

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

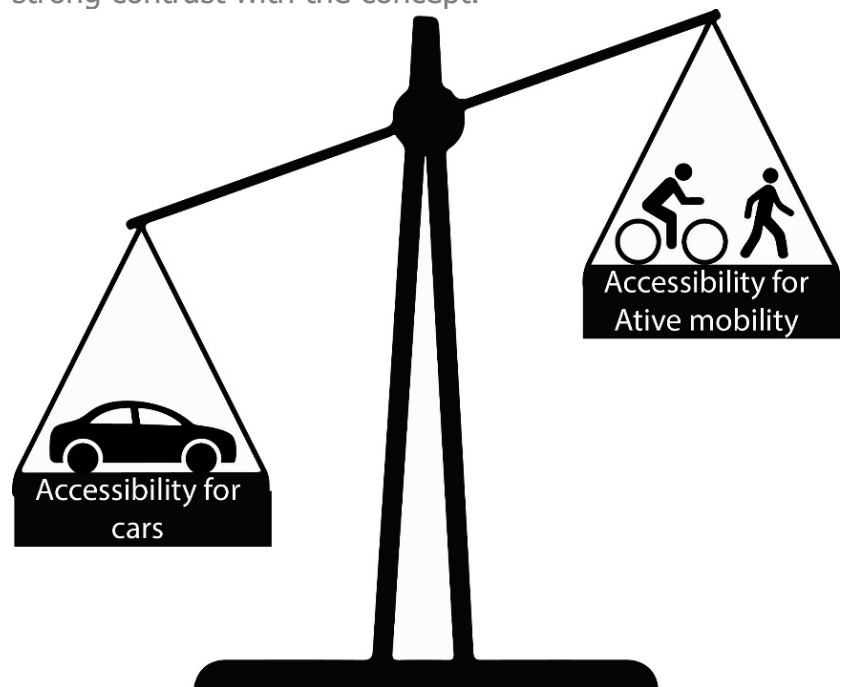
Personal information	
Name	Jesse Hoogeveen
Student number	4853318

Studio	
Name / Theme	Planning Complex Cities (PCC)
Main mentor	Thomas Verbeek Section Urban Studies
Second mentor	Rients Dijkstra Section Urban design
Argumentation of choice of the studio	My interest in urbanism and urban planning comes from a desire to find sustainable and innovative solutions to the complex issues that affect our cities. The PCC studio's focus on exploring the interaction between spatial development and institutional change is interesting to me. I believe that by proposing institutional change and creating new spatial development, we can lay the foundation for a more inclusive and sustainable urban future. I am also interested in working across scales and embracing cultural diversity. This is connected with my view that successful urban planning not only requires technical and policy solutions but also an understanding of cultural and ethical aspects.

Graduation project	
Title of the graduation project	Rebalancing the city: Redistributing Urban Space in Amsterdam-Zuid Oost Through the 15-Minute City Concept
Goal	
Location:	Amsterdam Zuid Oost
The posed problem,	As a postman, I see daily how pedestrians and cyclists are structurally disadvantaged, especially in post-war neighborhoods like Amsterdam Zuid Oost. The neighborhood reflects the legacy of car-centric modernist planning: monofunctional, fragmented, and dominated by large-scale infrastructure. Originally built in the 1960s–70s as a middle-class expansion, Zuid Oost struggled with high vacancy rates and became home to lower-income and migrant groups

through social housing allocation. Although essential amenities are often within walking distance, access is hindered by unsafe traffic, poor infrastructure, and other spatial and social barriers.

