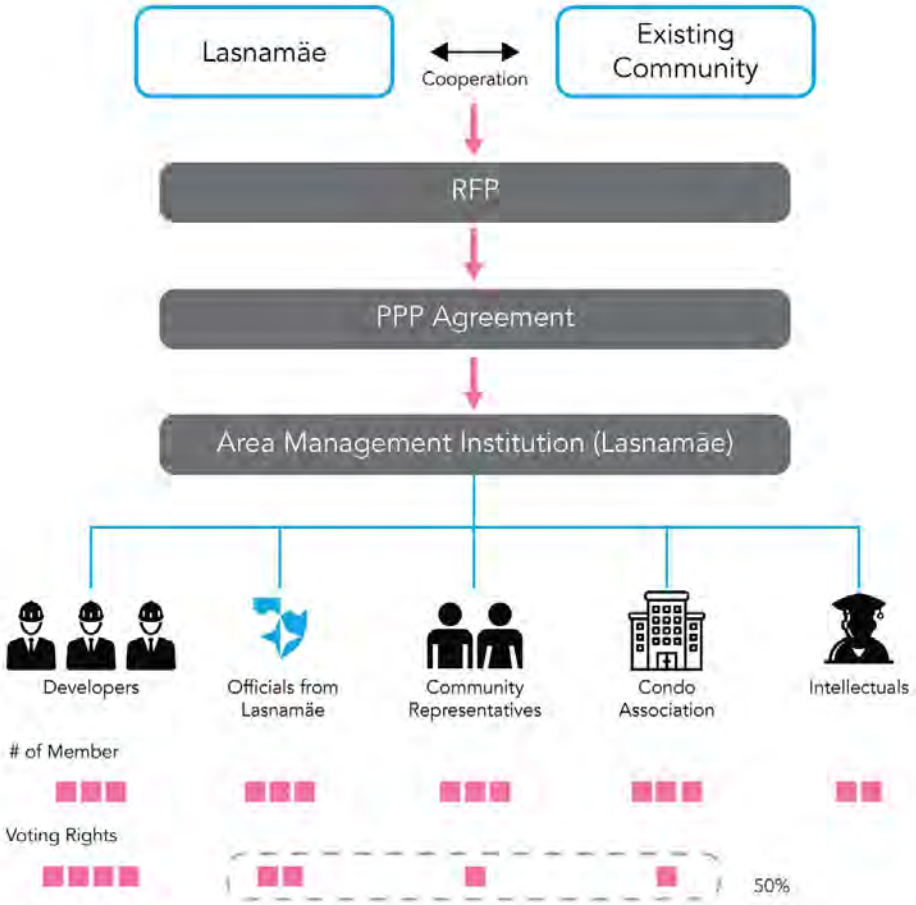
A 21st Century Response to the Soviet Plan

Arlyn Ramirez-Diaz
Takafumi Inoue

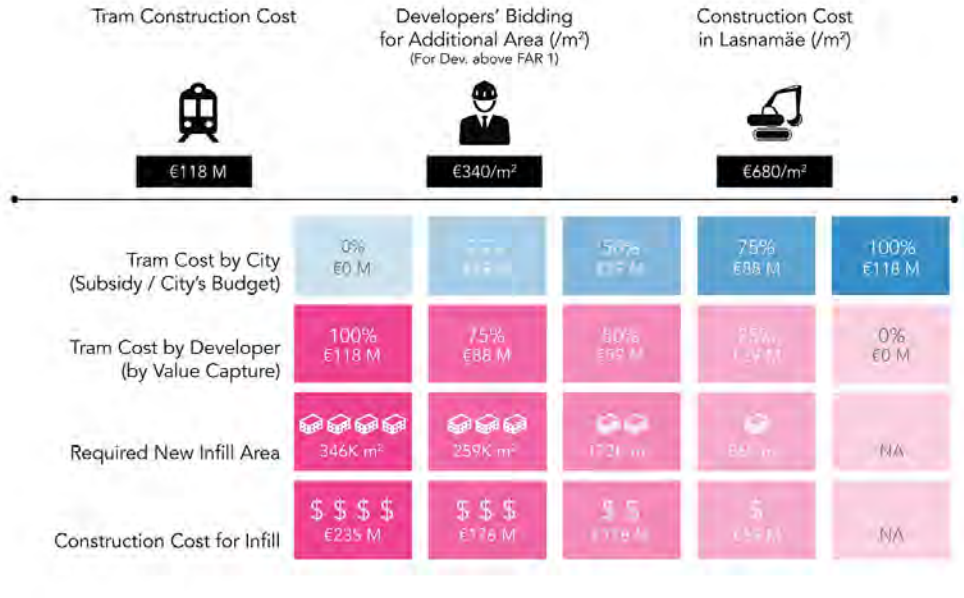
This project draws inspiration firstly from Eliel Saarinen's 1913 Grand Master Plan for Tallinn: from its proposed 4-mile long sunken channel, mass transit system and civic squares. Second, it also builds upon the 1970's Soviet Master Plan for Lasnamae. Despite these plans great intentions, upon the fall of the Soviet Union and Estonia's imminent independence from Soviet occupation, Lasnamae was left unfinished and is now considered a dormitory district as only residential buildings were built and its subcenters remain disconnected from the very thing that was intended to connect them. " Revisiting Lasnamae" aims to continue with the progressive and ambitious principles drafted in 1913 and 1970, but revisiting them in order to address Lasnamae's and Tallinn's contemporary needs and context.

1:10,000 Map of projection of the entire district
Project Goals:
1. Pick up the Soviet plan and adapt it to Tallinn and Lasnamae's contemporary context
2. Develop a financial mechanism to make the deveolpent feasable and sustainable
3. Stimulate community-oriented urban environment



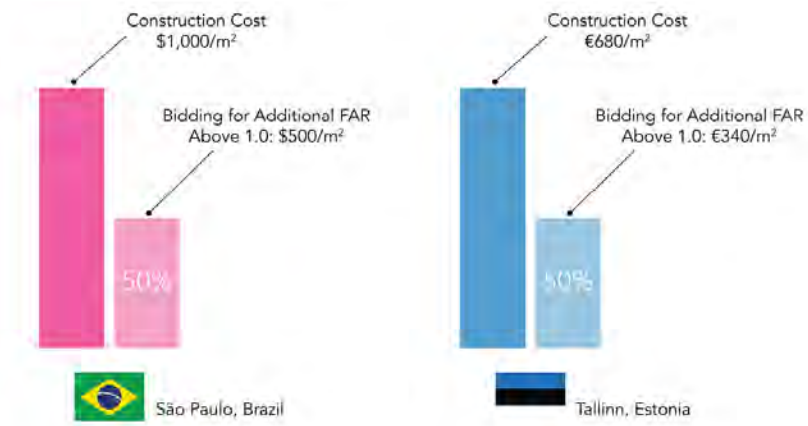


Tram Development Cost and its Financing



Assumption

Tram Line Length: 14km
Tram Stops: 12
Acquisition of Rolling Stock: 14 Cars (1 Car/km)
Indirect Cost: 20% of the Entire Cost



Laagna micro-center site limits.

Laagna micro-center public land (blue) versus private land (white).

Laagna micro-center walkshead analysis.

Laagna micro-center land use: site selection based on primarily commercial use parcrels (blue) and publicly accessible land (pink) and minimal residential intervention (orange) to prevent current resident relocation as much as posible.

Laagna micro-center heirarchy of transit networks to follow the original mi-crorayon shceme.

Laagna microryon re-zoning for new infill: Zone A (in pink).

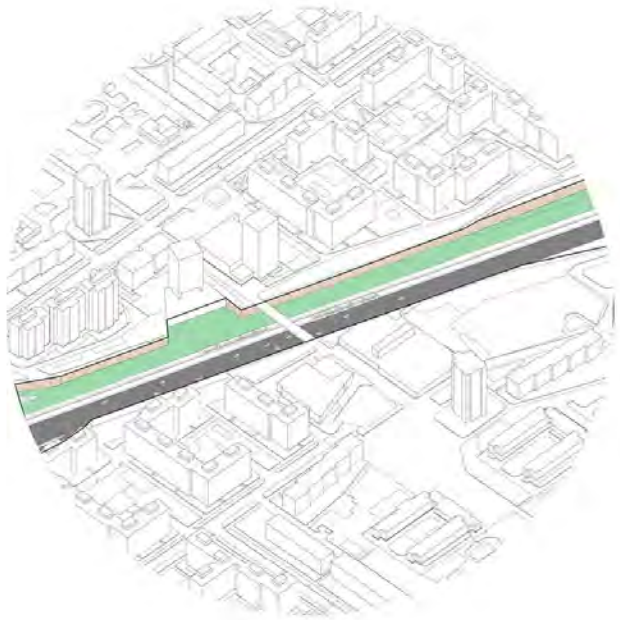
Laagna microryon re-zoning for new infill: Zone B (in blue).

Laagna micro-center land readjustment to creat a finer grain in the urban fabric.

0 Tram Development

~1 yr

Step 0: Tram development.



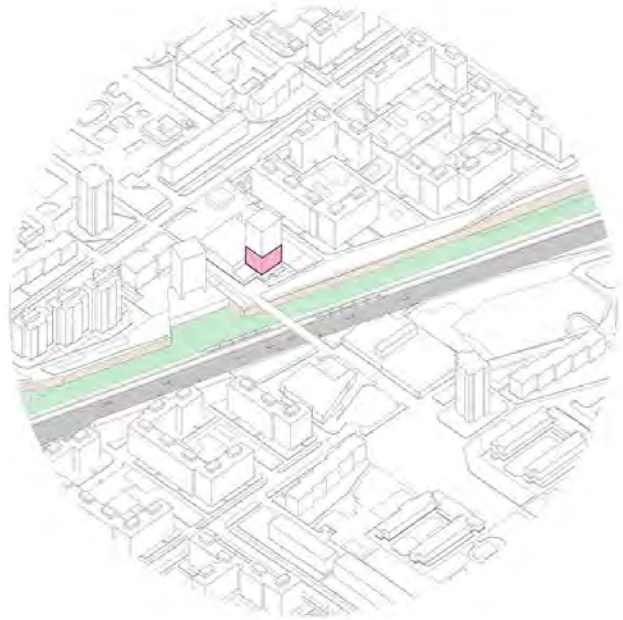
Supporting density for tram development in Lasnamae.

Source: ULI "Ten Principles for Successful Development Around Transit" (2012)

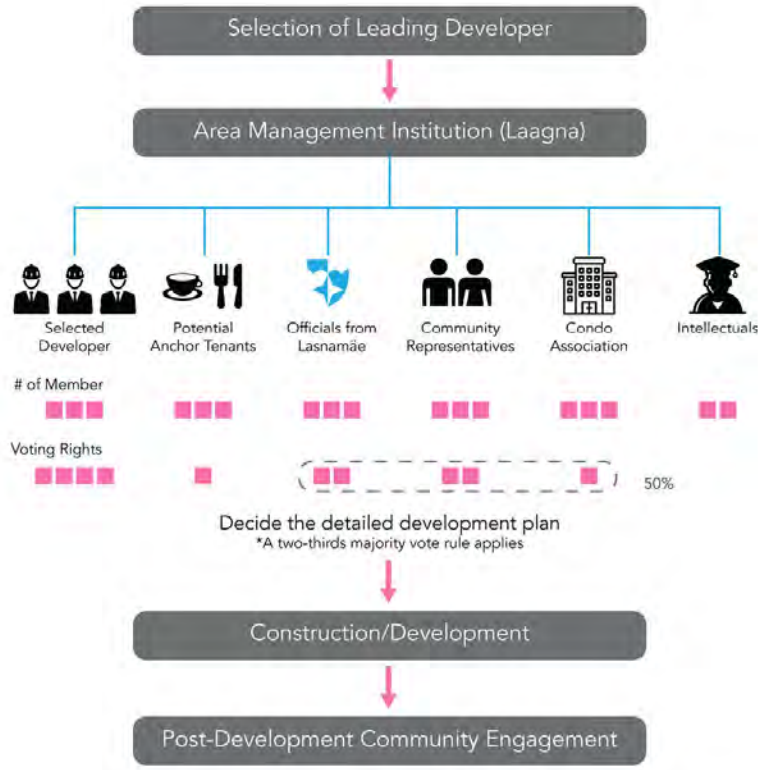
1 AMI

~1 yr

Step 1: Implementation of an area management institution.



Area management institution structure and phasing for each center.

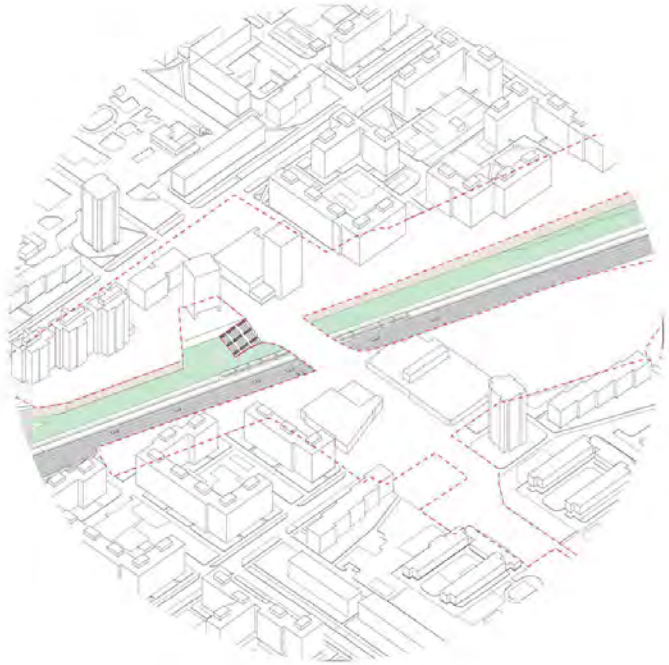


2

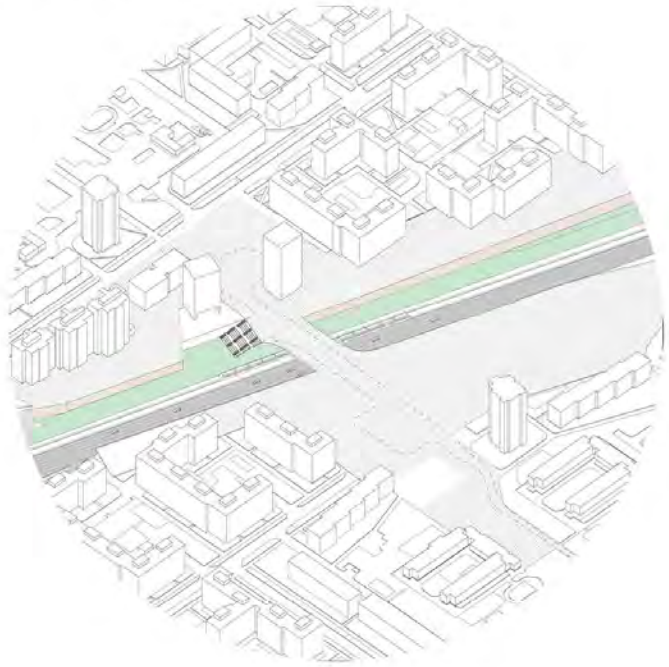
Enhancement of Pedestrian Bridge
& Public Spaces

~ 6 months

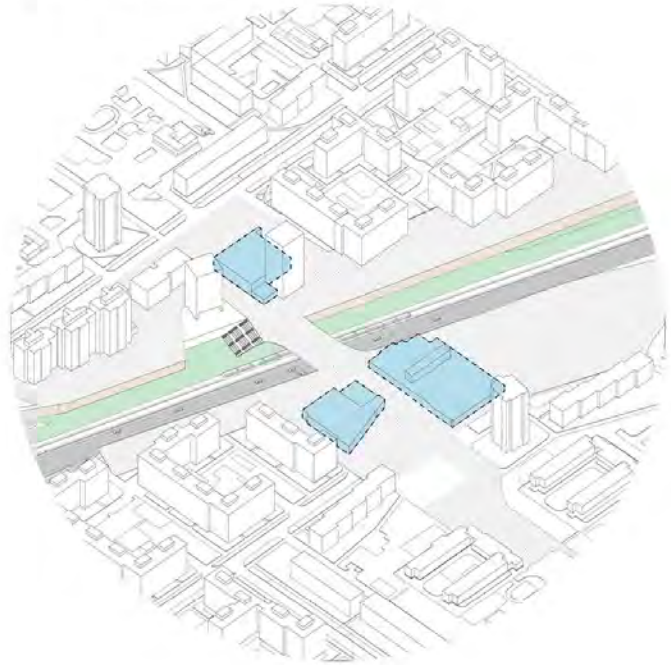
Enhancement of pedestrian bridge and public space.



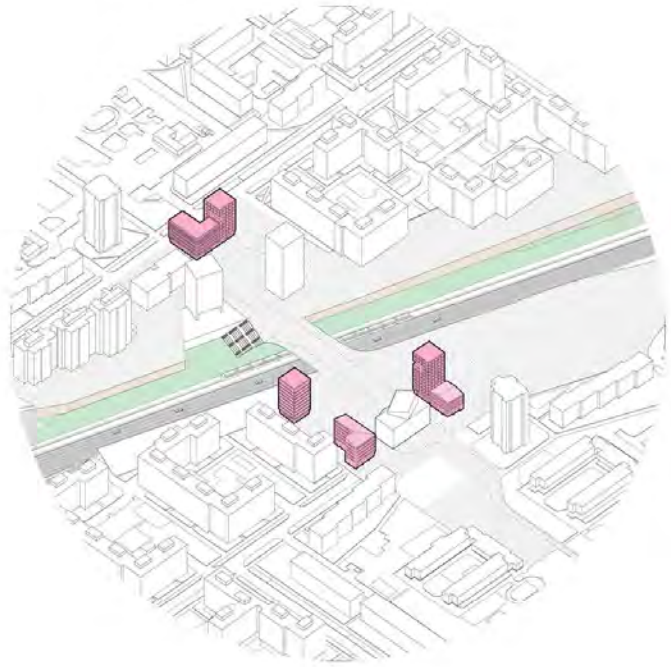
Box market buildigns are assumed to be phased out first to give way for the public spine.



Box market buildigns are assumed to be phased out first to give way for the public spine.



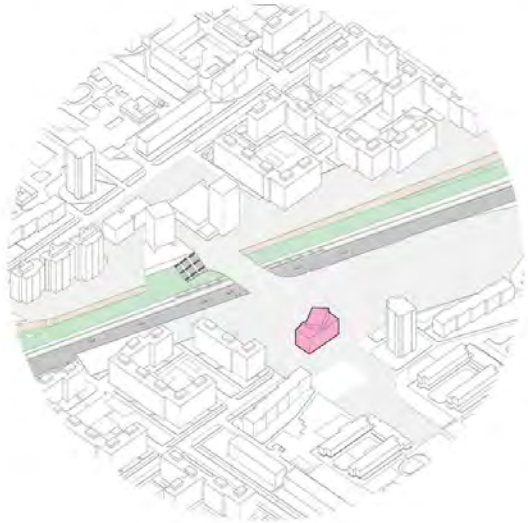
Framing of public space with new infill.



3 Introduction of Anchor Programs

~ 6 months

Introduction of anchor tenants.

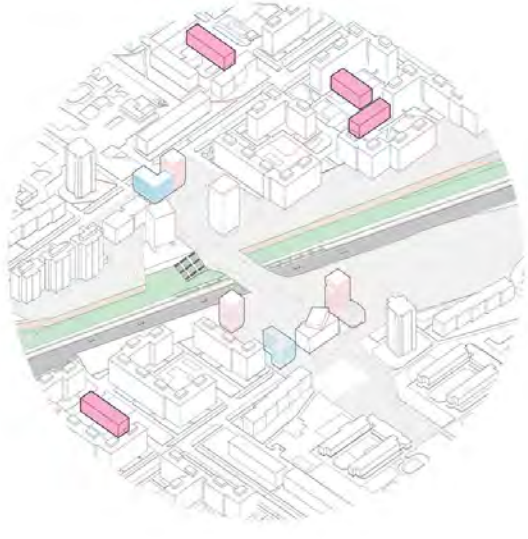


Program for each anchor is to complement cultural practices and activities so as to provide identity to each micro-center.

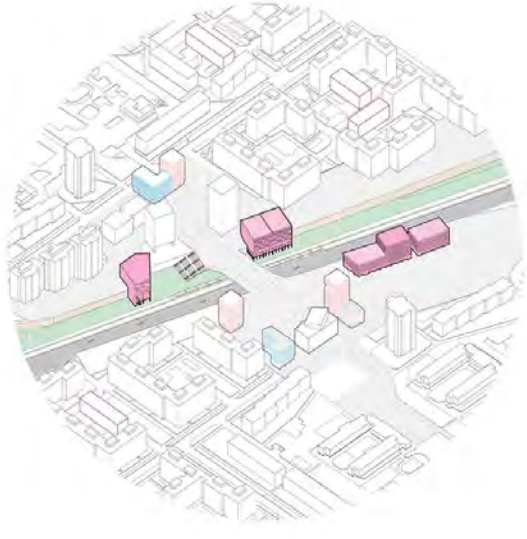
4 Residential Development in zone A&B

~1 yr

Residential in zone A.

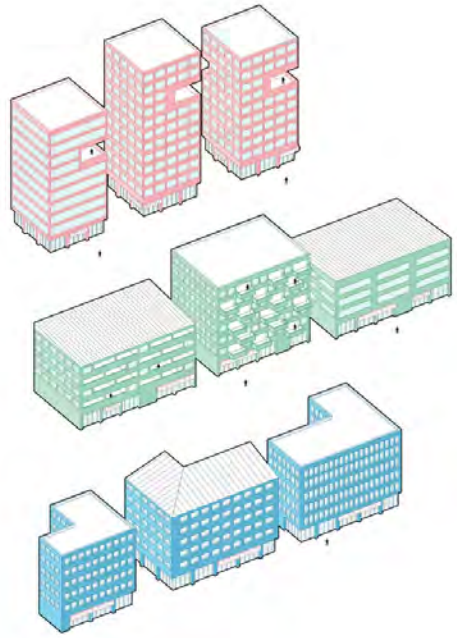


Residential in zone B.

