

# Borgarlínan – A Backbone for Sustainable Urban Mobility

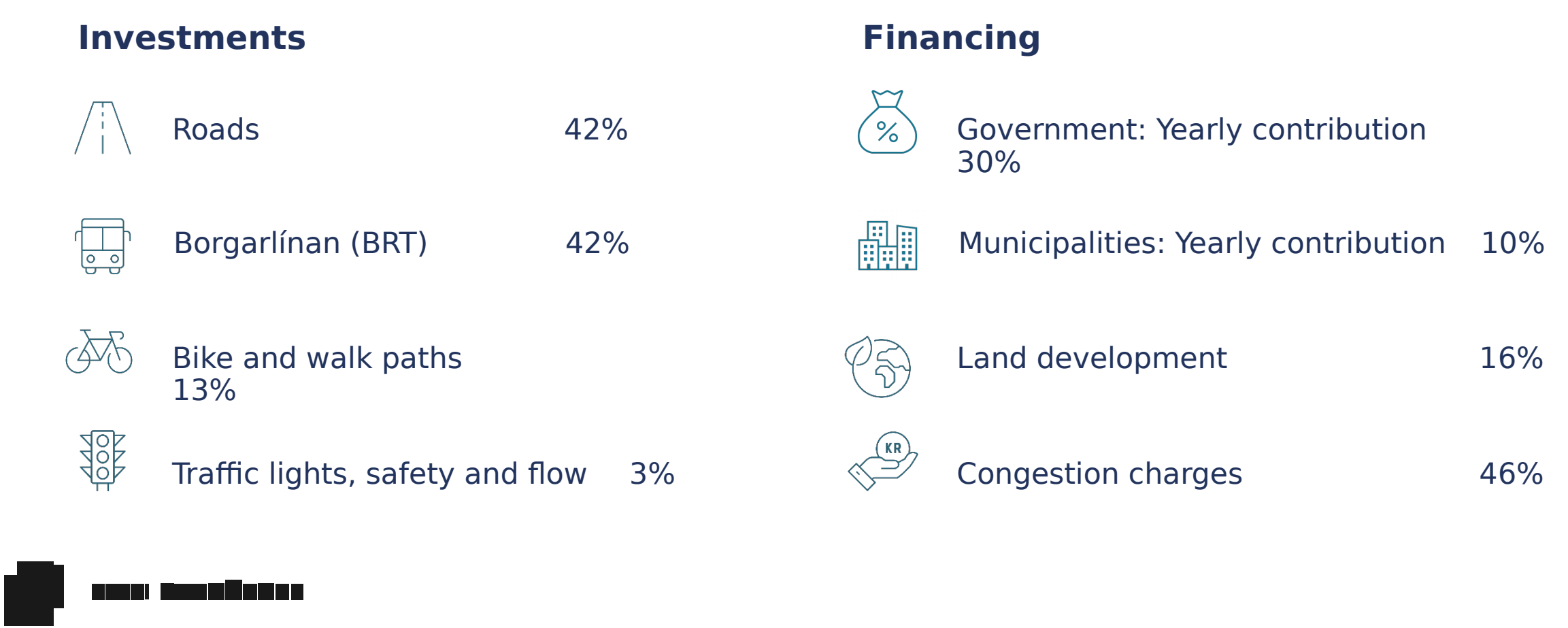


# Borgarlínan – A Backbone for Sustainable Urban Mobility

- Hallbjörn R. Hallbjörnsson
  - Transport engineer from Aalborg University
  - Design manager in the Borgarlínan project
  - Have been involved in the Borgarlínan project for 6 years
- Transport for the Capital Area
  - Transport treaty for the capital area
  - An Official Public Limited Company incorporated to invest in major transport infrastructure projects in accordance with the Treaty
  - Shareholders: Government of Iceland & Municipalities in the Capital Area