The result is a landscape of spatial injustice: there is an unequal distribution of accessibility, favoring cars. This has led to a major car dominance in the area. People without cars are extra disadvantaged by this current situation, where they face obstacles to reach essential services that are physically close, but often not accessible through active mobility. Zuid Oost is therefore a highly relevant case to reimagine the 15-minute city concept under conditions of spatial inequality in a suburban and car-dominated neighborhood, conditions which are in strong contrast with the concept.



research questions and

Main Research Question:

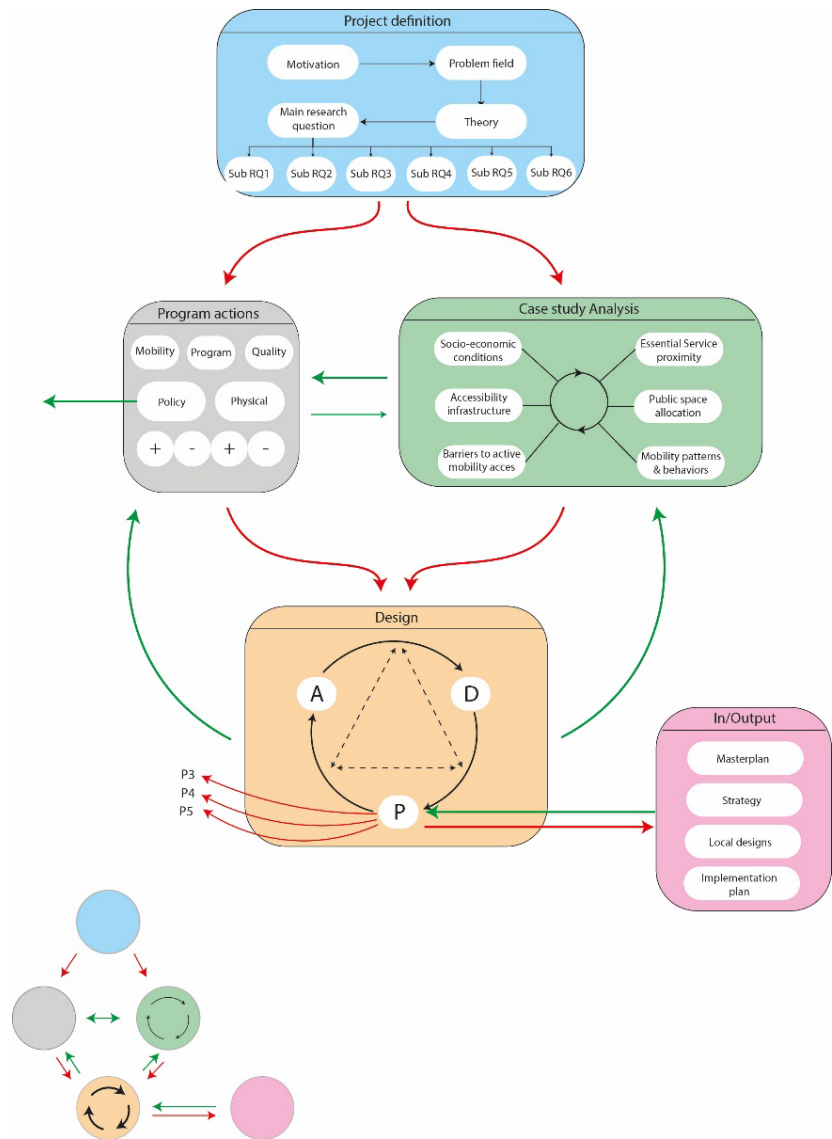
How can the 15-minute city concept be applied to correct spatial inequity in Amsterdam-Zuid Oost through the redistribution of urban space?

Sub-Research questions:

- What are the spatial characteristics and root causes of inequality in Amsterdam-Zuid Oost according to the literature and existing data?
- What spatial barriers and mobility obstacles do residents experience in their daily use of the neighborhood?
- How can the concept of the 15-minute city be adapted and applied to address physical inequalities in Amsterdam-Zuid Oost?