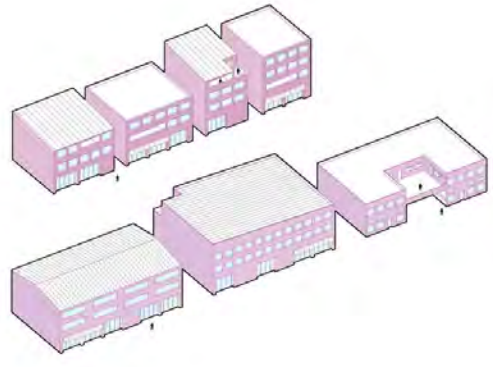


4 Residential Development in zone A&B

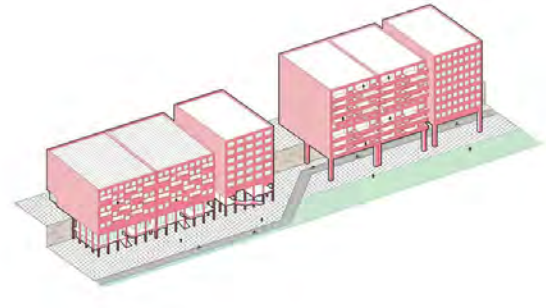
~1 yr



Medium to High Density
10% Public + Institutional
10% Amenity
10% Retail
30% Residential
40% O ce + Commercial

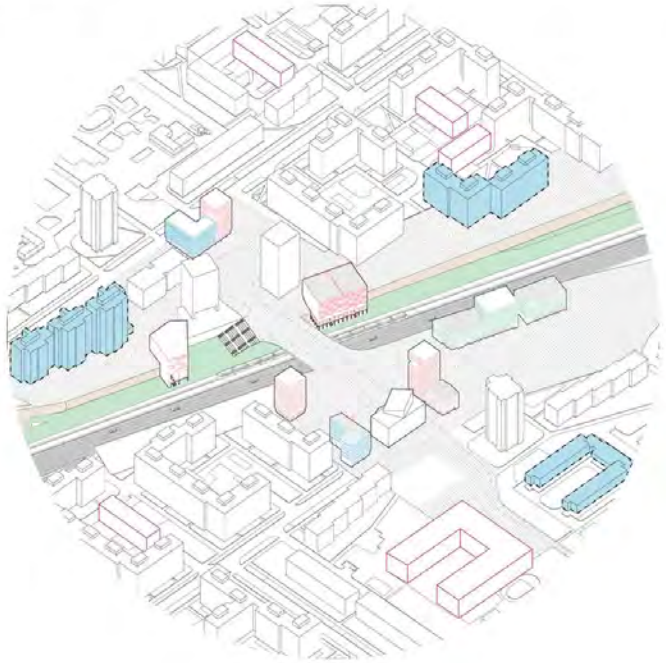


Low Density
0-20% Retail
80-100% Residential

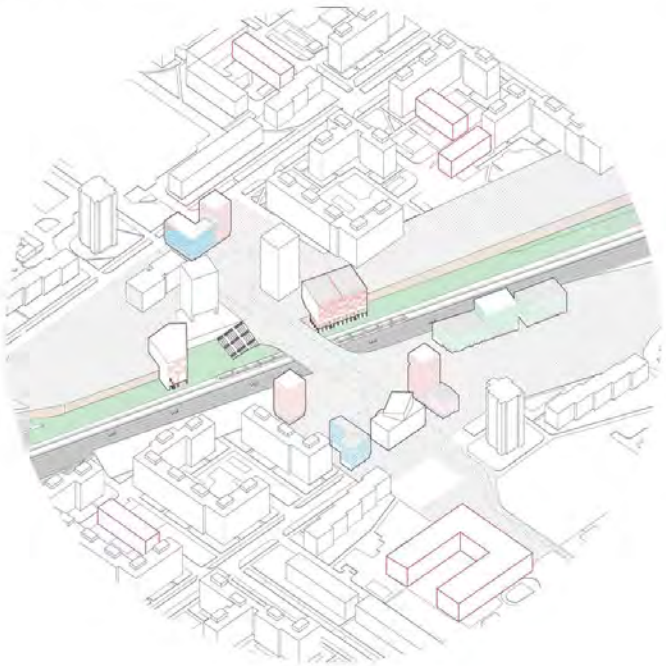


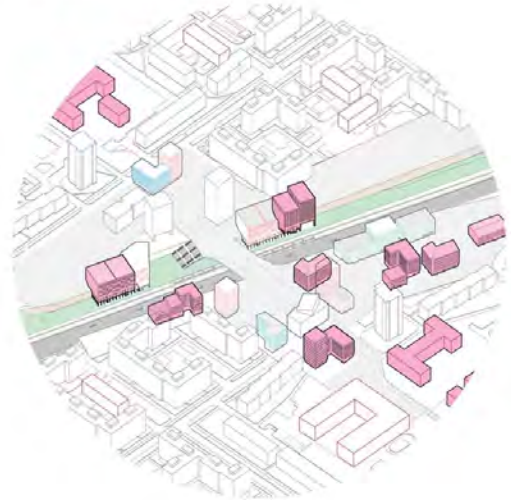
Canal In ll
10% Public + Institutional
10% Amenity
10% Retail
30% Residential
40% O ce + Commercial

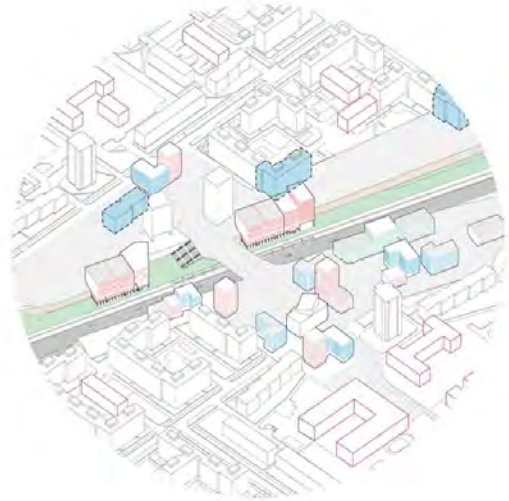
Demolition of designated buildings in blue, with residents relocated to newly built zones A.

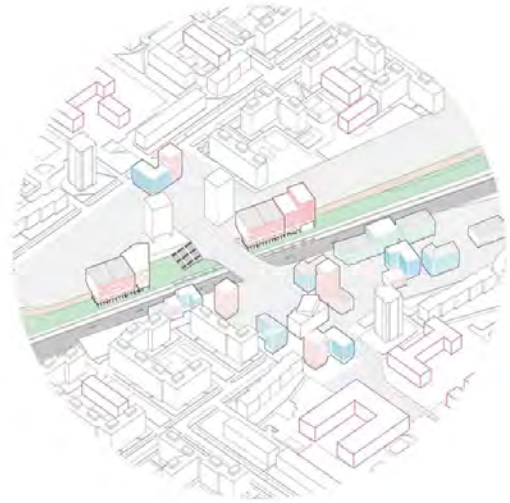


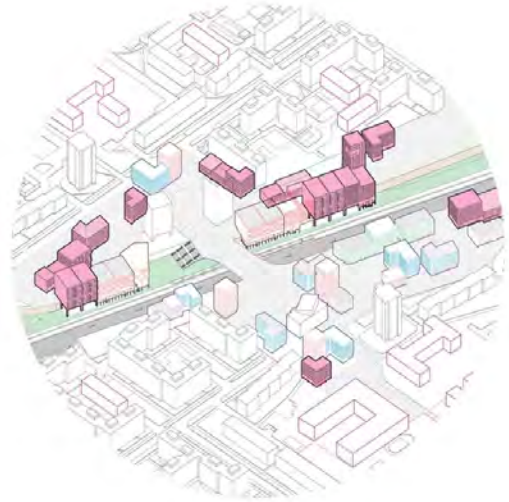
Demolition of designated buildings in blue, with residents relocated to newly built zones A.

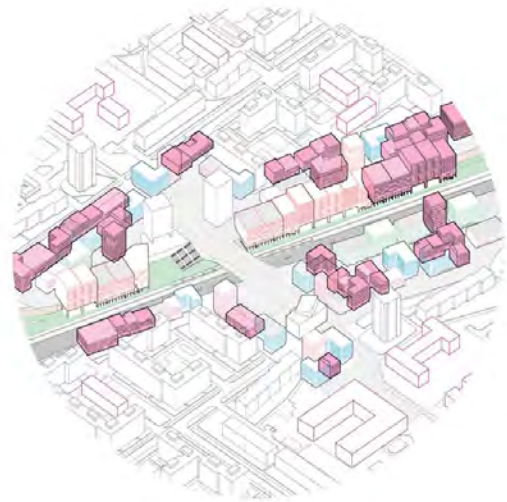


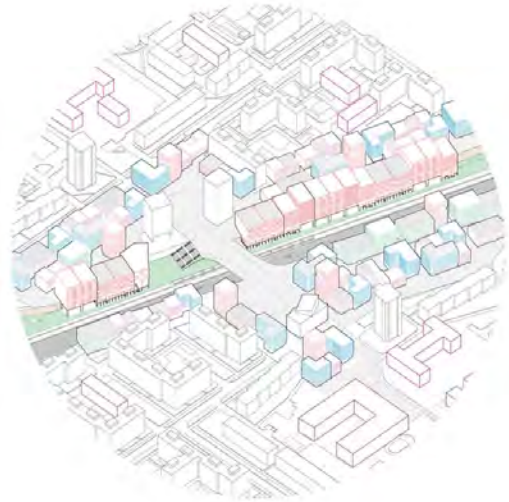






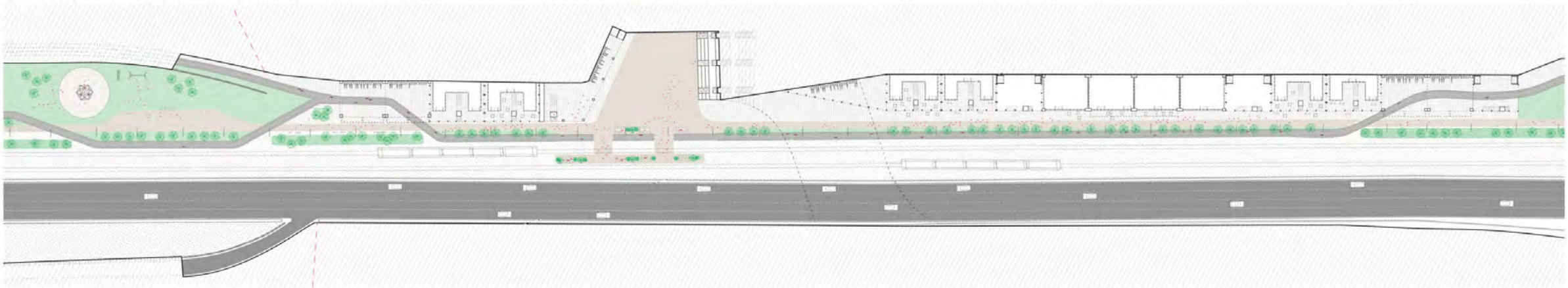




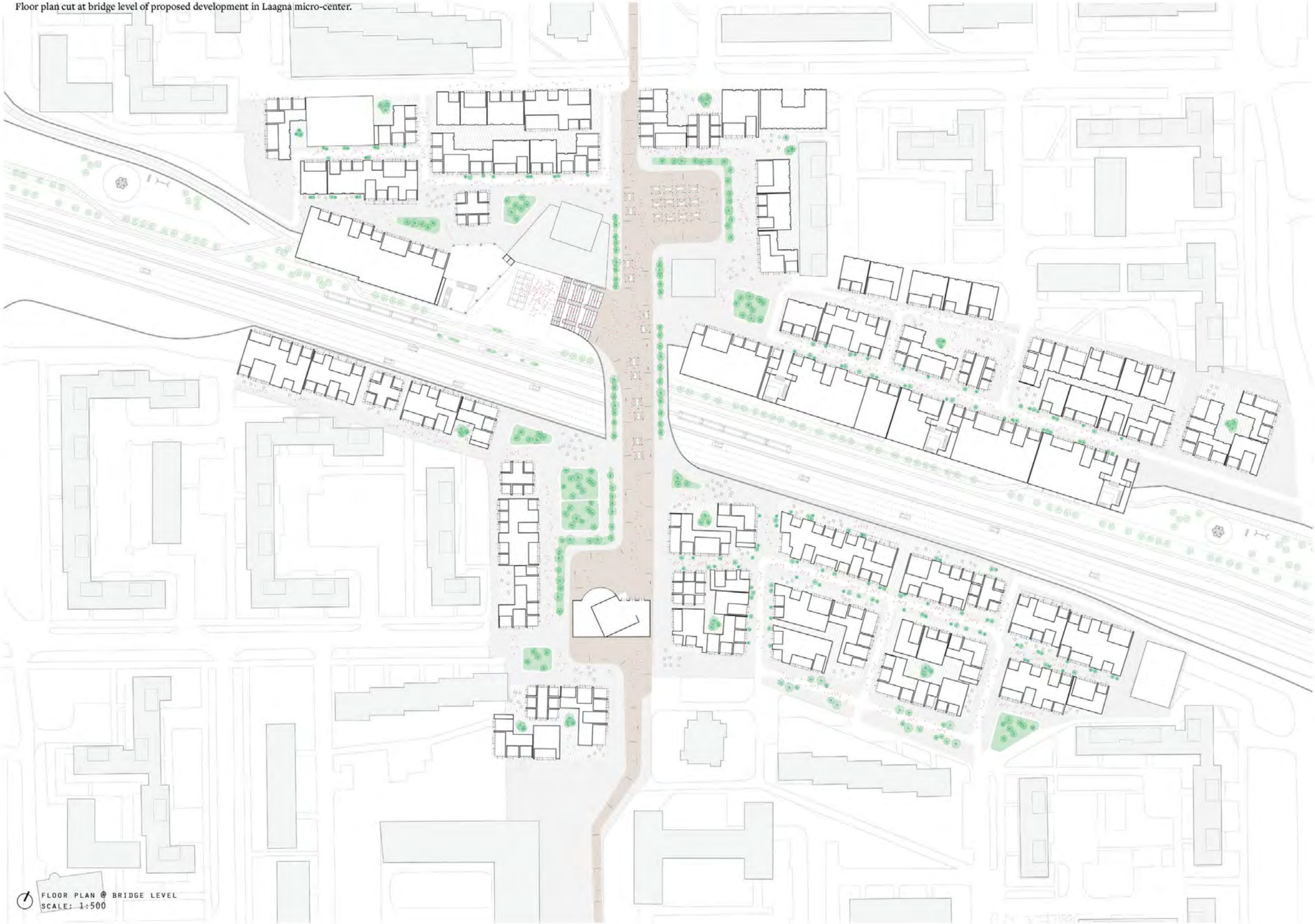


Roof-plan of proposed development in Laagna micro-center.

Floor plan icut at channel level of proposed development in Laagna micro-center.



Floor plan cut at bridge level of proposed development in Laagna micro-center.



View looking down to amphiteatre steps and tram stop.

North-south section cut looking east.

View from anchor building toward the newly refurbished pedestrian bridge.

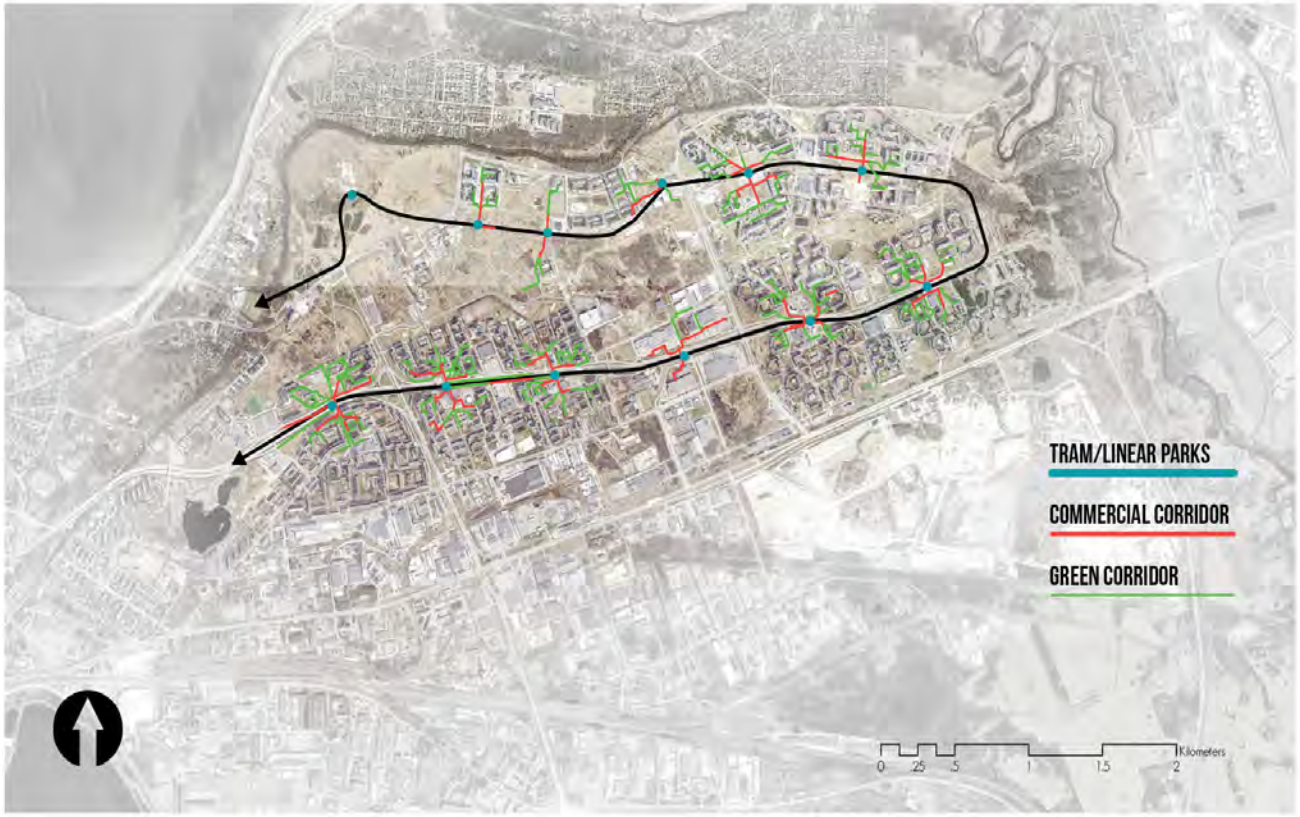
View from one of the newly readjusted city streets.

RESCALING:

Pedestrian Oriented Development for Lasnamäe

Donald Taylor-Patterson
Armando Sullivan

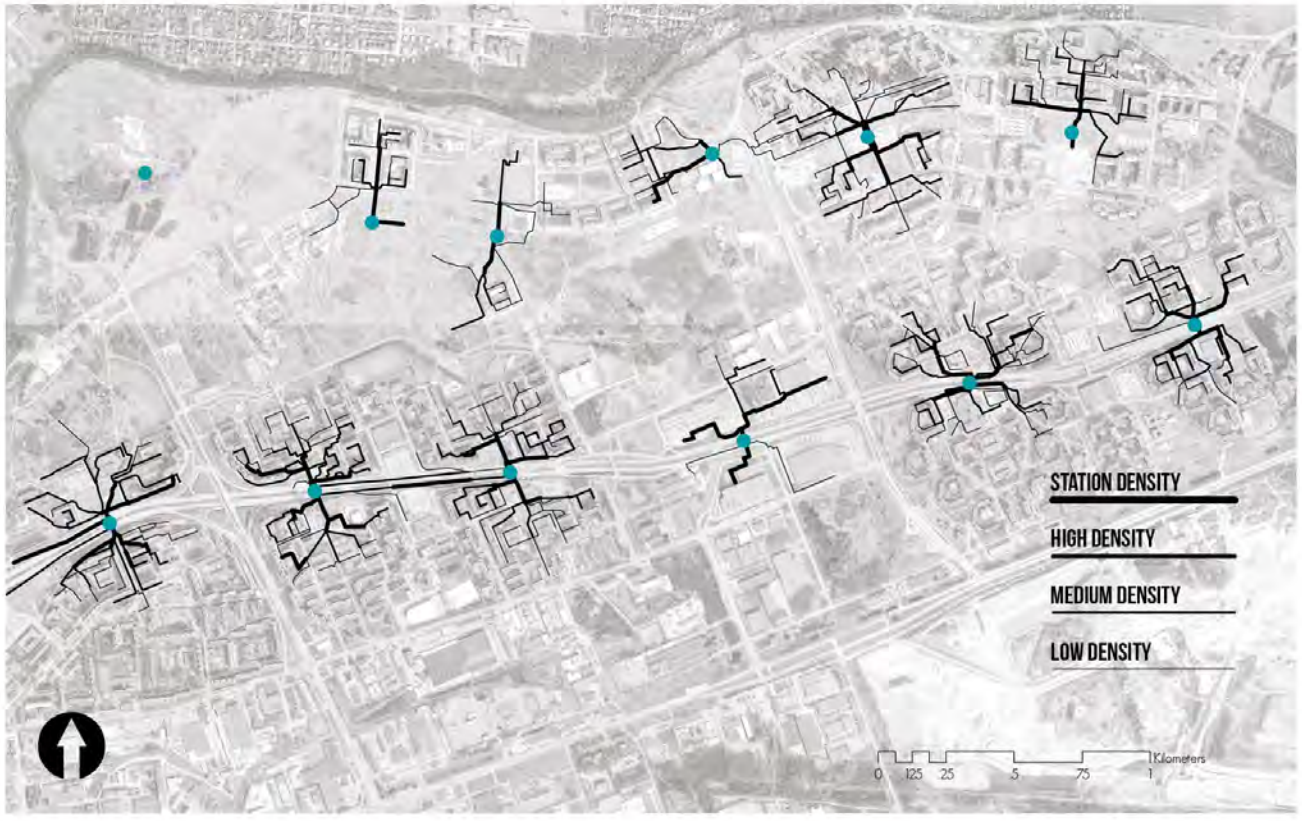
The transition from a communist to capitalist state left many aspects of Lasnamäe largely incompatible with the future development of the city. These issues manifest in four main categories: Key Issues:
1 Housing: Soviet housing was built quickly and inexpensively, making much of the existing housing close to being in need of replacement. Additionally, the transition to private homeownership made ownership of Lasnamäe's residential buildings highly fragmented.
2 Commercial: The vast mono-functional residential land use in Lasnamäe and the incompleteness of the centers that were built left a major need for commercial space in the neighborhood. Basement shops fulfilled this need until big box stores took over, challenging the vitality of existing basement shops and increasing the number of trips out of the neighborhood for daily needs.
3 Transportation: The neighborhood is becoming increasingly car-dependent, making parking an issue. Public transit is served by buses only. Bus stops aren't multi-functional centers for development. 4 Open Space: Soviet planning included lots of open spaces, however many of them are un-programmed and serve little use. The transition to a capitalist economy left land ownership fragmented. Thus, a lot of land around in-between buildings remains under the ownership of the city and is underutilized.