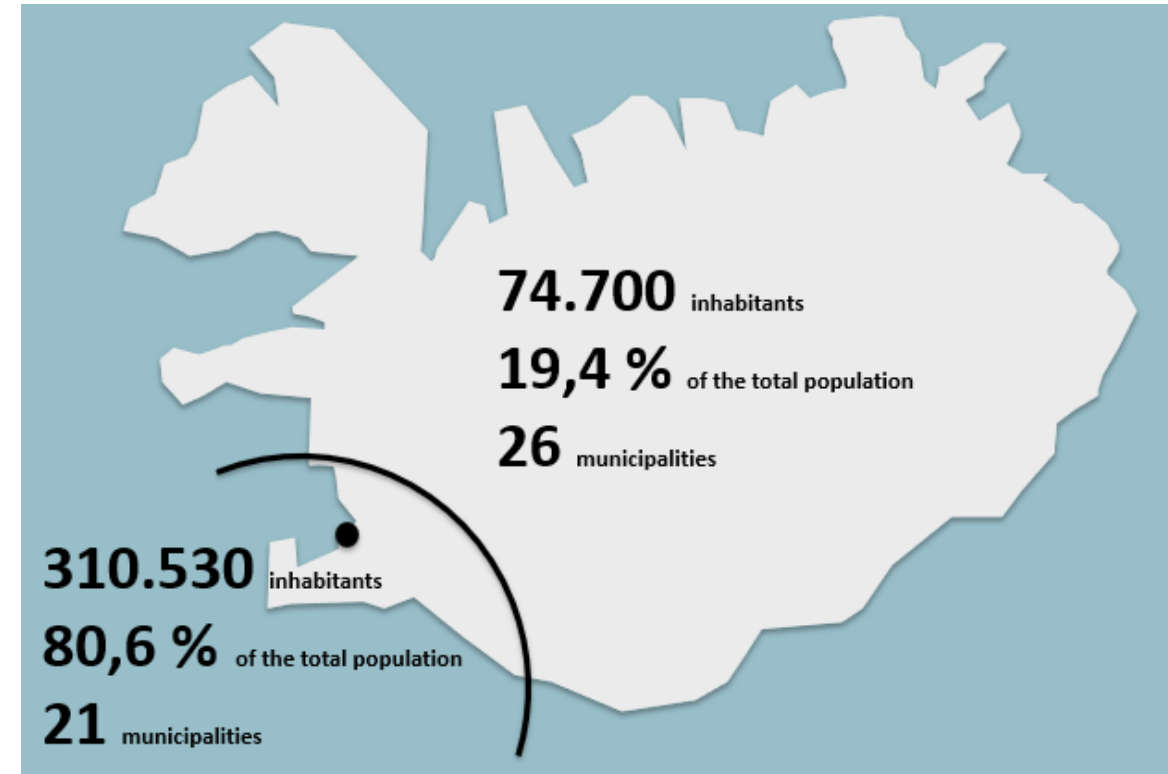


# Investment & Financing



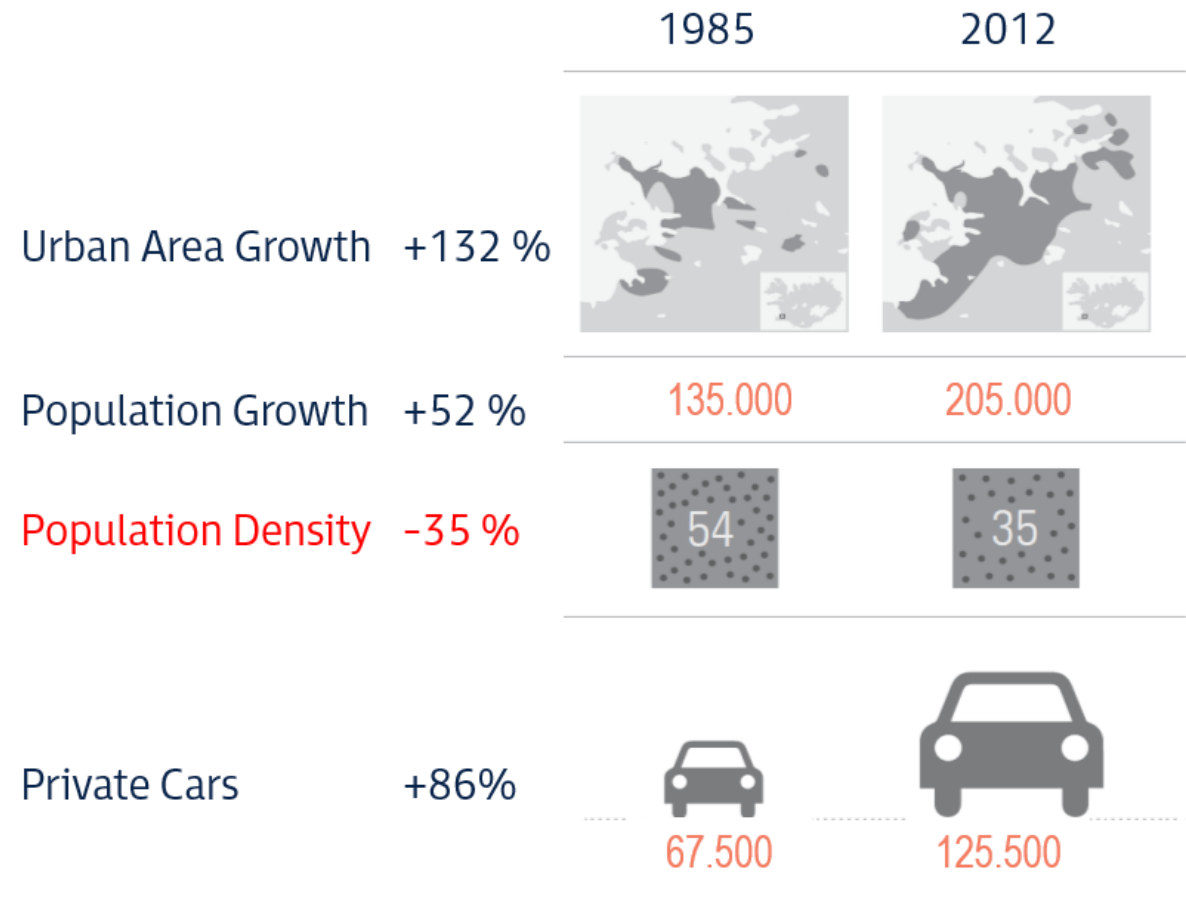
# The Challenge

- Population
  - 80% within 45 minutes from the capital area.
- An average annual population growth rate of 2% since 1945.



