

**Dissertation Release**

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## **Better public transport through redesigns?**

<b>Title of the dissertation</b>	Transit in transition: insights into large-scale public transport network redesigns
<b>Contents of the dissertation</b>	<p>The Ring Rail Line, West Metro, tram network reform, new trunk routes, and a focus on feeder routes... The Helsinki public transport network of today looks very different from what it looked a decade ago, involving a shift from direct connections to the city center to a stronger emphasis on frequent trunk routes. The redesigned network has improved service for many, while others have been left worse-off, consequently needing to drastically adjust their daily routines. Many other cities ranging from Houston to Amsterdam have applied similar network redesigns with similar means and goals. The redesigns are often motivated when the old network is unable to adapt to changes in travel patterns, stronger competition from or new synergies with other modes, and the expectations of the passengers.</p> <p>This dissertation increases the understanding of public transport redesign effects while simultaneously providing the means for easier comparison between public transport networks whether it be between cities or the long-term changes of one city. Moreover, the dissertation focuses on the interface between policy and the public transport network. The dissertation provides novel approaches for quantifying mobility, navigability, and network structure. Furthermore, the trade-offs between these factors are studied in several network redesigns. The redesigns tend to favor high frequencies and a simplified network structure, focusing on areas with the highest potential for attracting passengers. The research approach is made possible by the improved availability of open schedule data, enabling effortless modeling of real-world public transport networks.</p>
<b>Field of the dissertation</b>	Transportation engineering
<b>Doctoral candidate</b>	Christoffer Weckström, M.Sc. (Tech.), born in 1988 in Helsinki, Finland
<b>Time of the defence</b>	August 13 <sup>th</sup> , 2021 at 15:00 hours
<b>Place of the defence</b>	Online: <a href="https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWUxN2ZIZjE-tOTMzMj00ZGJmLWEyYWMtY2ExZDZjYTRkNTg3%40thread.v2/0?context=%7b%22Tid%22%3a%22ae1a7724-4041-4462-a6dc-538cb199707e%22%2c%22Oid%22%3a%2229496725-0b11-4a9a-b252-75ebaa3f0f0d%22%7d">https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWUxN2ZIZjE-tOTMzMj00ZGJmLWEyYWMtY2ExZDZjYTRkNTg3%40thread.v2/0?context=%7b%22Tid%22%3a%22ae1a7724-4041-4462-a6dc-538cb199707e%22%2c%22Oid%22%3a%2229496725-0b11-4a9a-b252-75ebaa3f0f0d%22%7d</a>
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