Proposed District Plan: After observing the realities of present day Lasnamäe, we decided that our goal would be to revisit the Soviet plan and revise it to fit Lasnamäe's contemporary context. By focusing on revising the original Soviet plan we can strengthen Lasnamäe's existing condition and bring new opportunities that serve both Lasnamäe's residents and Tallinn as a whole. We believe this can be done through a robust Transit Oriented Development plan centered around the re-introduction of the planned tram looping through the neighborhood along Laagna channel and the designated space planned for the unbuilt Rahu tee. In order to achieve this vision, we've laid out a set of four subgoals for the project, each of which will both address an issue highlighted previously and support TOD.

Goals:
1: Introduce more low-rise high density buildings.
2: Increase commercial uses.
3: Provide new housing opportunities.
4: Create a more community-centered public realm.

District Plan: The district plan details how the goals stated above and the subsequent interventions (expanded later) take shape over the entire Lasnamäe neighborhood.400 meter radius of proposed stations provides to the station. This initial analysis examines existing streets and buildings only.



Spatial Analysis: In order to determine where to focus TOD development eff orts, we conducted a footfall analysis at the neighborhood scale using a 400 meter radius around each of our potential tram stops. 400 meters was chosen as the target distance because after a 400 meter walk, the likelihood that potential patrons will walk to transit stops drops to almost 0%. The footfall analysis examines the connection each street within this 400 meter distance provides to proposed tram stations, taking into account the number of people each building along these streets can hold based on its gross fl oor area (under the assumption that one person requires roughly 20 square meters of living space), and determines the streets with the most direct connection to proposed stations with buildings that can house the most people. We simplified the output into a hierarchy of four densities.

Densities:
1: Station Density: Where the most important public realm and commercial interventions are focused.
2: High Density: Where the highest density development is focused.
3: Medium Density: Where the second highest density development is focused.
4: Low Density: Where the lowest density development is focused.

Footfall Analysis: The footfall analysis examines the connection each street within a 400 meter radius of proposed stations provides to the station. This initial analysis examines existing streets and buildings only.

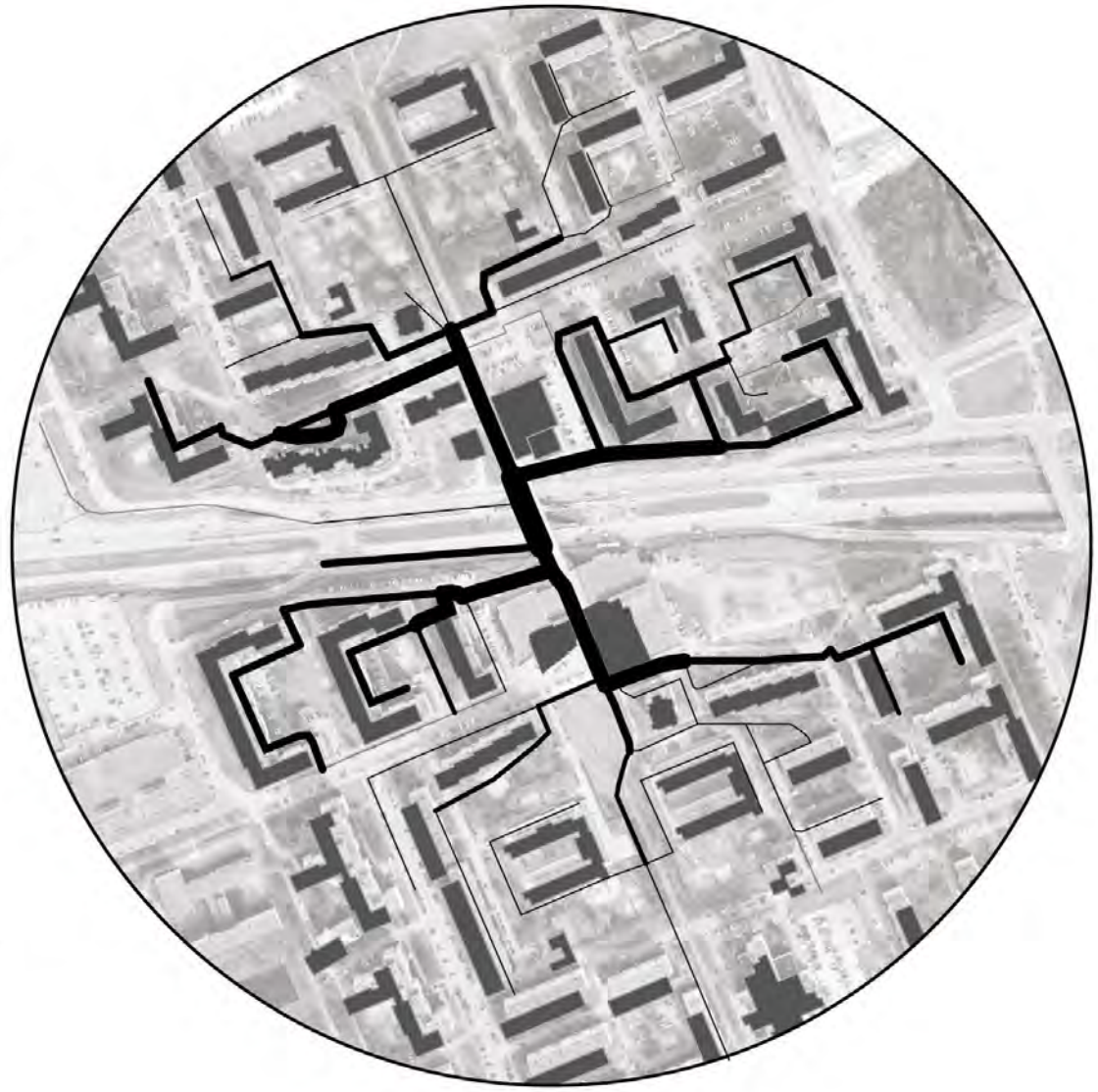
Laagna Proposal: After conducting our footfall analysis, we chose to zoom in on the Laagna micro-region as a test site for our interventions. This site was chosen because it was one of the first Soviet micro-regions to be completed. Thus, it is one of the most complete. By focusing our intervention on this site first, we are able to better understand how these intervention types would interact within the existing Lasnamäe context. Within each density level we develop a set of interventions to address building types, uses, streets, and open spaces, all within our overarching goal to create a pedestrian oriented development plan for Lasnamäe centered around new tram stations. Each density level looks to real world precedents and re-envisions them in the context of Lasnamäe. These interventions come together to create a new vision for Laagna that both respects the existing typologies and proposes new typologies that better achieve the goal of a more pedestrian-centered Lasnamäe.

STATION DENSITY

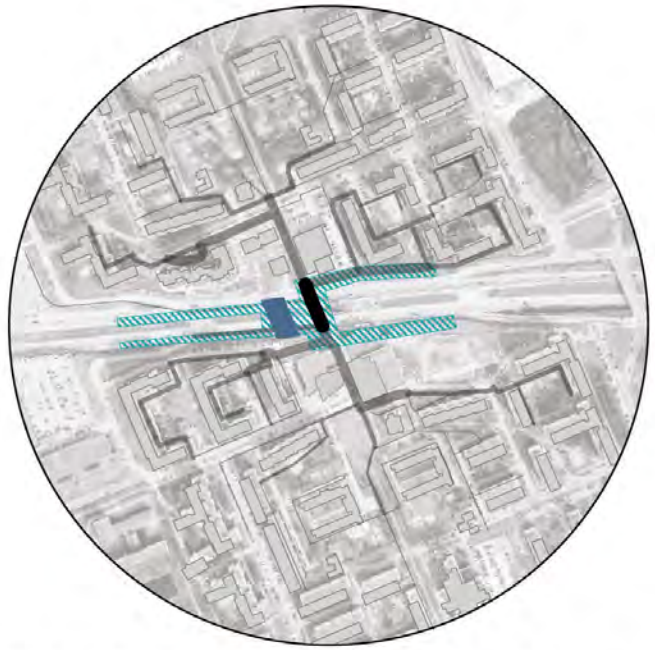
HIGH DENSITY

MEDIUM DENSITY

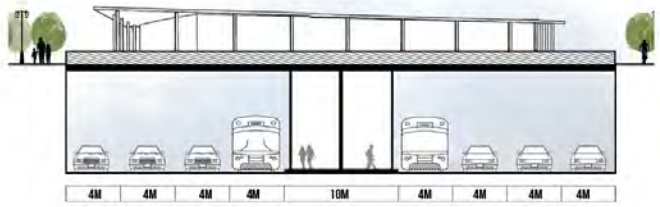
LOW DENSITY



Laagna Footfall Analysis: The footfall analysis examines the connection each street within a 400 meter radius of proposed stations provides to the station. This initial analysis examines existing streets and buildings only.



This plan details where the station density level occurs in Laagna. The iconic structure is shown in dark blue. The open space is shownin light blue.



This section details the station density level at Laagna, which occurs entirely over the channel. At ground level there is a plaza andiconic structure.

Station Density: The streets with the highest connectivity to our proposed tram stations have been classifi ed “Station Density” in our footfall analysis. This density level typically occurs directly around the station and is where we choose to focus the most important public realm and commercial interventions. This density level is the center of the communitycentered public realm and thus, will not allow private development. Instead, it will feature a multi-functional iconic structure and multi-functional open space. In the case of Laagna, this requirement produces a structure that functions both as tram station and year-round market structure. The open space is a plaza that can host anything from seasonal outdoor markets to festivals. The iconic structure in Laagna is based on Aligre Market in Paris, France. The market has both a conditioned permanent structure for year-round use and an outdoor plaza space for multi-functional seasonal use. We see this outdoor space as a community-centered space for Lasnamäe residents and visitors alike. It allows space for temporary vendors, cultural events and festivals, etc.

Precedent

Aligre Marche, Paris

Building Form

Iconic Structure

Open Space

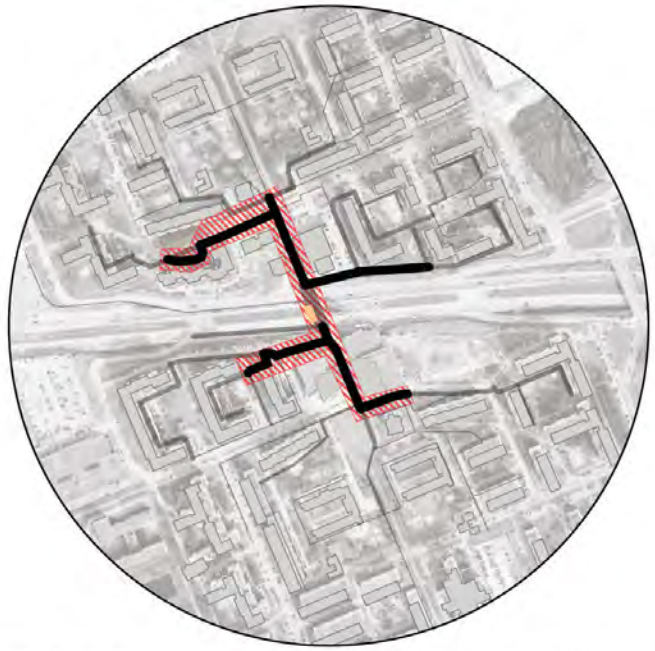
Open Space Adjacent to Linera Parks

Building Uses

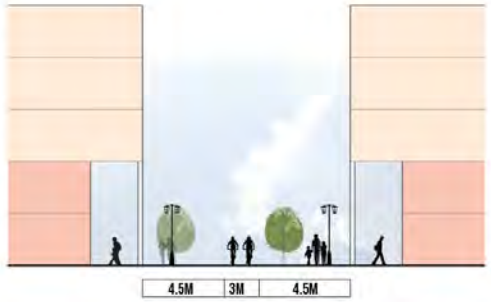
Commercial Uses

Existing

Proposed



This plan details where the high density level occurs in Laagna. The red hatch represents the main street that is derived from this density level.



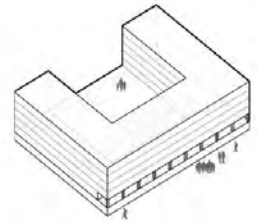
High Density Section (Above): This section details the high density level at Laagna.

High Density:The streets with the second highest connectivity to our proposed tram stations have been classified "High Density" in our footfall analysis. This density level is where we focus our "main street" and highest density development. The direct connection to our iconic structure and central open space at this density level makes it ideal for a pedestrian focused main street. Streets at this level are pedestrian only, with wide sidewalks, dedicated bike lanes, street trees, paving, and other street beautifi cation techniques. Furthermore, arcades are required along buildings facing these pedestrian streets to allow for protection from the elements and activation of the street throughout the year. Buildings at this density level are partially based on a precedent found in Kalasatama, Helsinki, Finland. These buildings achieve high density at low heights, allowing for more "eyes on the street" and a closer connection between residents and street activity. Buildings are limited to 5 stories, have semi-private courtyards, and underground parking. Building uses will be commercial and residential, with commercial uses occupying the first 1 to 2 floors and residential uses occupying the remaining 3 to 4.

Precedent

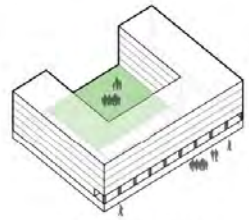
kalasatama, helsinki

Building Form



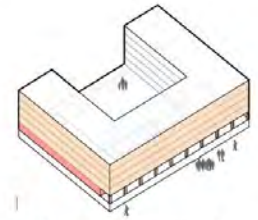
5 stories of condos

Open Space



private open space

Building Uses

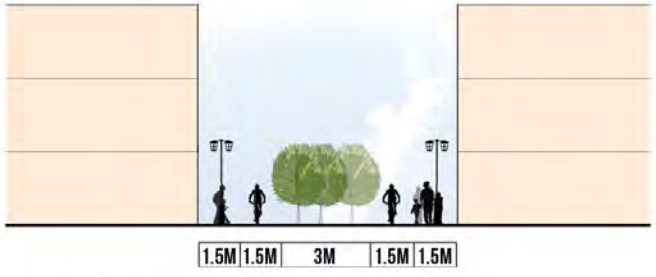


residential and commercial uses

Existing

Proposed

This plan details where the medium density level occurs in Laagna. The green hatch represents the linear parks that extend throughout the subdistrict.



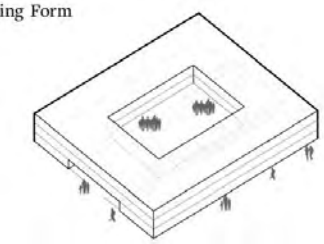
This section details the medium density level at Laagna

Medium Density: The streets with the third highest connectivity to our proposed tram stations have been classifi ed "Medium Density" in our footfall analysis. This density level is where we focus our linear parks and medium density development. Like the high density level, streets at this level are pedestrian only. However, they take the form of linear parks with dedicated bike lanes and sidewalks. These green corridors extend from the central open space and station out through the subdistrict and act as way-finding mechanism for pedestrians and bicyclists. Buildings at this density level are partially based on a precedent found in Northshore, Stockton-on-Tees, United Kingdom. These buildings also achieve high density at low heights, allowing for more "eyes on the street" and a closer connection between residents and street activity. Buildings are limited to 3 stories, have a private elevated courtyard, and parking on the fi rst fl oor, beneath the courtyards. Building uses are residential only.

Precedent

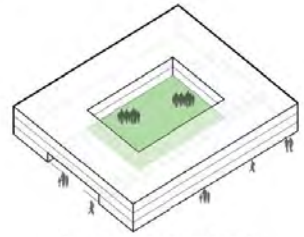
Stocktnoonr-tohns-htoeerse

Building Form



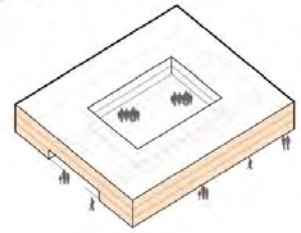
3 stories of condos

Open Space



shared private open space

Building Uses

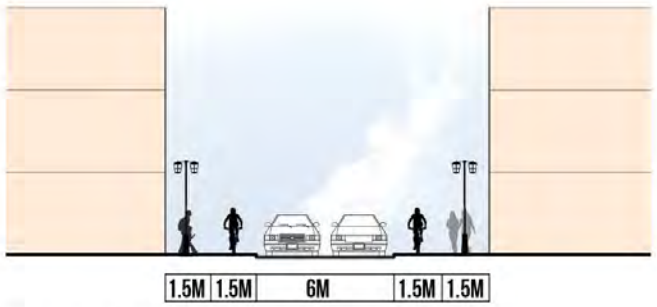


residential use

Existing

Proposed

This plan details where the low density level occurs in Laagna.



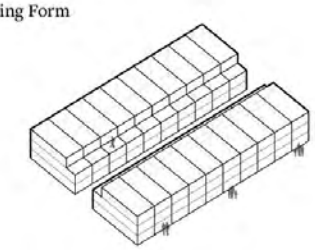
This section details the low density level at Laagna.

Low Density: The streets with the lowest connectivity to our proposed tram stations have been classifi ed "Low Density" in our footfall analysis. This density level is where we focus low density development. Unlike the other density levels, streets at this level are more standard, allowing both pedestrian and car traffic. However, smaller lanes limit speeds through the centers. Buildings at this density level are partially based on a precedent found in Borneo Sporenburg, Amsterdam, Netherlands. These buildings are diff erent from the other typologies as they are individual townhouses instead of condominiums. Buildings are limited to 3 stories with private garages on the first floor and private terraces on the third floor.

Precedent

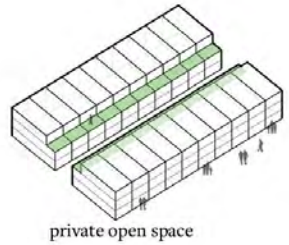
borneo sporenburg, amsterdam

Building Form



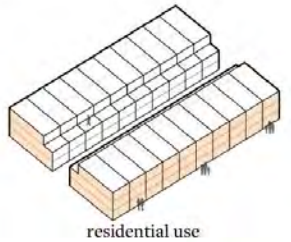
single family attached homes

Open Space



private open space

Building Uses



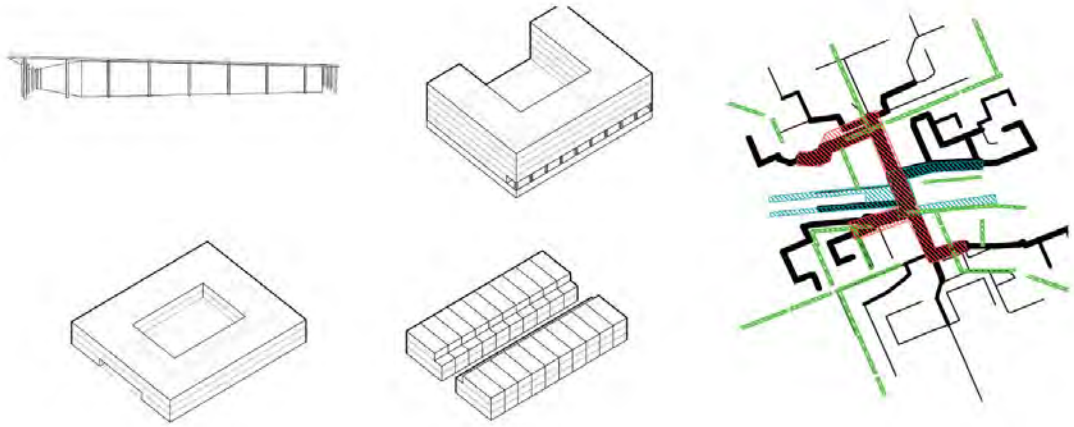
residential use

Existing

Proposed

Laagna Plan: A vision of Laagna center with our proposed interventions realized.

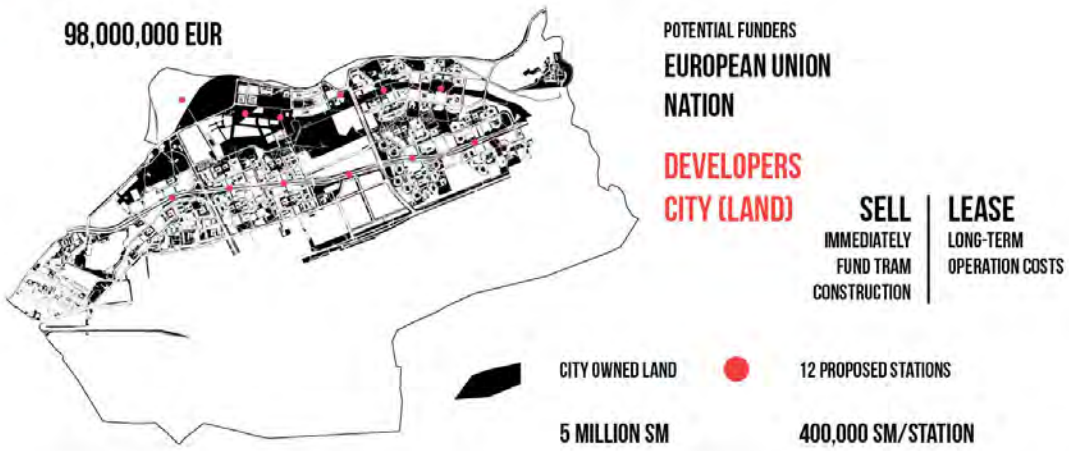
Laagna Axonometric: An axonometric drawing of Laagna center with our proposed interventions realized. Yellow represents new residential development. Red represents new commercial development.