	<ul style="list-style-type: none"> • What spatial interventions are needed to overcome barriers and improve access to essential services through active mobility? • What spatial and policy strategies are necessary to support the design proposal while enhancing the spatial quality of the area? • What implementation strategies are required to realize the design proposal and promote spatial justice in Amsterdam-Zuid Oost?
<p>design assignment in which these result.</p>	<p>The design assignment begins with a spatial analysis of Amsterdam-Zuid Oost, focused on identifying the spatial inequality in access to essential services. Based on this analysis, a strategic zoom-in area was selected—one where three key amenities (supermarket, school, and general practitioner) spatially overlap. These locations are strategic leverage points for behavioral change. While physical proximity to these services exists, proximity alone does not automatically lead to the desired behaviour. Small interventions in this strategic area can have a big effect.</p> <p>The main objective is therefore to make active mobility more attractive and car use a less attractive choice in daily routines. To support this, a Program of Actions was developed—an intervention catalogue aimed at improving access to essential services through active mobility. This catalogue is categorized into different themes, with a clear distinction between high-priority and supporting interventions. Each intervention is further classified by its type (policy vs. physical) and by its behavioral approach: positive (encouraging desired behaviors) or negative (discouraging undesired ones).</p> <p>Together, the intervention catalogue and the case study form the basis for the design process. However, this is not a linear process. The design phase itself is structured in iterative cycles of analysis, design, and presentation, and provides continuous feedback to both the catalogue and the case study analysis.</p> <p>The final output consists of a masterplan for the selected zoom-in area, a spatial strategy, local design interventions, and an implementation plan;</p> <p>The masterplan visualizes how all the interventions come together to improve accessibility, restructure space, and promote active mobility in a coherent spatial layout.</p> <p>The strategy outlines the underlying design logic, priorities, and principles that guide the selection and placement of interventions.</p>

The implementation plan breaks the proposal into actionable steps, defining phases, responsible actors, and how changes can be realized over time. The iterative workflow makes sure that all components evolve together, responding to each other throughout the process.



Process

Method description

Spatial analysis

→ To map accessibility, proximity, infrastructure, and land use using QGIS and isochrone mapping.

Quantitative data analysis

→ To look into socio-economic and demographic data that show patterns of spatial inequality.

Field observations

→ To observe mobility behavior, physical barriers, infrastructure conditions, and public space use in the area.

Interviews

→ To gain insight into residents' mobility behavior, their perceived barriers, and preferences through conversations

Literature and theory review

→ To frame the project within an academic foundation on spatial justice, urban accessibility, and the 15-minute city.

Design iterations

→ A cyclical process of testing, adjusting, and refining spatial and strategic designs and interventions based on findings from analysis and design feedback.

Strategic spatial synthesis

→ Integrating all findings and designs into a coherent spatial masterplan, strategies, local designs, and implementation plans.

Literature and general practical references

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Reflection

My graduation project focuses on addressing spatial inequity in access to essential services, favouring cars, in Amsterdam-Zuidoost by adapting the principles of the 15-minute city. Unlike its usual application in dense city centers, this project explores how the concept can be adapted to a post-war, car-oriented environment where proximity does not equal accessibility. In many areas, services may be physically close, but poor infrastructure, social barriers, and car-dominated space create major obstacles to active mobility, particularly for residents without access to a car.

By identifying a strategic zoom-in area where key amenities overlap, the project targets specific locations where small interventions can have a large impact on everyday mobility choices. The goal is to encourage walking and cycling while reducing reliance on the car through physical and policy-based interventions focusing on improving accessibility to essential services.

The PCC studio's emphasis on spatial and institutional transformation supports the project's broader ambition: not only to redesign space but to challenge the systems that historically reinforced inequality. The MSc Urbanism program has helped me with the theoretical grounding and design tools to look into these complexities, from spatial analysis to iterative design processes.

This project is both scientifically and socially relevant because it brings the 15-minute city concept into a relatively new context that is in contrast with its usual application. Through different spatial strategies and a clear implementation plan, it will provide a concrete model for promoting accessibility for active mobility, sustainability, and spatial justice in historically underserved urban environments like Amsterdam Zuid Oost.