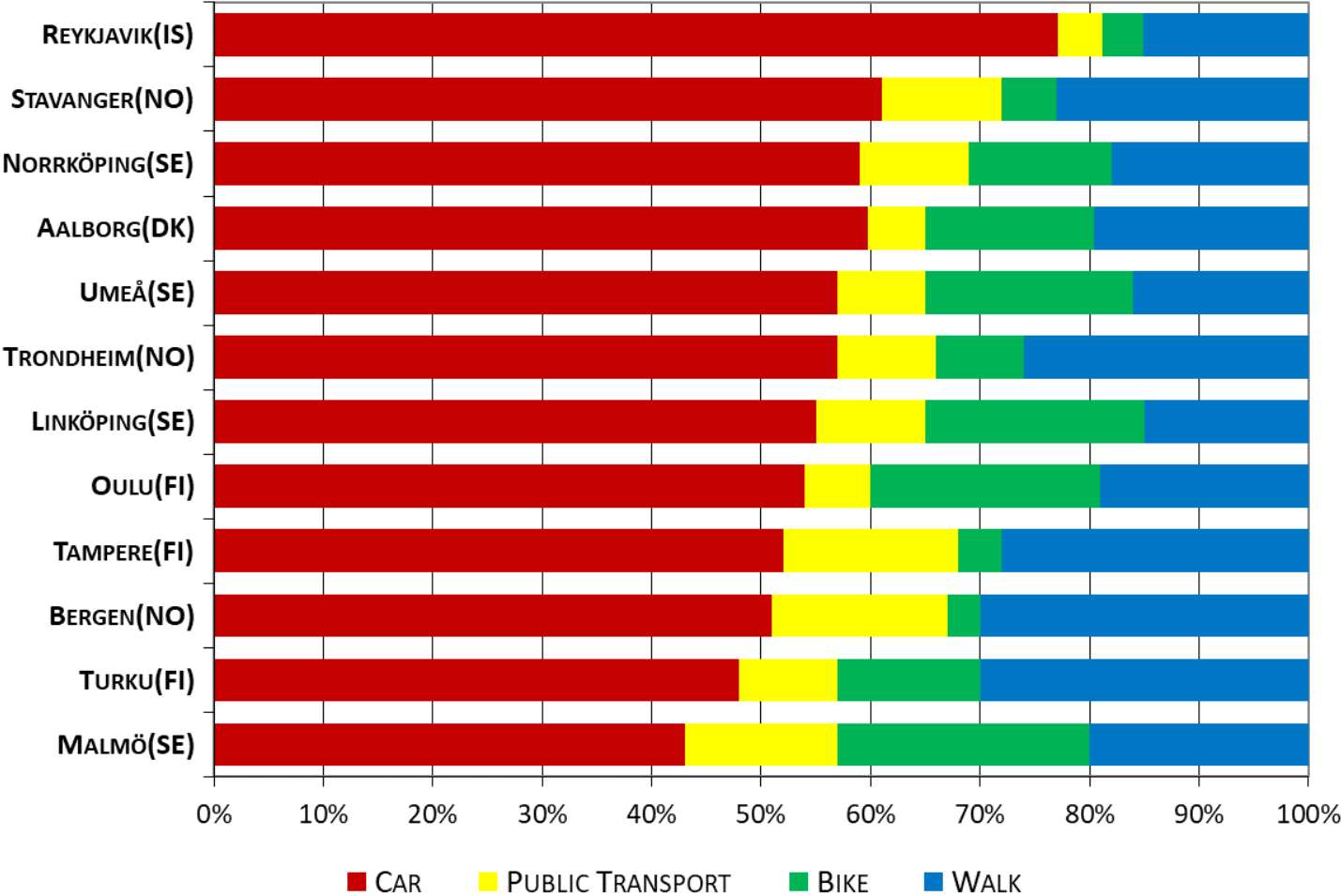
# The Challenge

- 70% of trips by car → major emissions source
- Congestion, sprawl, and wasted resources