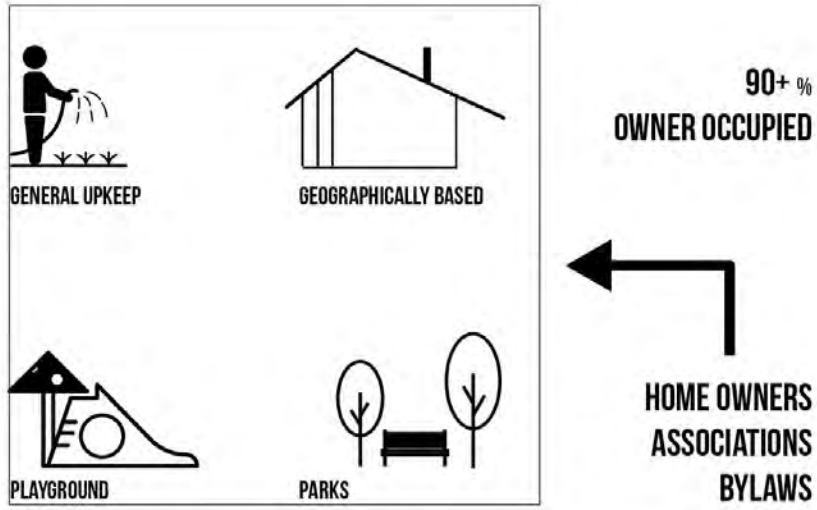
BUILDING DESIGN
BUILDING USES
OPEN SPACE ALLOCATION

STREET HIERARCHY
STREET DESIGN

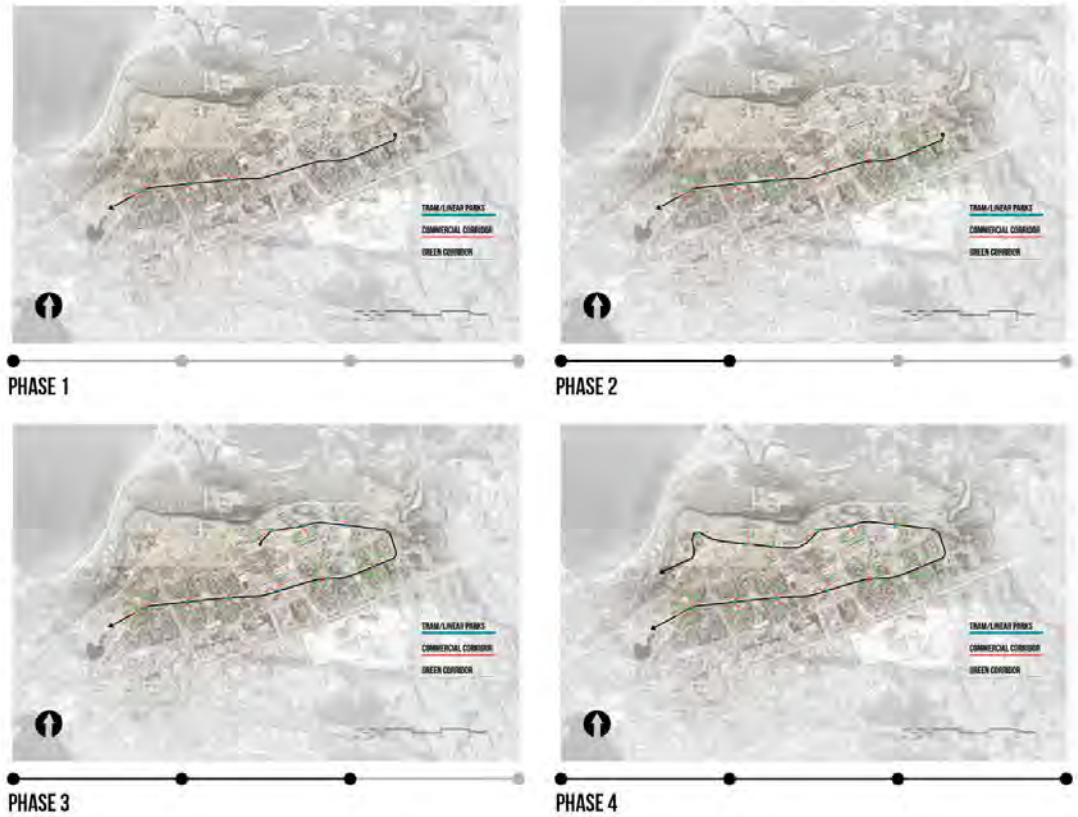
Quality Control: Quality Control ensures that new development follows the guidelines set in the previous section. This would involve requiring all new buildings, streets, and open space to follow the set guidelines set out in the plan.



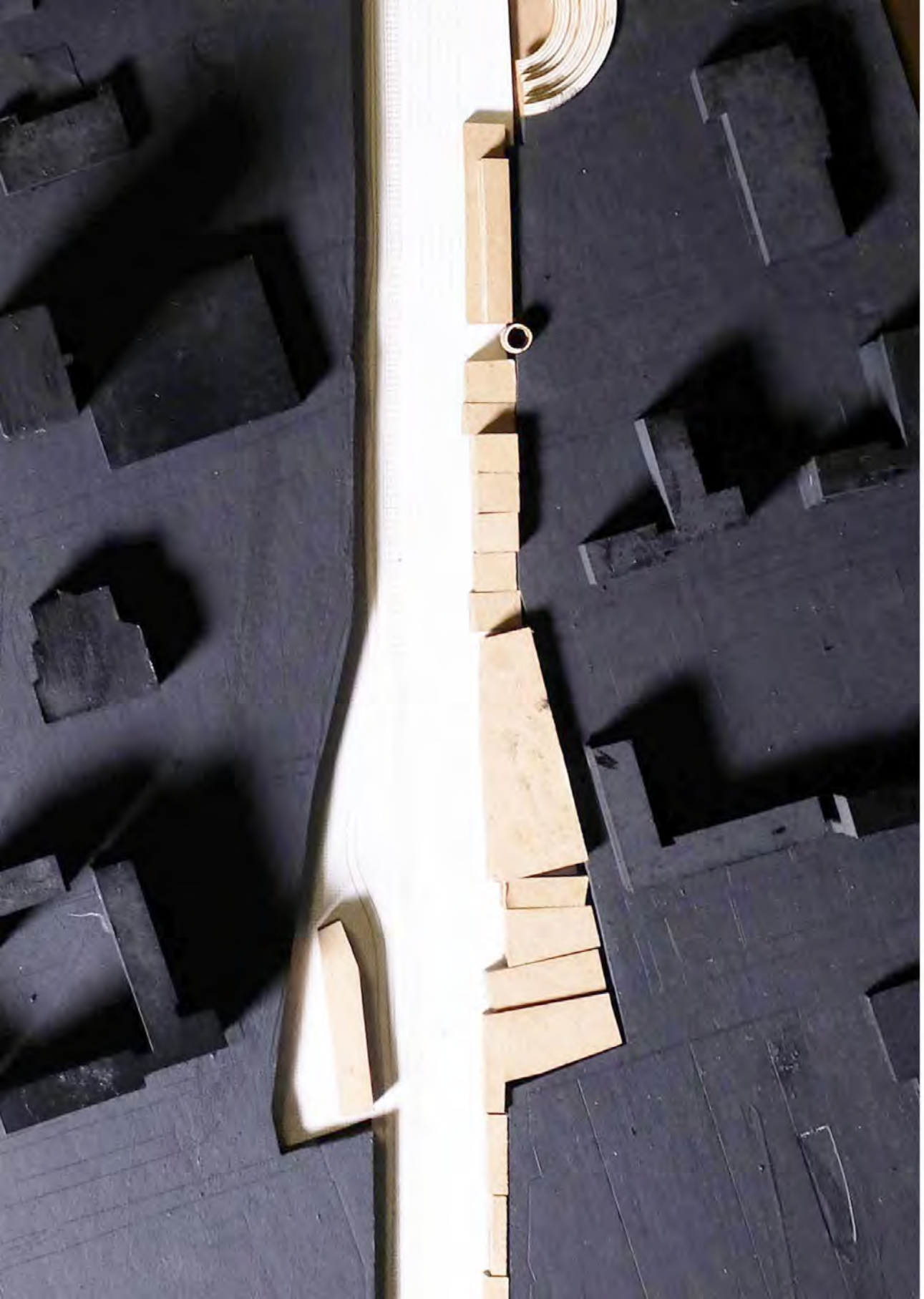
Financing: We envision financing for the project coming from several sources. We estimate a cost of just under $100 million Euro to complete the new tram project. This would require signifi cant investment from the EU, the Estonian Government, and the city of Tallinn. However, the city has the resource of vast amounts of city-owned land in Lasnamäe and we anticipate the new tram will increase the desire for development in the neighborhood. Thus, we also anticipate funding could come from the strategic sell and lease of city-owned land as well as value sharing mechanisms that allow the city to capitalize on the development value the tram investment will generate in its immediate vicinity.



Programming: Programming would involve employing various existing homeowners' associations and new associations created by new development in the upkeep of open space in the neighborhood. These homeowners' associations, with the assistance of the city, would also help determine how public open spaces are programmed to best meet their needs.



Phasing: We envision this project occurring in four phases. In the first phase the portion of the tram along Laagna channel would be constructed including the first six tram stops. Development in the first three centers along the line would also occur during this phase. In the second phase development in the next three centers would occur. In the third phase the next three tram stops would be constructed along with development in those centers. Finally, in the fourth phase the last three tram stops will be constructed, completing the loop back to the city. The final three centers would also be developed at this time.



LAAGNA:

The New Spine of Lasnamae

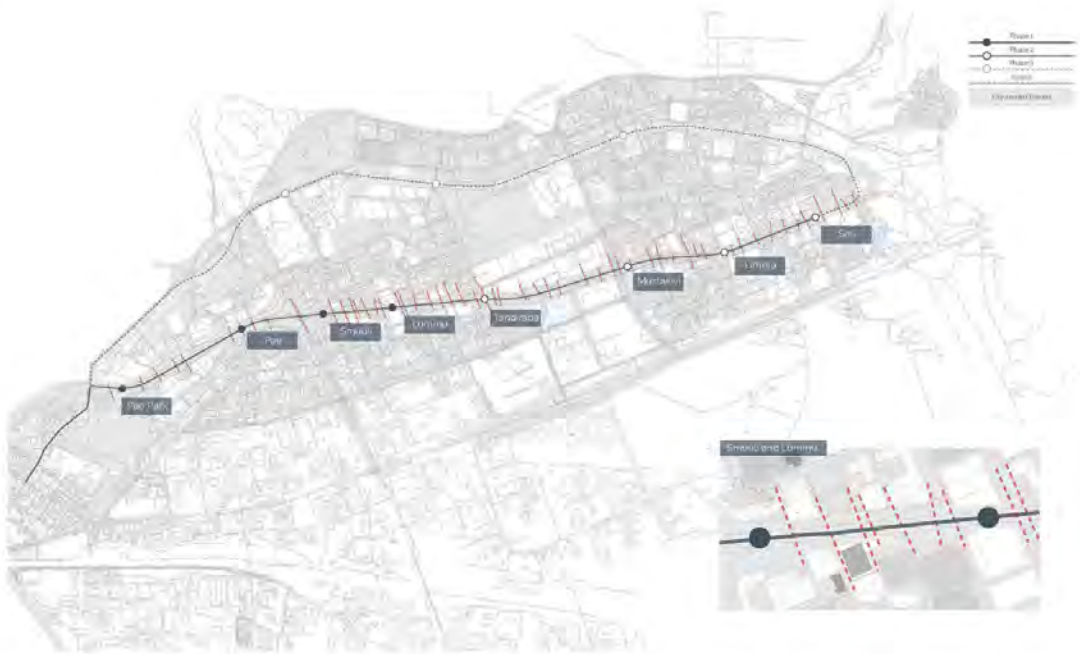
Alifa Putri
Chanel Williams

This project aims to turn Laagna Channel, the historic sunken highway, into an active and engaging spine. Our framework plan proposes the creation of linear centers along Laagna Channel by converting the car-only highway into spaces for retail, office and residential use. We also propose transforming the green buffer in the center of Laagna Channel into a new tram route which connects the northern and central parts of Lasnamae, allowing residents to directly access downtown Tallinn via public transit.

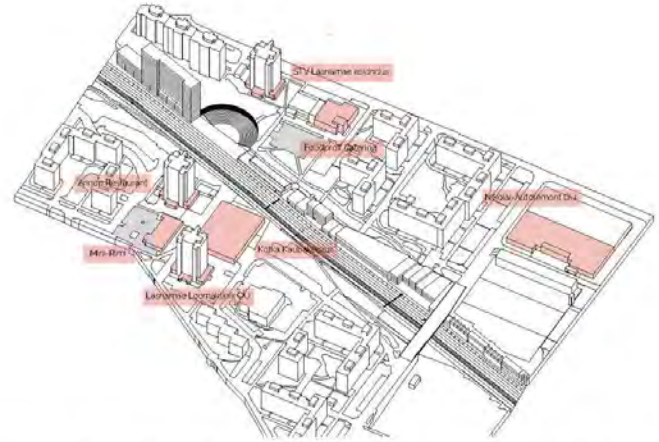
We use three principles in planning and implementing the project: Development, Access and Multimodal. Development aims to humanize the channel by bringing human-scale development to accommodate a variety of land uses: retail, office, housing and institution. By concentrating various activities along this centrally located channel, we hope to improve public life in the neighborhood.

To attract visitors to these new amenities, we introduce Access to allow movement into and along the channel. We propose different ways of connecting the channel with adjacent streets using ramps, bridges, stairs and an amphitheater. Density, cost and existing landscapes are the three main considerations in determining what type of access is needed. Finally, Multimodal introduces different ways of traveling through the channel by providing sidewalks, constructing tram lines and installing bike and pedestrian paths through the linear green space.

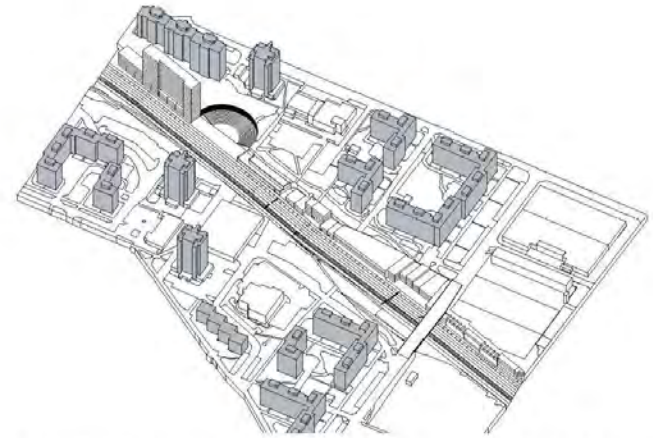
Analysis Map: Map showing commercial areas in Lasnamae as well as publicly owned land in the district. The commercial buildings convey a lack of heirarchy in the retail distribution throughout the area. These commercial buildings are superblocks that contain activity inside rather than promoting activity outside.



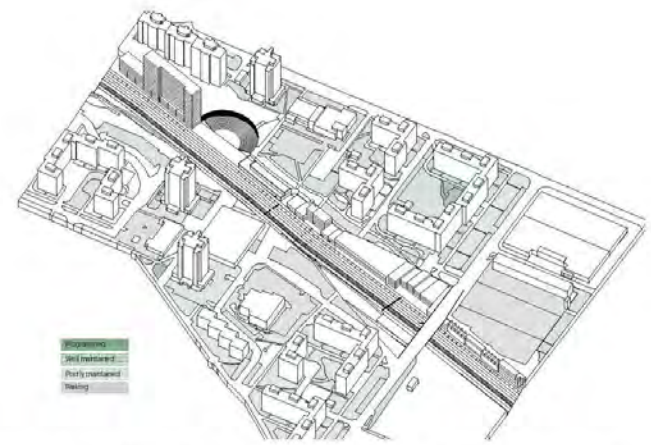
Framework Map: Map showing our proposed tramline creation along Laagna Channel. This tram route will occur in 3 phases (Phase 1: Pae Park to Tondiraba, Phase 2: Mustakivi to Seli, Phase 3: Narva Mantee.) In addition to the creation of a tram our framework plan proposes the creation of new access points , shown in our framework plan as red dashed lines. The public land in and adjacent to Laagna Channel is proposed for the development of retail, office and residential uses, as well as the creation of programmed open spaces.



Existing Retail Analysis Diagram: Image and diagram showing the conditions of exising retail in Luumu. Luumu's retail typologies align with those discussed in our framework plan. Retail in Luumu is mostly superblock structures that take up large lot foorprints and provide an impersonal character to the neighborhood.



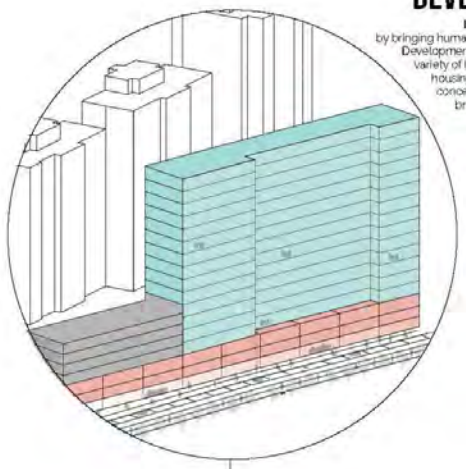
Existing Housing Analysis Diagram: Image and diagram show typical residential buildings in Luumu Center. Ninety nine percent of the buildings are high rise apartments. This monotony in housing structure provide s few other options for families desiring to live in Lasnamae.



Existing Open Space Analysis Diagram: Image and diagram showing the conditions of open space in Luumu. Most of the open space in Luumu is unprogrammed and in the form of secluded courtyards. Part of our proposal is to create more programmed and centrally oriented open spaces in this center.

DEVELOPMENT

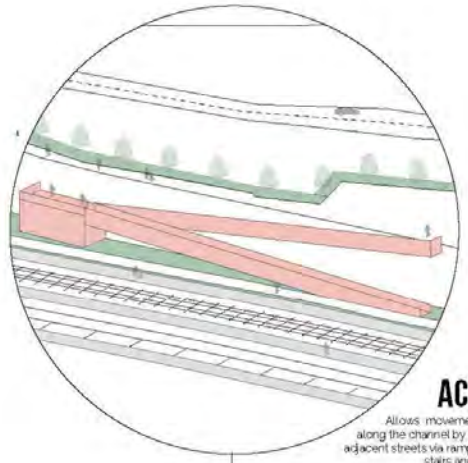
Humanize the channel by bringing human-scale development. Development will accommodate a variety of land uses: retail, office, housing and institution. Such concentration of activity will bring life to the channel.



PRINCIPLES:
- Small parcel size
- Active use at ground level
- Transparent building envelope
- Connection between channel and upper level
- Place-based land use

ACCESS

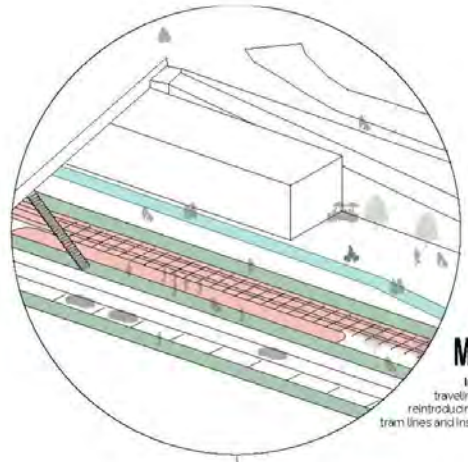
Allows movement into and along the channel by connecting adjacent streets via ramps, bridges, stairs and buildings.



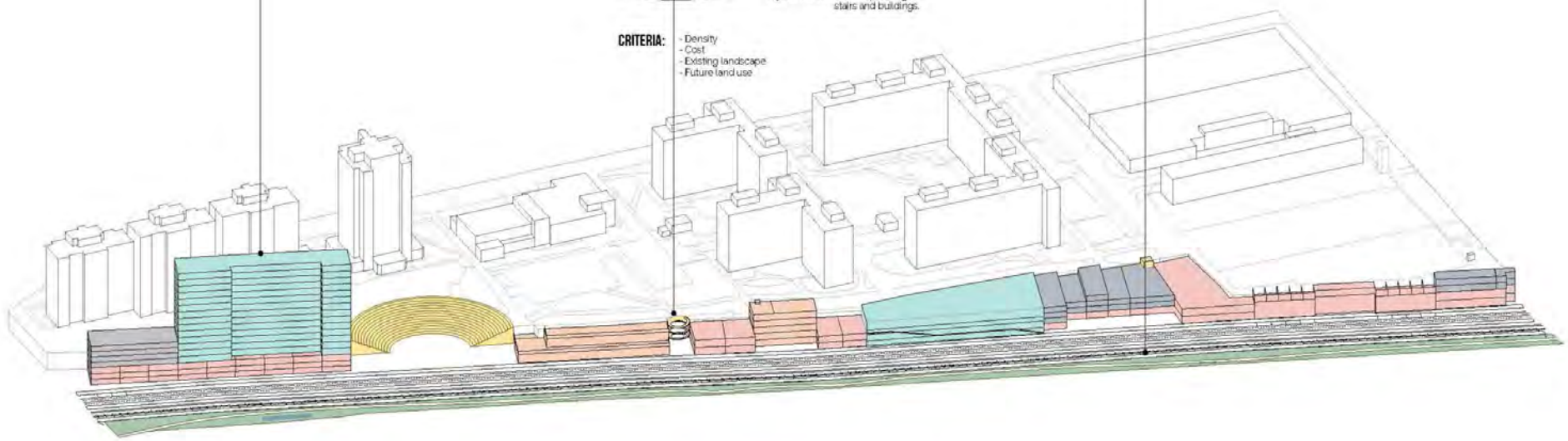
CRITERIA:
- Density
- Cost
- Existing landscape
- Future land use

MULTIMODAL

Introduce different ways of traveling through the channel by reintroducing sidewalks, constructing tram lines and installing bike and ped path.

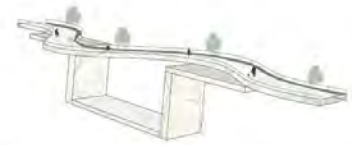


FEATURES:
- 4 km of bike/ped linear path
- 2 tracks of tram/bus lane
- 2 car lanes (20 km/h speed)



Key Concepts Diagrm: This diagram conveys the three concepts of our proposal. These concepts are development along Laagna Channel, additional access routes to the channel and create multiple modes of mobility along the channel. More details about these three concepts are provided above.

Access Toolkit for Laagna Channel: Our access toolkit provides unque ways for Lasnamae's residents and visitors to access Laagna Channel. The amphitheater and slope proposed in this toolkit not only provide acces, but also a space to socialize and interact outside of Lasnamae's supeblock buidlings.



bridge

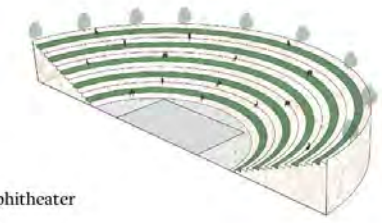
ped ramp

stairs

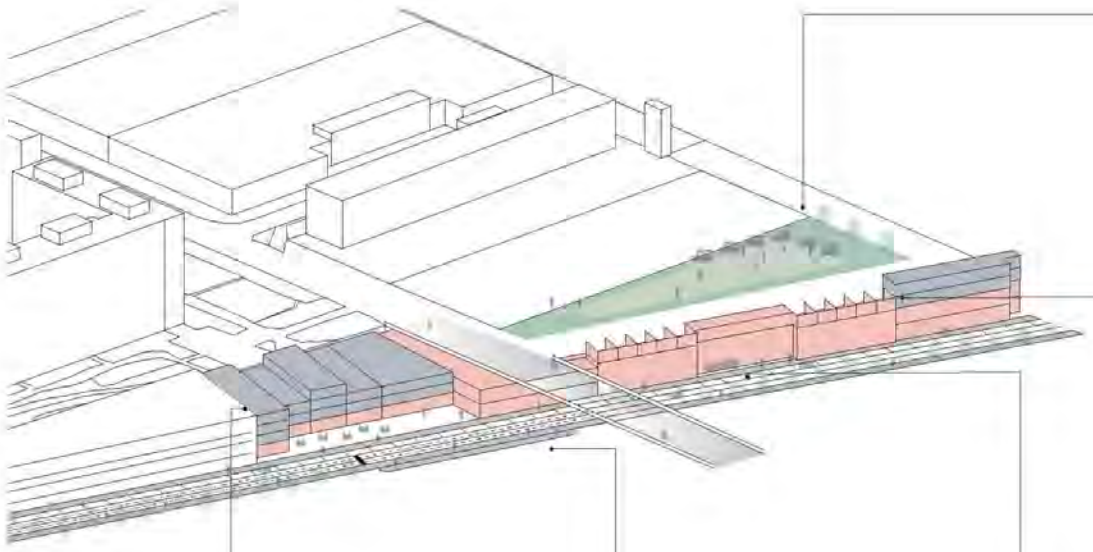
elevator

slope

bike ramp



amphitheater



SMALL PLAZA

Parking lot facing the stalls can be
ed into small plaza where visitors
and hangout

SMALL STALLS

Upper level small stalls (25 sqm) ac
dates informal businesses that curr
exist without protection in various
micro-rayon centers

SHOPHOUSE

Ground level retail/service and upper level
smal residential

TRANSIT STOP

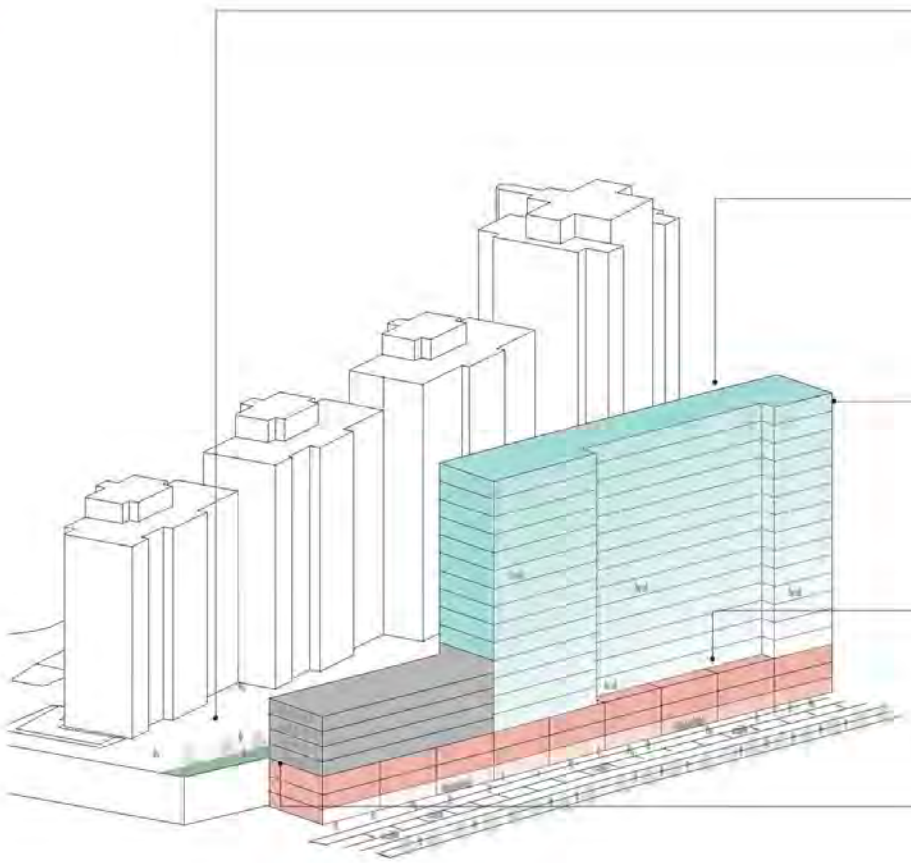
Platforms for transit riders located in the
center of the street

OUTDOOR SEATING

In sections where there is abundant space
for development, buildings can have set
backs and allow for outdoor seating

Lummu as Main Street: While a business district has a busier feel, we want parts of Lummu, as well as other spaces on Laagna Channel, to be quieter and more residentially focused. Luumu as mainstreet propose low density development along Laagna and encourages outdoor activities that bring people together. Lummu as Main Street includes plazas that provide outdoor seating, an example of what transit stops along Laagna would look and feel like, as well as spaces for locally owned businesses. When we began considering developing along Laagna Channel and creating an active spine on this corridor, we understood that the creation of new retail could negatively impact the existing small businesses in Lasnamae. Our proposal takes this into consideration and provides small stalls for Lasnamae's entrepreneurs. Subsidies for relocating these local entrepreneurs is included in our polic proposal section.

Lummu as Main Street: Axon showing ways that we can develop in Laagna Channel and transform Lummu Center into a residential main street.



STREETSCAPING

Double entrance would triggerstreetscaping
along the street parallel to Laagna channel

DOUBLE ENTRANCE

Building should allow movement from/to
the channel by having two entrances in
both Laagna and the upper level

OFFICE CLASS B AND C

Small size office space at XXX sqm to
support small businesses and compliment
existing supply in Ulemiste and Smuuli

SMALL RETAIL

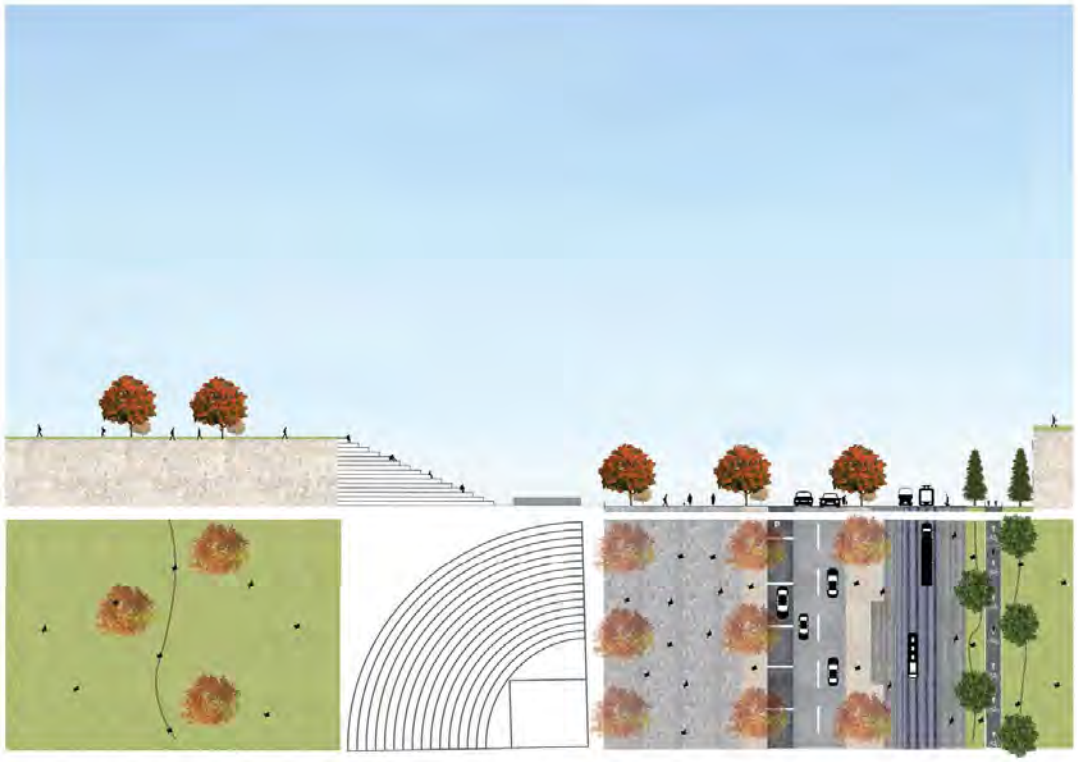
Shops and restaurants at ground level ensures
that the building is open for the public

MULTI-STOREY CAR PARK

Car parking can be shared between daily
visitors and residents

Lummu as Business District: Through our research we found that the majority of Lasnamae's residents work in downtown Tallinn as opposed to in their own district. Our proposal involves the development of office space along Laagna Channel. We want to encourage Lasnamae's residents to work where they live and while also attracting residents from other districts in Tallinn to work in Lasnamae. The creation of a tram route along Laagna Channel makes developing office space in this area ideal. In order to attract business while not competing with Downtown Tallinn and Ulemiste City, we propose the creation of Class B and Class C office space. Small retail will be located on the first floor of these office buildings to encourage a mix of uses, a feature that does not exist in many parts of Lasnamae. Understanding that people may still desire to drive to work rather than taking a tram, we will create a car park so that Laagna Channel can remain truly multimodal.

Axon showing ways that we can develop in Laagna Channel and transform Lummu Center into a business district. Details of the key features of this development are adjacent to the axon.



Lummu as Main Street: Section demonstrating how access to Laagna Channel can provide a space for social gatherings. This section also shows the multimodal component of our proposal and how we envision Laagna becoming a more public transit and pedestrian-oriented.

Precedent Studies: Images of infill in San Francisco, a multimodal street in East San Fernando Valley, and a limestone access point in Nasssau, Bahamas. These precedents connect to our vision of developing along Laagna Channel, transforming this highway into a multi-modal space and providing creative and innovate ways of accessing Lasnamae's main spine.

Changing Laagna Channel from a quiet car dominant space to an active spine is daring, innovative and necessary. During our visit to Tallinn in October, we met with students at the Estonian Academy of Arts. We asked them if they ever hung out in Lasnamae and many of them told us no. Our scenario of changing Luumu into an active street involves creating an access point that serves two purposes: paths that lead down into the channel and spaces for social gatherings.

In this section, our proposed amphitheater provides residents with access to the channel and also allows them to sit down and have lunch with friends and family. The amphitheater is one way we can get people out of their homes into their wider community. This amphitheater can serve as a space for concerts, cultural festivals and as a site for open markets. Access can be engaging and create a new street life that didn't exist on Laagna Channel before.

Active street life also involves having multiple means of mobility. The section to the right shows how Laagna Channel can be transformed into space for not only cars but trams, buses, bikes and foot traffic.

For or precedents, we looked into cities around the world that aligned with our key concepts of development along the channel, access to the channel and multiple modes of mobility along the channel.

Development: For our development precedent, we chose the Embarcadero Highway in San Francisco. This highway was opened in 1968 and existed until 1991 when it was torn down due to community disapproval. In the years after its removal, the highway was replaced by office and residential development shown in the image below. Our proposal for Laagna Channel follows the principles of this precedent and involves replacing a six-lane highway with new development.

Multimodal: Our multimodal precedent is East San Fernando Valley, California. Since 2010, San Fernando Valley has been working on a multimodal transportation project. This project has slowly changed Van Nuys Boulevard from a car dominant space to one that gives priority to public transportation, bikes, and foot traffic. We envision similar changes taking place on Laagna Channel to create a more pedestrian-friendly area along this current car dominant street.

Access: Our precedent for access is the Queen's Staircase in Nassau, Bahamas. Understanding that Laagna Channel has walls of limestone on either side, we chose a precedent that allows these walls to be transformed into new access points. The Queen's Staircase in Nassau is made out of limestone and provides access from the upper regions of the city into the downtown district. Our proposal for access endeavors to use the existing natural characteristics of Laagna to draw people to this street.

GOVERNMENT

Tallinn City Office

Tallinn Urban Planning Department

Lasnamae District Administration

Tallinn Transport Department

Tallinn Engineering Services

Tallinn City Property Department

Tallinn City Council

PRIVATE DEVELOPERS

LOCAL ORGANIZATIONS

Ideas for Lasnamae (Lasnakiee)

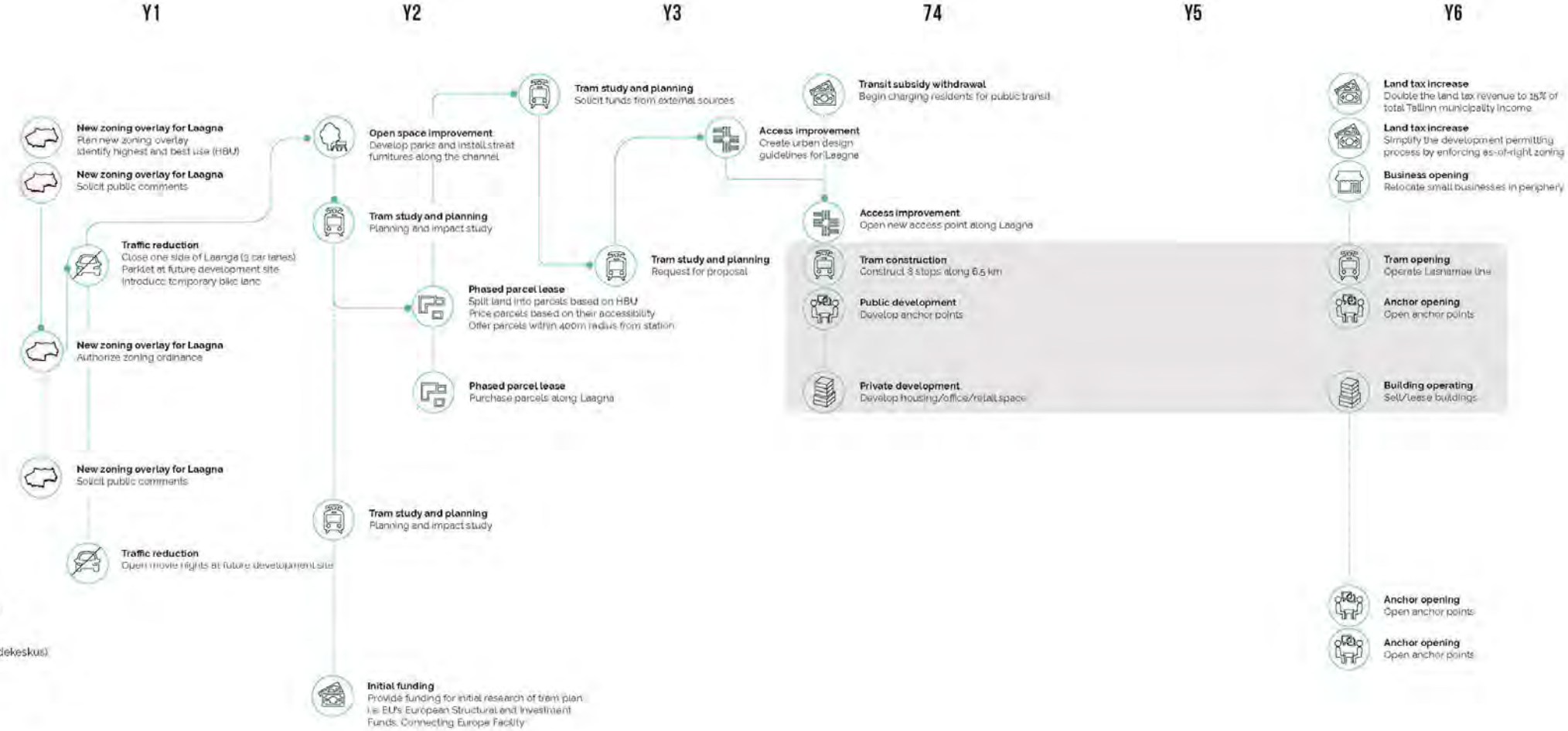
Estonian Urban Lab (Linnalabor)

Movie Bus (Kinobuss)

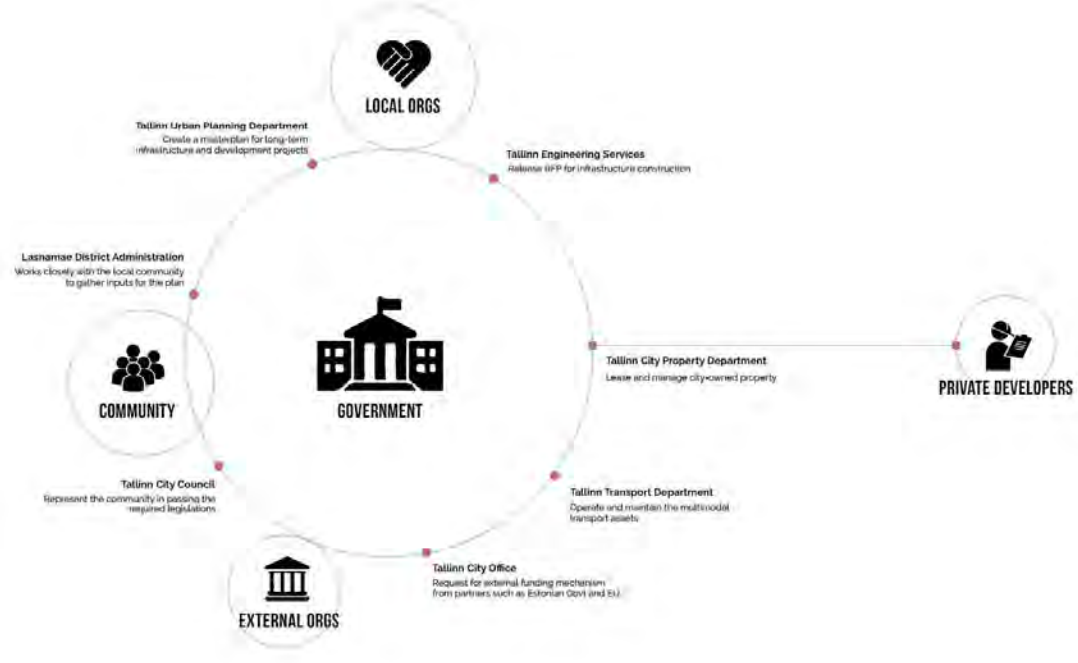
Center for Creative Development (Gagarin)

Family and Children Advice Center (Nouandekeskus)

EXTERNAL ORGANIZATIONS



Policy and Phasing Diagram (Above): Diagram showing the key organizations and institutions for implementing our proposal on Laagna Channel. This diagram also provides our strategy for phasing development along the channel so that it can continue to function as a transportation artery. This phasing includes soliciting public comments and slowly changing the face of Laagna Channel through programming it with car-free days, movie showings and artistic spaces. Our next phase includes open space improvement which will include a road diet that reduces car traffic to two lanes. We will then move on to constructing the tram and creating new office, retail and residential spaces along the channel. Money for developing the tram will be garnered through increasing land taxes in Tallinn and through the revenue gained from the phased leasing of land along the channel.



Framework Diagram (right): Diagram showing how key stakeholders in Lasnamae can interact in order to ensure the success of our proposal. We believe that local organizations in Lasnamae, organizations throughout Tallinn and community members can work together with the government to create a vision of Lasnamae that benefits everyone. Although private developers are often on the outskirts of these conversations, we desire to bring them in and have them be a part of this innovative change along Laagna Channel.

LEARNING FROM LASNAMÄE

Community Corridors for the Future

Emma Pattiz
Nerali Patel

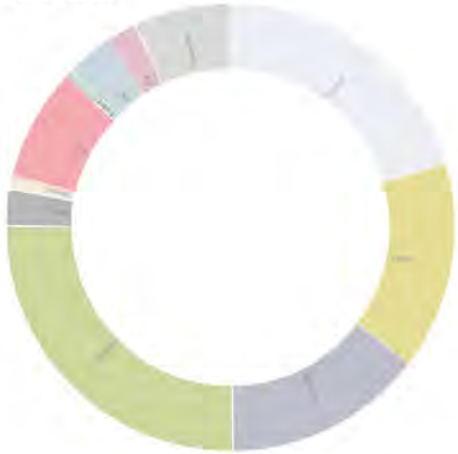
Tallinn's Lasnamäe neighborhood was developed under the Soviet regime as a largely monofunctional housing district. The neighborhood's most notable feature is a channel the length of the entire neighborhood that was blasted into solid limestone bedrock for a mass transit system that was never implemented. When the Soviet Union fell, development in Lasnamäe came to a stop. Today, Lasnamäe is home to 120,000 people, and 70 percent of the population is ethnic Russian.

This project looked at ways of better integrating this neighborhood into the city of Tallinn and improving the area's commercial prospects. The repetitive superblocks and stark building typologies create a physical condition that forces isolation and lacks identity. With limited opportunity for community engagement and few primary data sources, we took to social media to find out where there are sites of social interaction and identified areas of concentration worth enhancing.

The resulting plan aimed to reinvent a center as a place that serves a community function amplifies existing spaces of social interaction and eases social tensions. We proposed achieving this through proposals on three scales - neighborhood, block, and building. For each scale, we developed an implementation program that addressed policy, finance, and design.

Väike-Õismäe

Subject



Activity

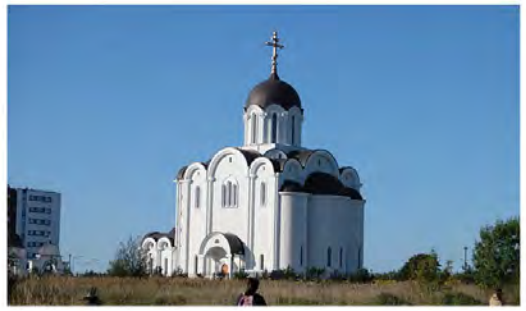
Mustamäe

Lasnamäe

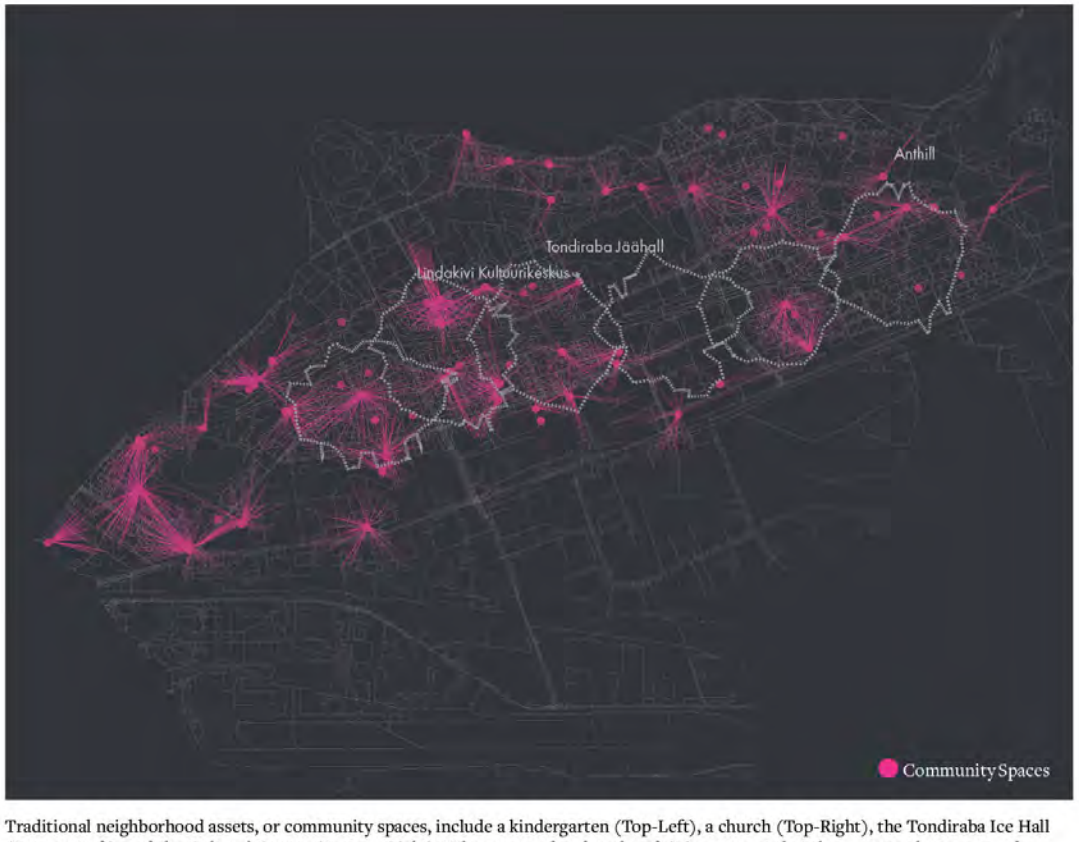
Social Interactions: SPIN Unit's study on Tallinn neighborhoods uses Four Square data to chart social movement. The study divides activities by subject as well as the type of activity.
http://www.spinunit.eu/metalinn-panelhouses/

Urban Form: Upon arriving in Lasnamäe, we were instantly struck by the distinct urban form. Inward-facing buildings, repetitive super blocks, and stark building typologies create a physical condition that forces isolation and lacks identity. Although this is most apparent in the many apartment buildings, the neighborhood's schools also follow this trend; replica blocks are divided by boundaries. Not only are these schools physically separated by this design, but neighboring schools do not teach in the same language; Russian- and Estonian-language educations are segregated. Students do not share language, facilities, or resources.

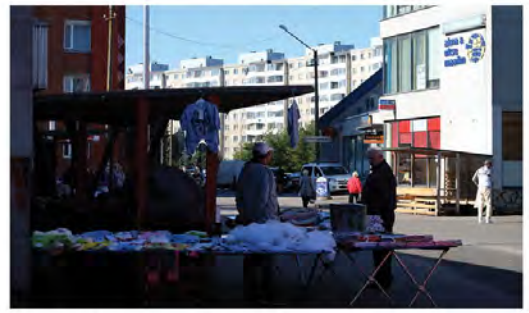
Lasnamäe's urban form is apparent in its apartment buildings, schools, and building entrances. The map emphasizes the physical arrangement of Estonian- and Russian-language schools. Although placed side-by-side, schools do not share language, facilities, or resources, segregating students and society.



Community spaces: In order to analyze social movement, we cataloged and studied Lasnamäe's existing neighborhood assets. The first category of neighborhood assets includes what might be considered traditional places of gathering, or community spaces. This category includes schools, cultural facilities, and churches.
Using the UNA Toolbox application in Rhino, we mapped the significance, or the reach, of these community spaces. It is evident that they concentrate in Laagna.



Traditional neighborhood assets, or community spaces, include a kindergarten (Top-Left), a church (Top-Right), the Tondiraba Ice Hall (Bottom-Left), and the Cultural Center (Bottom-Right). When mapped and analyzed, it is apparent that these assets cluster around Laagna.



Commercial/retail: As referenced above, commercial and retail spaces are also significant social spaces in Lasnamäe. Retail spaces in the neighborhood, however, range in scale and market. Although Tallinn is known for its big box stores, many of which are in the neighborhood boundaries, Lasnamäe also has a lot of basement retail options and informal market stalls. When we mapped these assets, we saw an East-West pattern form.

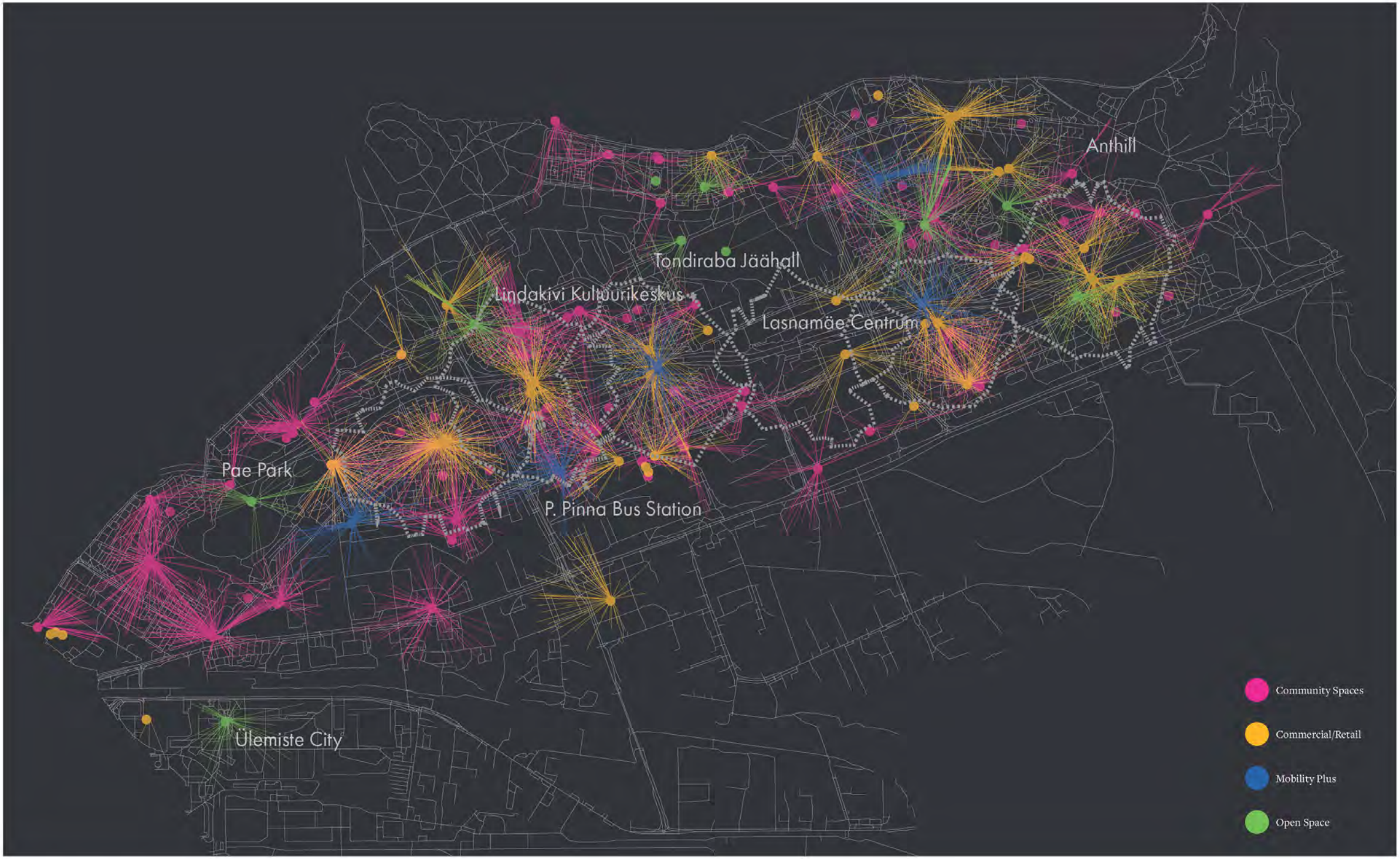
Big-box retail stores and malls (Top-Left) serve many of the needs of residents and serve as social spaces, but smaller spaces (Top-Right), informal economies (Bottom-Left) and basement shops (Bottom-Right) are also representative of the neighborhood's options. These assets are relatively well-distributed, forming an East-West formation.

Mobility Plus: The third type of neighborhood asset that we identified is mobility plus, or public transportation hubs that are coupled with something extra - a park, kiosk, or small-scale store. These are obvious sites of social interaction that are worth emphasizing and potentially expanding. The UNA analysis shows that these sites are very sparse throughout the neighborhood.

Without a tram, Lasnamäe is primarily served by the bus; however, bus stops that are coupled with gas stations (Top-Left), kiosks (Top-Right), parks (Bottom-Left), or stores (Bottom-Right) serve as key gathering places. They are rare (Right) but have potential to be community assets.

Open Space: Lasnamäe's open spaces range from beautifully landscaped parks, like Pae Park, to untouched "wasteland" areas that serve little function. By focusing on the successful spaces - both small and large - we are able to see viable sites of social interaction.

Pae Park (Top-Left) serves as an example for Lasnamäe's open spaces. Courtyard spaces between residential buildings could be better (Top-Right). "Wasteland" areas (Bottom-Left) are currently not serving as social spaces. Established playgrounds (Bottom-Right) show potential. The map (Right) highlights the most successful of these sites.



Neighborhood Assets: When we overlay these neighborhood assets, we start to understand where they concentrate. The current microrayon centers have an East-West emphasis, but the sites of social exchange are relatively scattered. These is, however, a significant concentration around Laagna, which is worth noting. After understanding the value of these assets, we start to rethink the way in which centers serve residents. We aim to: reinvent a center as a place that serves a community function, amplify existing spaces of social interaction, and ease social tensions.

Neighborhood:
Tram/Tram Stop/Plaza

On a neighborhood scale, key interventions can help to reorganize centers as important sites of social exchange. By turning microrayon centers into community corridors, as seen in blue, centers can become more accessible and better link community assets. The introduction of a new tram line above the channel will draw commuters to the new centers. Tram stops in each corridor anchor the centers and serve as hubs for social activity. New plazas near the tram stops will provide flexible retail and social spaces. Together, these interventions can promote social cohesion for all of Lasnamäe.
When implemented, the three neighborhood-scale interventions can anchor a neighborhood-scale program that includes assets for the entire Lasnamäe neighborhood. The tram stops, markets, and transit oriented developments that develop as a result of the new tram line will serve as the heart of the new corridors and support the mission for more social integration.

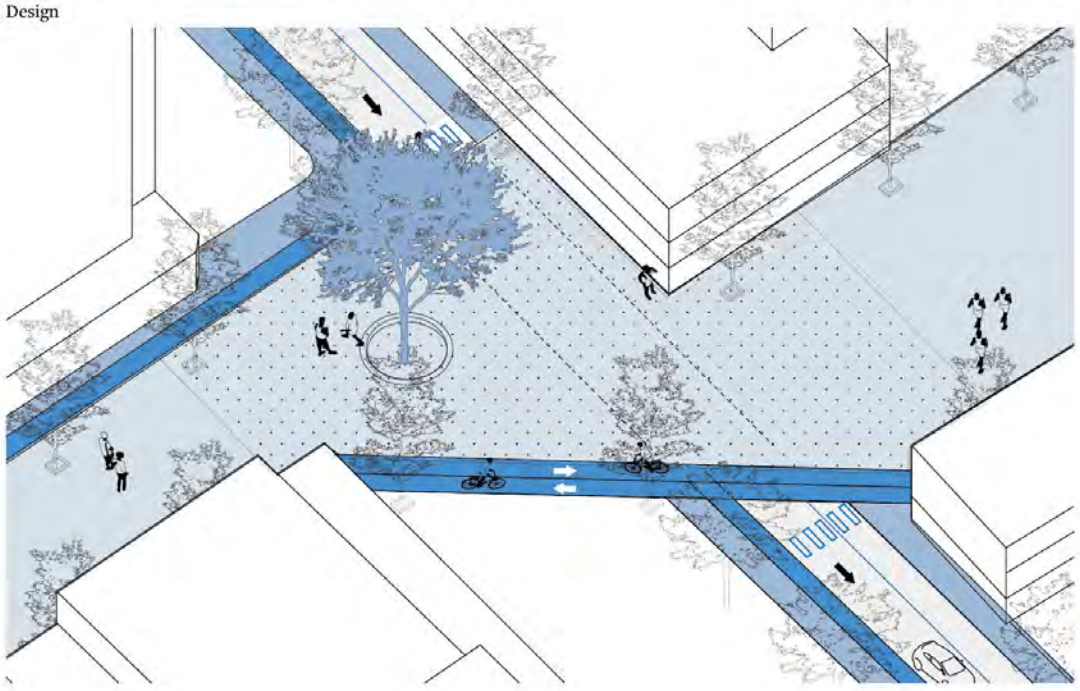
Program

Three precedents inspired the neighborhood-scale interventions. Tallinn's tram line (Top-Left) is free for residents and recently underwent an expansion. Lasnamäe's stops could resemble the Bellevue tram stop in Zürich (Top-Right), which includes a covered waiting area and small retail shop. Harvard's Science Center Plaza (Bottom-Left) also spans a highway and is central enough to be an activity hub.

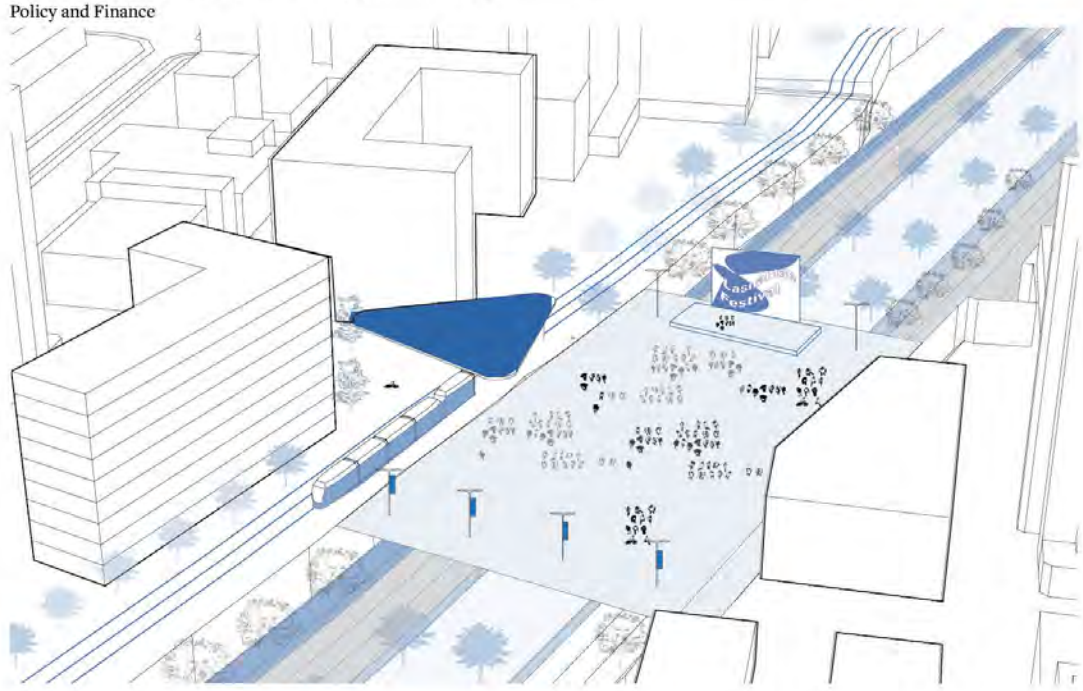
Plan

1:10,000 plan: highlights three potential corridors - Laagna, Tondiraba, and Pirita, all anchored by the new tram line and significant natural features.

Design



Policy and Finance




LAAGNA
LAAGNA STATION

Block:
New Street Network/Programmed Open Space/Pedestrian Corridor

We looked first to the existing multi-modal street network. Then, we overlaid pedestrian-only pathways and, finally, desire lines. Lasnamäe's residents are faced with a plethora of options, some of which were planned and other created by residents over the years. These diagrams visualize the redundancy and inefficiency in the current street network. We then identified the orientation of building entrances, knowing that many of the building entrances are not properly aligned with streets or walkways.
From this analysis, we were able to develop a new scheme and rerouted the street network to optimize social interaction and create spaces for development. We cut the available pavement by 75% in an effort to concentrate pedestrians in strategic locations and guide future development.

Program

When the three block-scale interventions are implemented - a new street network, programmed open spaces, and a pedestrian corridor - they form a program for Laagna that serves the district. The new street network brings people together, the programmed open spaces maintain the street network and house community activities, and the pedestrian corridor remains the heart to this program. By lining the corridor with community uses, as outlined in the axo to the right, residents are compelled to travel its length every day.

Plan

The block-scale interventions can be seen in this 1:1000 plan view. Working together, the rerouted streets, programmed open spaces, and pedestrian corridor create a cohesive district with clear sites of concentration.

Pedestrian Analysis

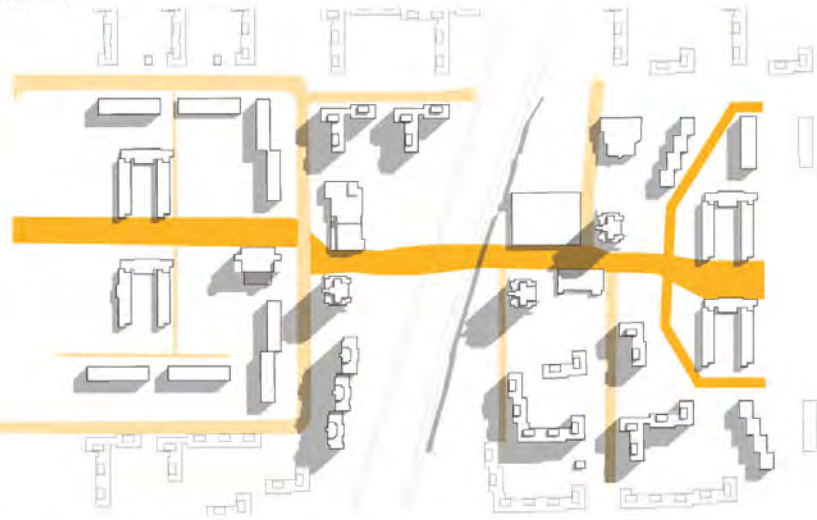
Existing Network

Pedestrian

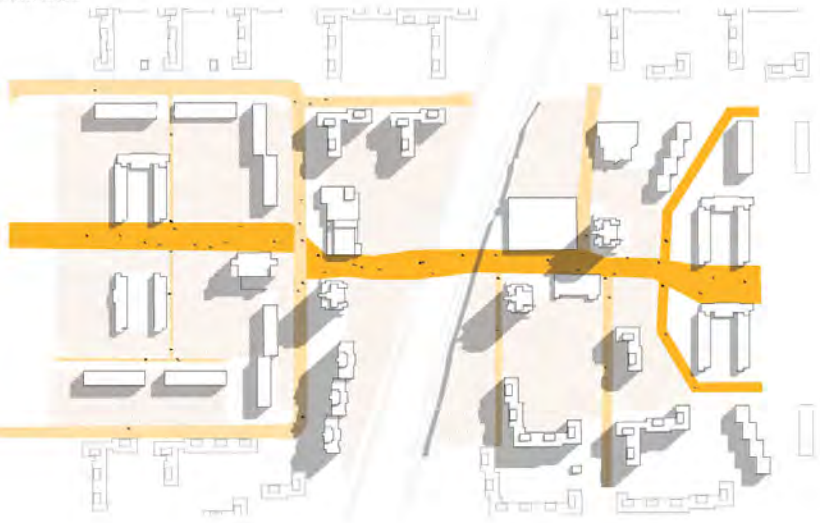
Desire Lines

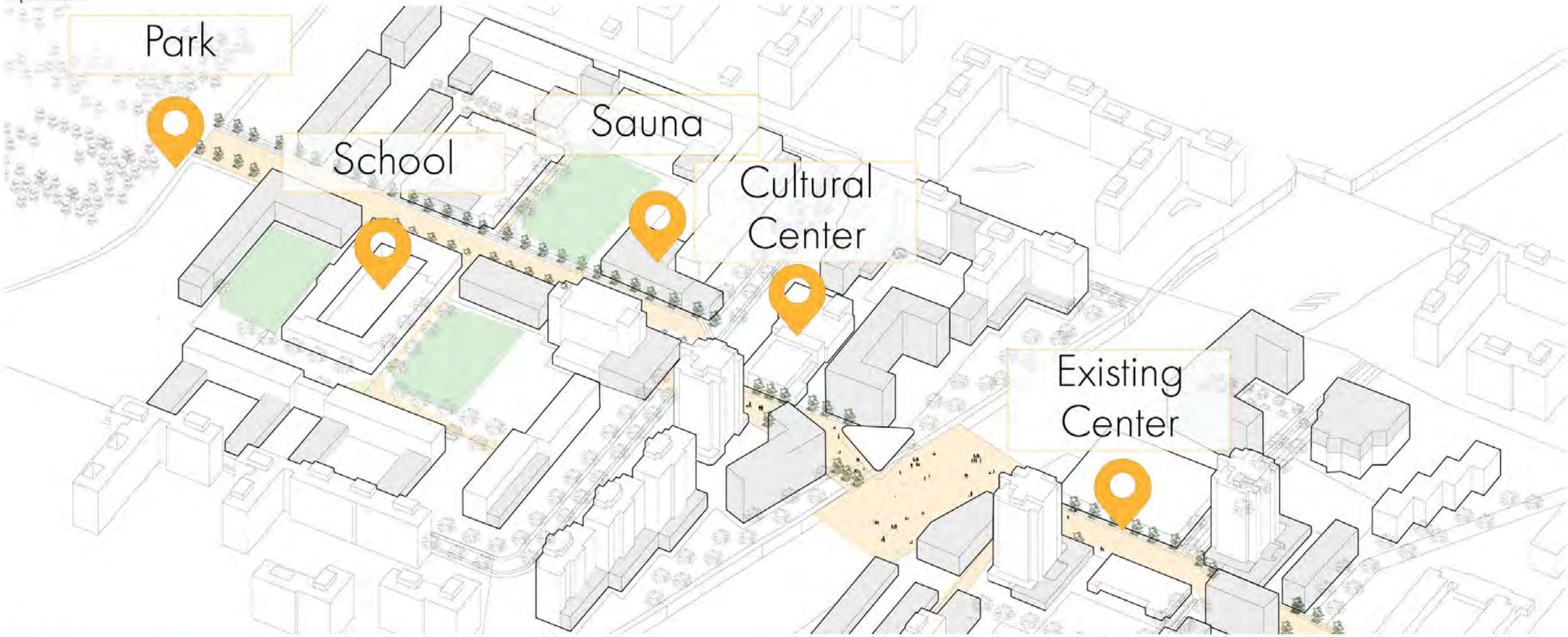
Building Entrances

Rerouted Network



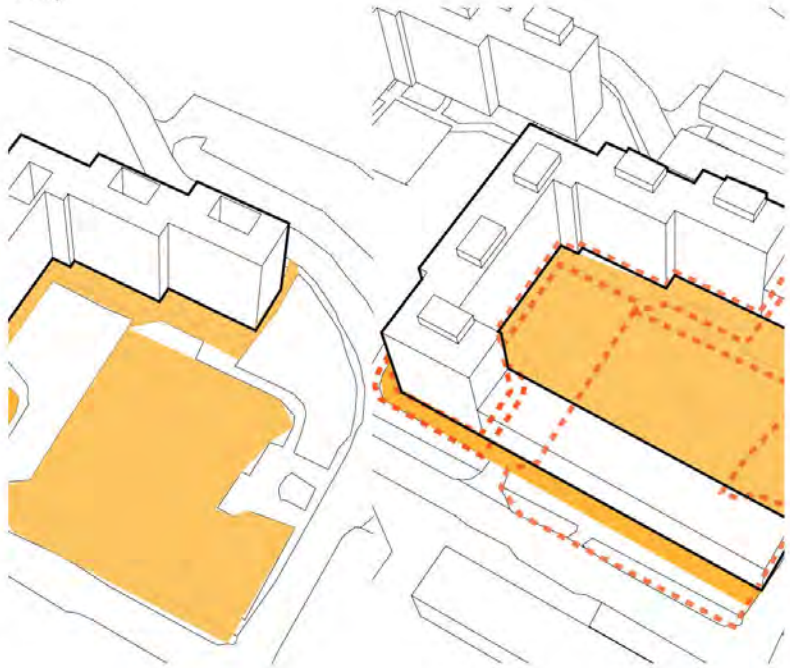
Development Sites



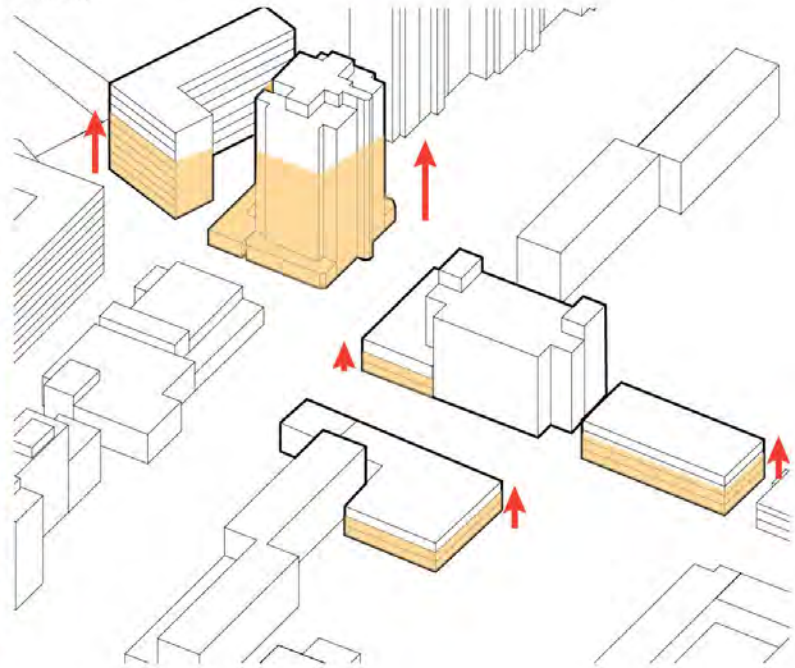


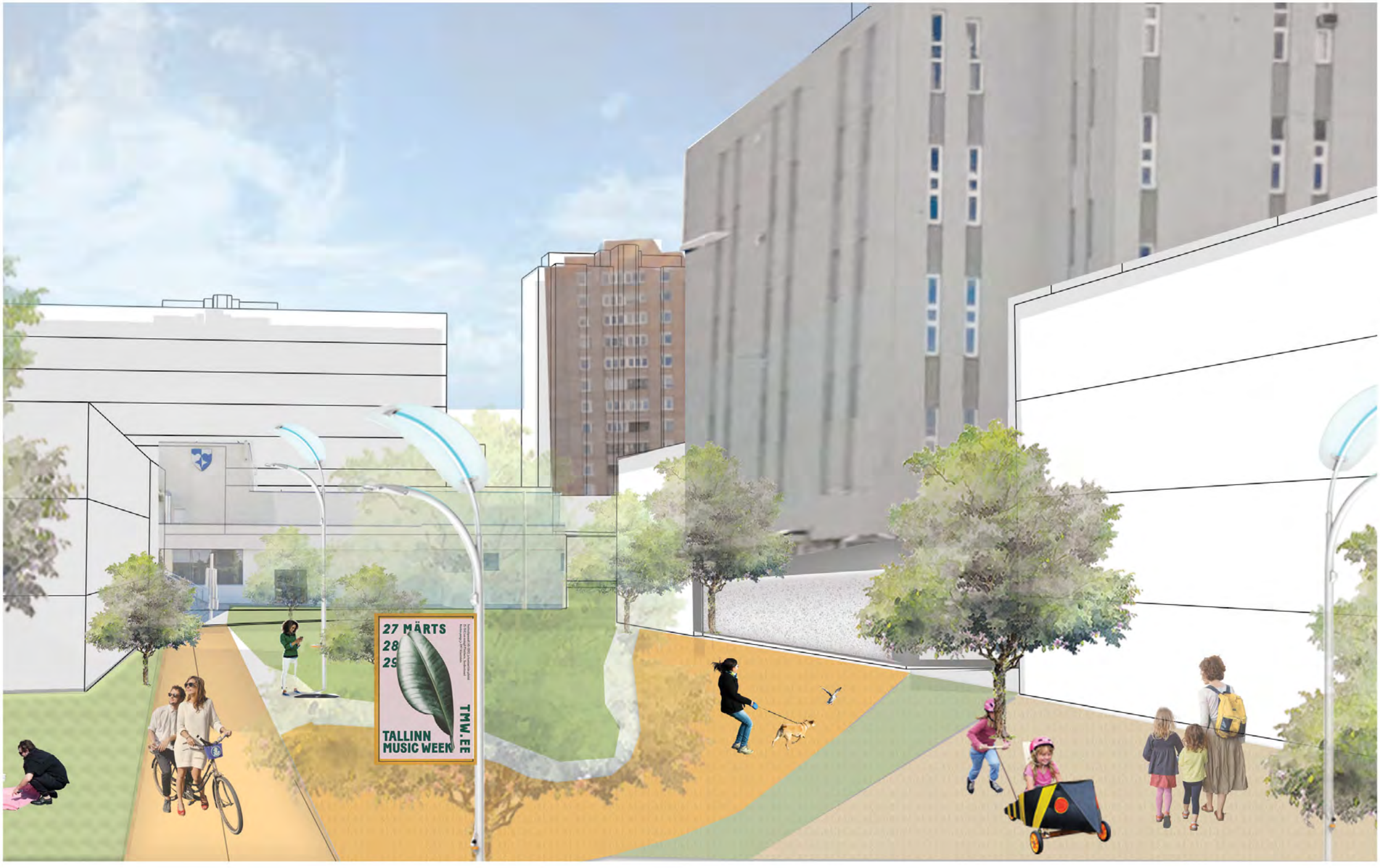
Design

Policy



Finance




27 MÄRTS
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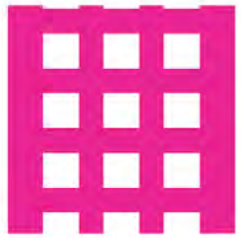
TMW.EE
TALLINN
MUSIC WEEK

Building:
Lower Density Residential/Podiums/
Rooftop Community/Spaces/Circulation Retrofit



The building-scale interventions create more opportunities for social interaction. New building types diversify the built form and create new housing typologies for Lasnamäe's families, who often move out of the area after outgrowing their apartment units. New podiums add additional community or retail spaces while bringing people closer to the street. Circulation retrofits allow for aging-in-place, a relevant issue in Lasnamäe right now, and create spaces for lingering. Rooftops can also be leveraged as indoor or outdoor community spaces.

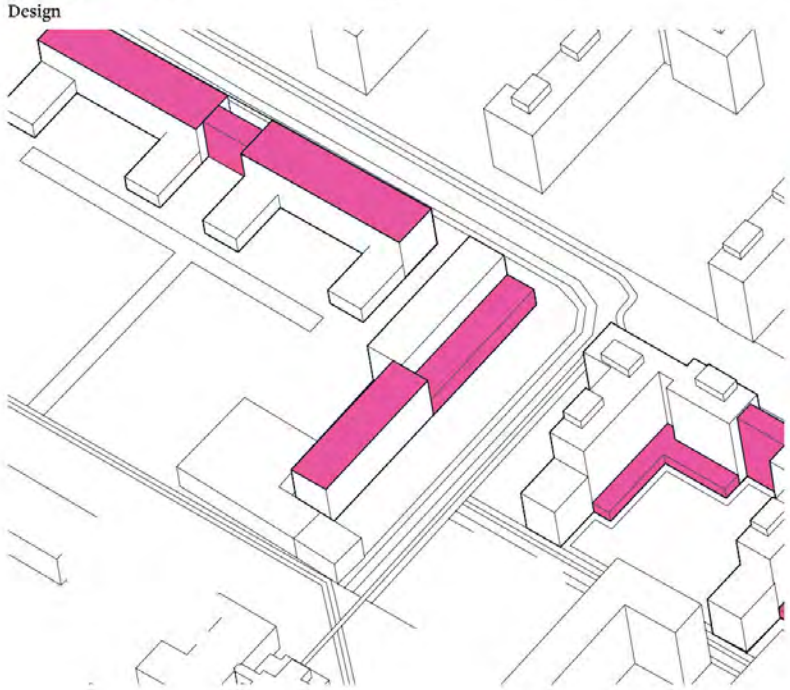
Diversify Residential Typologies

Podiums

Circulation

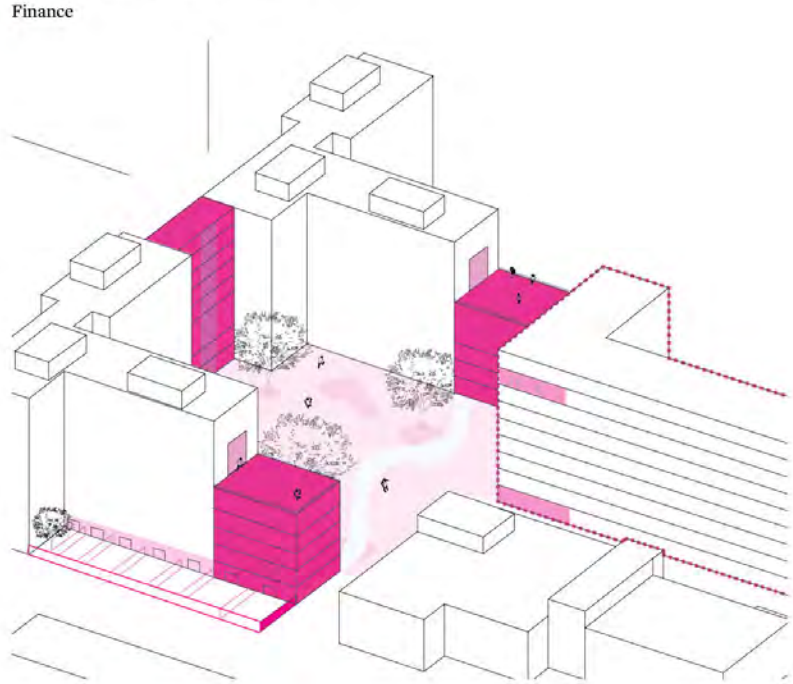
Rooftop Additions

Design



Policy

Finance



Appendix: Case Studies

Phase One of the studio, involved background research on Tallinn using maps, spatial data, text, historical and statistical research. Students were asked to analyze urban form, density and land-use distribution in and around one characteristic subcenter of Tallinn, outside of Lasnamäe.

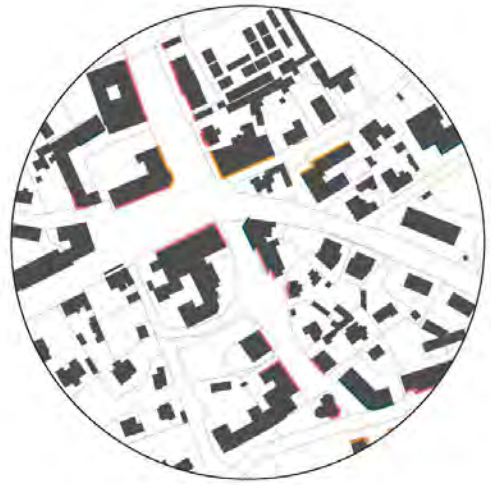
The areas of analysis included: 1. Telliskivi Creative City and Baltic Rail Station Market, 2. Viru-Rotermanni center, 3. Ülemiste City, 4. Nõmme Center, 5. Tallinn Central Market, and 6. Mustamäe Cultural and Commercial Center. For each centre, an analysis of functional mix, density, spatial configuration and accessibility within the centre as well as its surrounding catchment area was conducted to explain how the center had evolved, how it currently functions and which socio-economic actors it benefits.

This work was meant to familiarize students with existing typologies of urban subcenters of various scales in Tallinn, as well as the housing and commercial neighborhood fabrics around them.

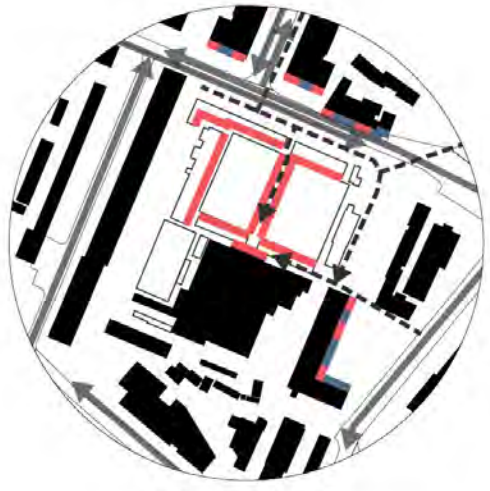
Telliskivi Creative City and Baltic Rail Station Market

Viru-Rotermanni Centers

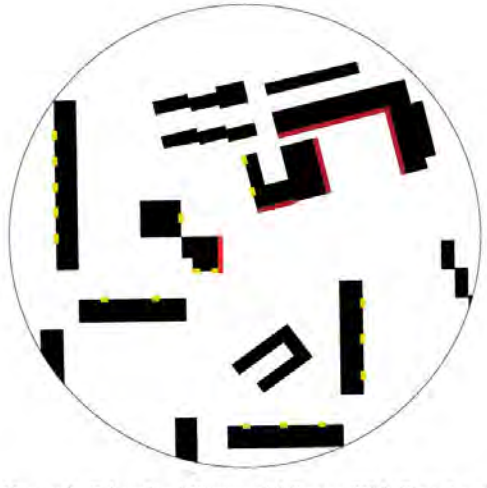
Ülemiste City



Nõmme Center



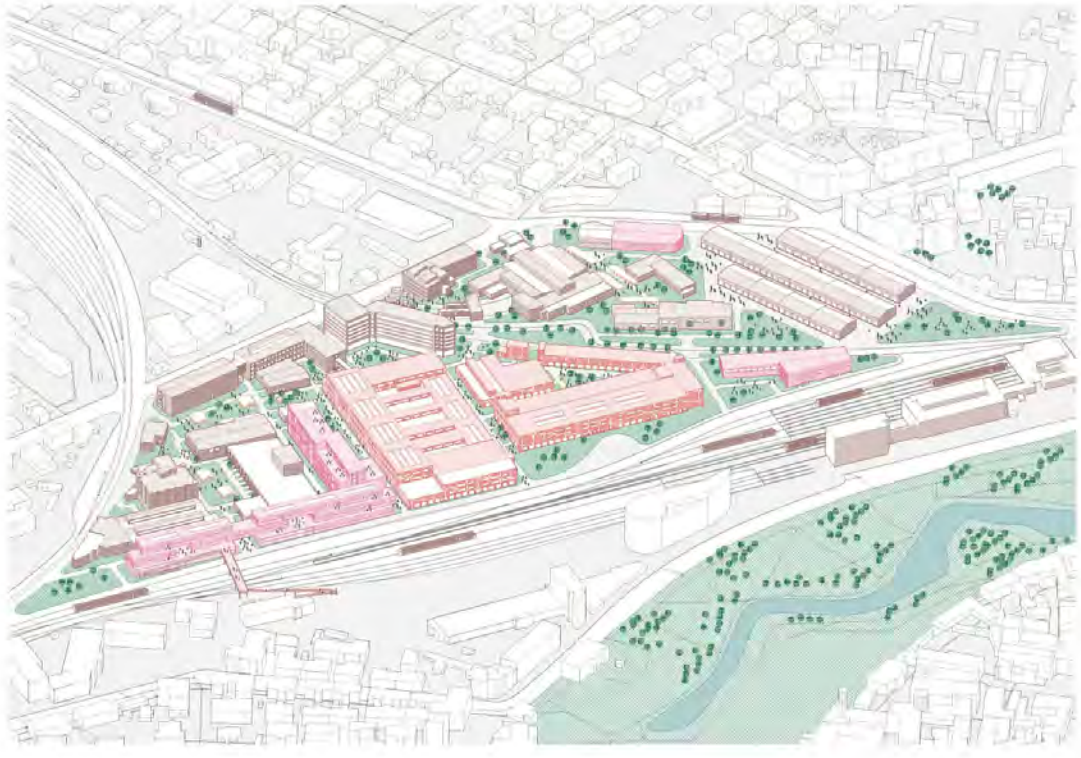
Tallinn Central Market



Mustamäe Cultural and Commercial Center (Vilde Tee 118-124)

Telliskivi-Baltic Market

Telliskivi and Baltic Market are situated next to the Baltic Station, a major transportation hub that provides local and regional connections in Tallinn. The Station connects 15 train lines, 2 tram lines and 60 bus routes. The station is the final destination for trains coming from other cities in Estonia as well as Russia. While it benefits from the connections, Telliskivi and Baltic Market are facing some accessibility issues as a result of being surrounded by the station infrastructure - its train tracks and tram lines. The train tracks to the southeast of the site as well as the tram lines to the north are actively used, as illustrated with red lines on this drawing. Telliskivi was decaying before it was purchased by a developer who turned the area into creative clusters with locally-owned shops, studios, restaurants, and offices. Telliskivi Creative City was established in 2009 and has evolved to become the largest hub for the creative economy in Estonia. Baltic Market, which is located next to Baltic Station, completed a major renovation in 2017. The developer decided to erect a contemporary market building while trying to preserve the existing historical limestone buildings. The developments in Telliskivi and Baltic Market are great examples of successful brownfield redevelopment, however, they mainly cater to established businesses. In the case of Telliskivi, it is "most popular among young, successful Estonians, but is seldom visited by Russian-speakers." Given the site's ideal location, there are some missed opportunities because of the lack of social inclusion and programmatic diversity. Key Issues: 1/ Accessibility 2/ Inclusion 3/ Diversity.



Viru Rotermanni

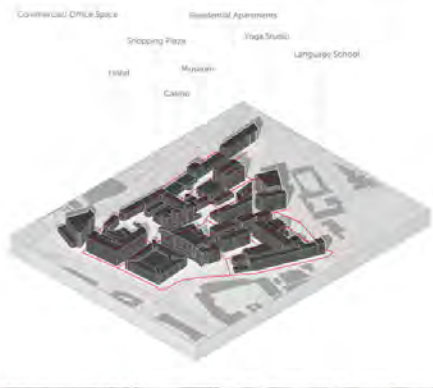
Viru Rotermanni is located at the center of Tallinn and is known as the city's central business district. Viru Rotermanni is home to many businesses and has a unique mixture of historic and modern architecture. As this area experienced changes in architecture, building typology, and political framework, it maintained its appeal. In 2015, 4.5 million tourists were recorded as visiting the city of Tallin. More than half of these tourists arrived in Tallinn through the city's port, located adjacent to Viru Rotermanni. In addition, Viru Rotermanni is a central hub for public transportation, with many residents traveling to this area for work and/or entertainment. Many tourists enjoy spending time in the Central Business District and in Tallin's Old Town. However, there are improvements that can be made to better connect these three sites in downtown Tallinn. Through research and mapping routes, we found that traveling from the port to Viru Rotermanni's Central Business District takes less than ten minutes, In addition, it takes less than fifteen minutes to travel from the Port of Tallinn to the Old Town. Although this walk is short, tourists often travel to these sites by bus, due to unpleasant conditions in the area. The street sections adjacent to our analysis map show that the width of streets (shown in red) makes traveling by foot unpleasant and challenging. Residual green space on the border of the Old Town creates an inactive and unengaging space for people traveling by foot. In addition, wide intersections and inactive storefronts lead to a less stimulating urban environment in Viru Rotermanni. Based on the challenges of this site our key issues are: 1/ Residual Greenspace 2/ Unpleasant Intersections 3/ Incomplete Streets 4/ Inactive Frontages

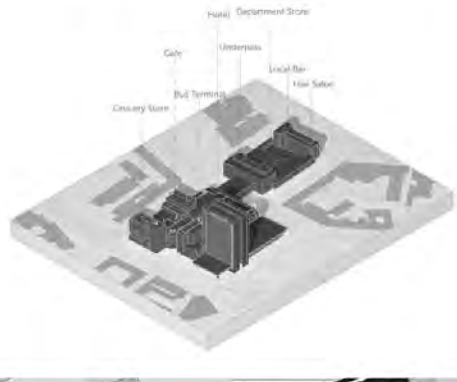
Residual Green Space

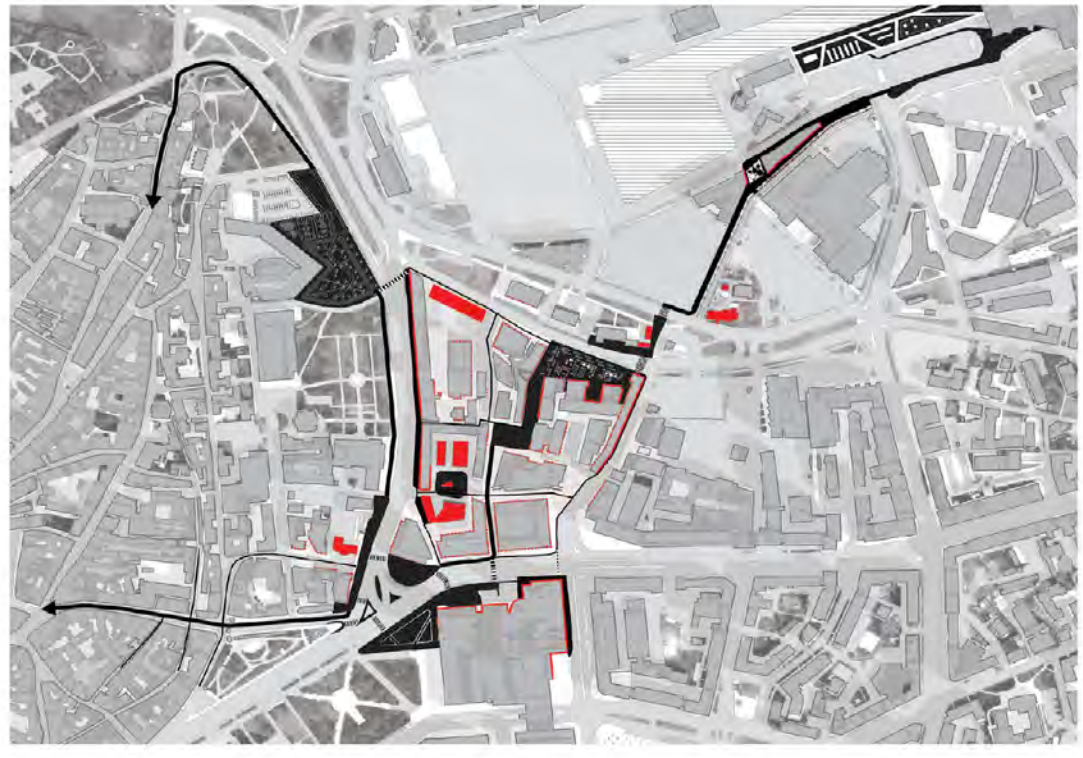
Unpleasant Intersection

Inactive Store Frontages

Incomplete Streets

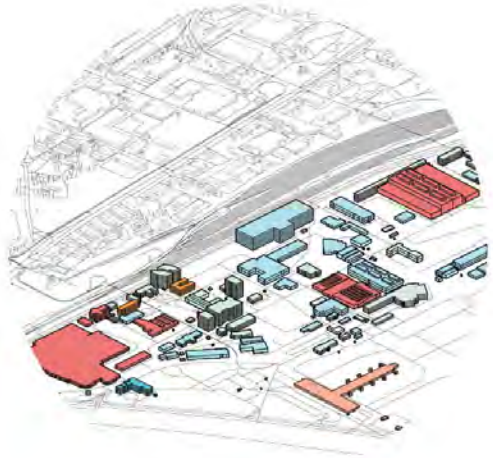


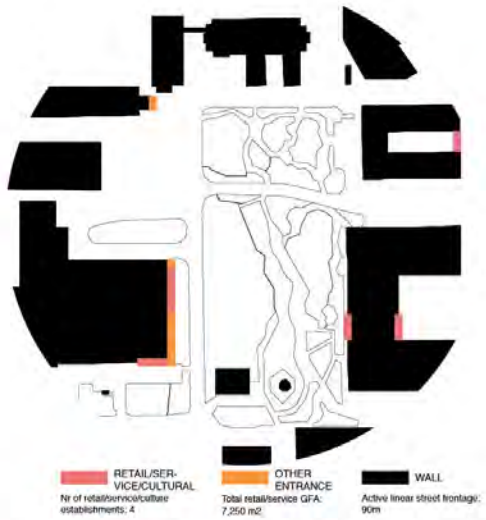


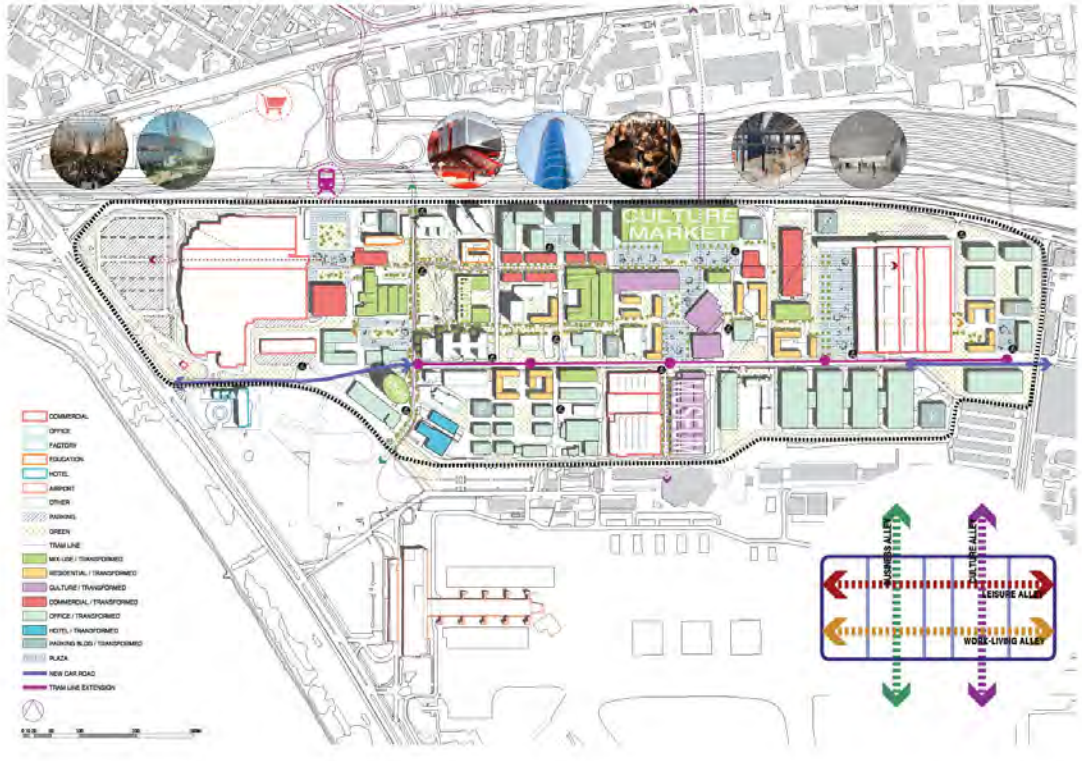


Ülemiste City

Ülemiste City is a business park in Tallinn, Estonia, on the site of the former factory complex Dvigatel in the Ülemiste neighborhood. It is situated between Lennart Meri Tallinn Airport, shopping center Ülemiste Keskus and the Ülemiste railway station, forming the core of the Ülemiste subdistrict. The factory complex Dvigatel, built at the end of the 19th century for producing railway cars and other machinery for the Russian Empire, closed after Estonia regained its independence from the Soviet Union in 1991. After its privatization and some unsuccessful attempts to restore former production capacities, the new owners decided to re-profile the area. In 2005, AS Mainor launched the transformation of the favorably-located 36 ha old industrial area into a modern technology campus, drawing inspiration from Kista Science City in Stockholm, called the Silicon Valley of the Nordic countries. In 2010, the Finnish company Technopolis was included in the development of the business park. Key Issues: 1/ Single-mode problem 2/ Lack of mixed-use programs 3/ Spatial segregation.

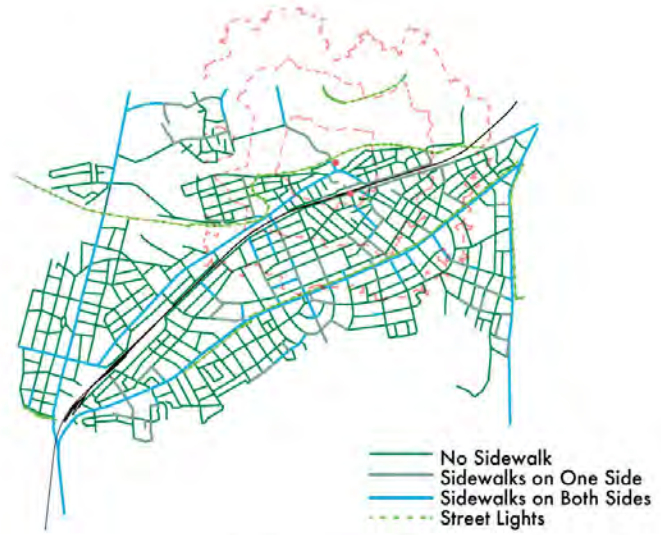


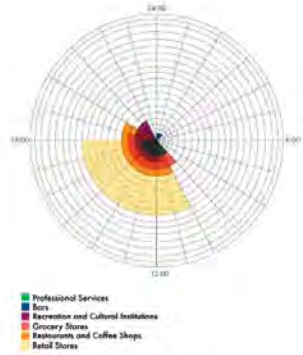


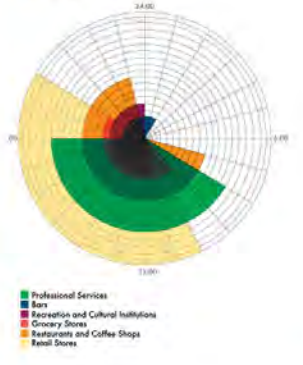


Nõmme Center

Nõmme is one of Tallinn's eight subdistricts and home to about 40,000 people. Separated from central Tallinn by a lush forest, Nõmme remains largely residential with a basic but sparse central shopping area and a commuter rail station. Nõmme is economically stable, with higher home prices and incomes compared to- Lasnamäe and other parts of the city. Although there are few jobs in Nõmme, residents easily commute to job centers in the center city and development patterns reveal that more opportunities are unlikely to arrive soon. Bounded on one side by the forest and on the other by an active commuter train station, Nõmme Center's location is a naturally occurring commercial hub well positioned for transit-oriented development. Commuters and visitors frequent the Nõmme Market, a historic market that was recently updated and sells high-end and everyday goods. Despite its optimal location and apparent activity, Nõmme faces a number of constraints. Physically, Nõmme's built form lacks continuity, and its poor street conditions make it difficult for pedestrians to access destinations in town. Underutilized lots and surface-level parking make up a significant proportion of land, further straining the pedestrian experience and failing to promote more sustainable modes of transport. This small, yet disconnected, town center does not adequately serve the Tallinn community. Key Issues: 1/ Poor streetscapes that block access to town 2/ Incongruous built form in need of more activity and purpose 3/ Lack of adequate gathering spaces for residents and visitors

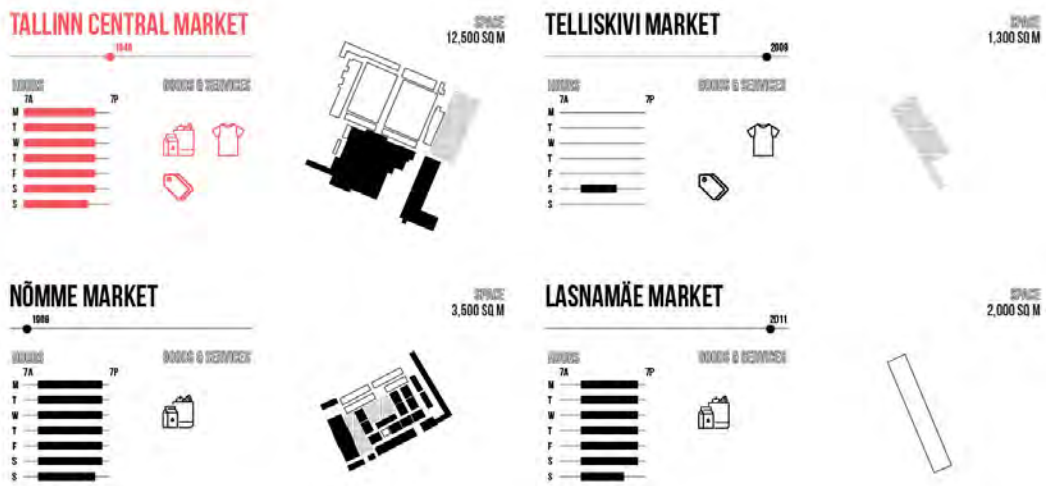






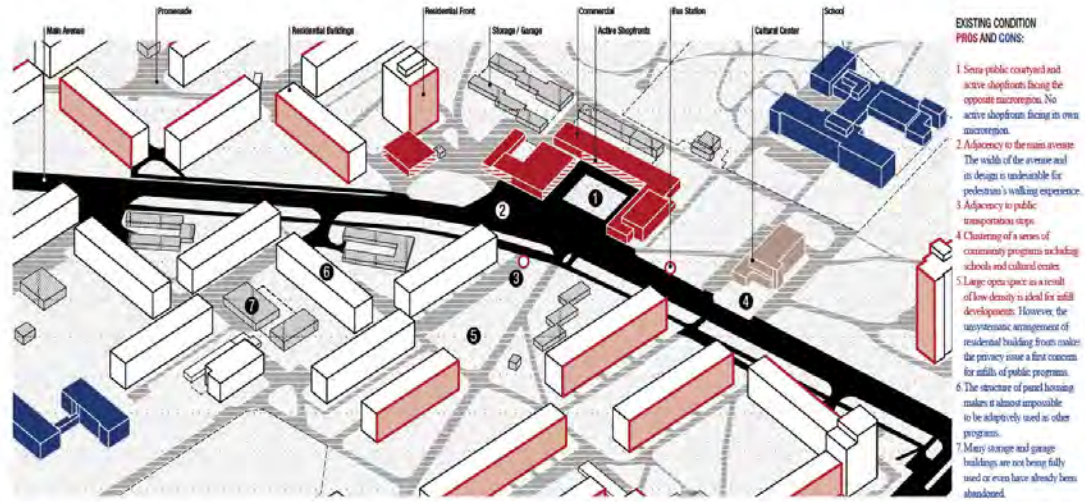
Keskturg (Tallinn Central Market)

Keskturg, Tallinn's Central Market, is located in the Keldrimäe sub-district of the city, adjacent to Tallinn's central business district and well served by bus and tram routes. This central location makes the market convenient for residents from all over the city to conduct their produce shopping and serves a vital function as an affordable locale regularly frequented by residents of diverse ethnic and economic backgrounds. In comparison to the other seven open food markets in the city, Keskturg is one of the biggest. These factors make its disrepair and dilapidation even more critical. The market's structure is outdated and in need of repair, the produce sold and stall space rented out to vendors is not yielding a high enough revenue for the property's private owner, and there is impending pressure to develop apartment buildings on the site as new developments continue to pop up around different parts of Keldrimäe. Furthermore, Keskturg is largely surrounded by residential buildings. As more people move to the sub-district, there is a growing need for more mixed-use programming. More open space would make Keskturg more of a destination for its patrons. The market is also well served by transportation. Several bus and tram lines have a stop a short distance from Keskturg. Unfortunately, the current road configuration and streetscaping make the connection from this transit hub to Keskturg difficult to see. These issues need to be addressed in the redesign of Tallinn's Central Market. Key Issues: 1/ outdated structure 2/ pressure to develop higher revenue yielding property 3/ lack of open space 4/ poor circulation

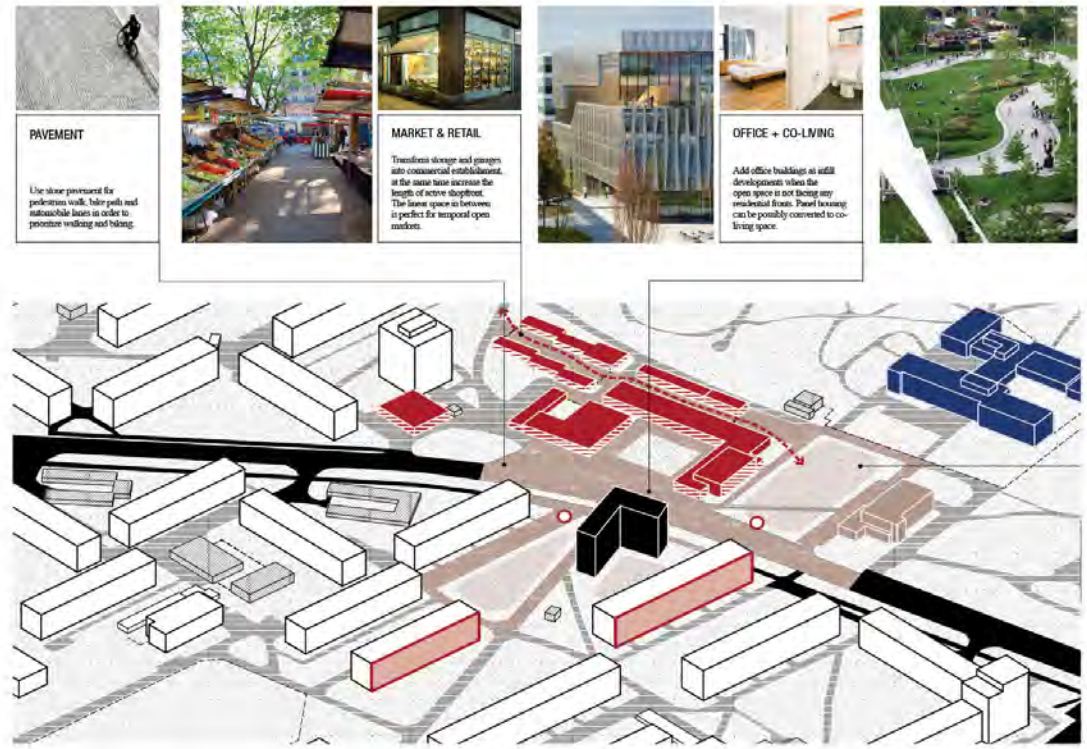


Mustamäe

Mustamäe is located 5km of the center of Tallinn and is the first mass-produced panel housing district in Tallinn, a home for 67,000 people. During the socialist era, Mustamäe was originally designed as six microregions divided by the main avenues. Each microregion was meant to be a self-sufficient unit which contains two or three schools, several commercial establishments, and a series of panel housing blocks. Therefore, there was supposed to be no interaction in between microregions. Also due to the independence of the microregions, the choice of location for commercial buildings did not take much consideration for outreach interactions but focused more on how it can better serve its own dominant. Then came the collapse of Soviet Union. The capitalist economy took the role where commercial activities tend to cluster, and the location and connectivity of commercial establishments become the crucial factor for prosperity. The downside of the Mustamäe planning starts to reveal. At the same time, we can see an increasing number of families having their own private cars. A bunch of large-scale shopping malls and commercial centers were built and started to attract a huge number of people driving there for shopping. As a result, the commercial establishments in Mustamäe is having a hard time surviving such social trends. A lot of them are being less visited or even abandoned. But there are still several small commercial centers functioning quite well and thus, it is critical to zoom into one of them and investigate the potential for improvements. Key Issues: 1/ Lack of self-sufficiency - Lack of core civic nodes and program diversity 2/ Difficulty for transformation - Land and property privatization & Lack of systematic management



COMMERCIAL AND CULTURAL CENTER EXISTING CONDITION



The Unfinished City
Envisioning 21st Century Urban Ideals in a Soviet-era Housing District

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In the fall of 2017, a research and design studio at Harvard Graduate School of Design embarked on a studio practicum focusing on analyzing and understanding the natural, urban, and cultural characteristics of existing environments in Tallinn, Estonia and translating this comprehensive profile into meaningful design and development proposals for the future developments in Lasnamae. The research and design agenda was intended to challenges graduate students to explore innovative urban development concepts through trans-disciplinary research involving architecture, landscape architecture, and urban planning + design. Student projects take on policy, development patterns.

Notes

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Fall 2017

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