- The capital area needs to decarbonize transport fast...



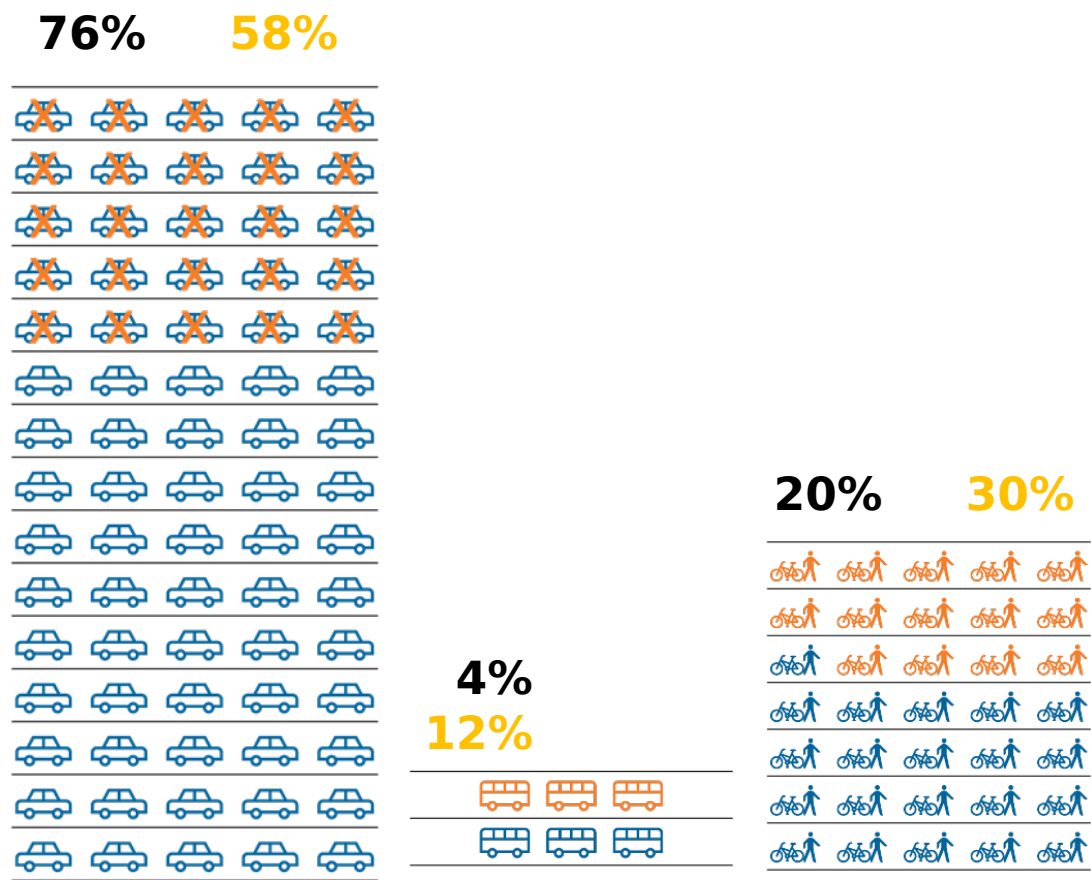
# The Challenge

MODAL SPLIT IN NORDIC CITIES\* (POPULATION 100 - 300 k)

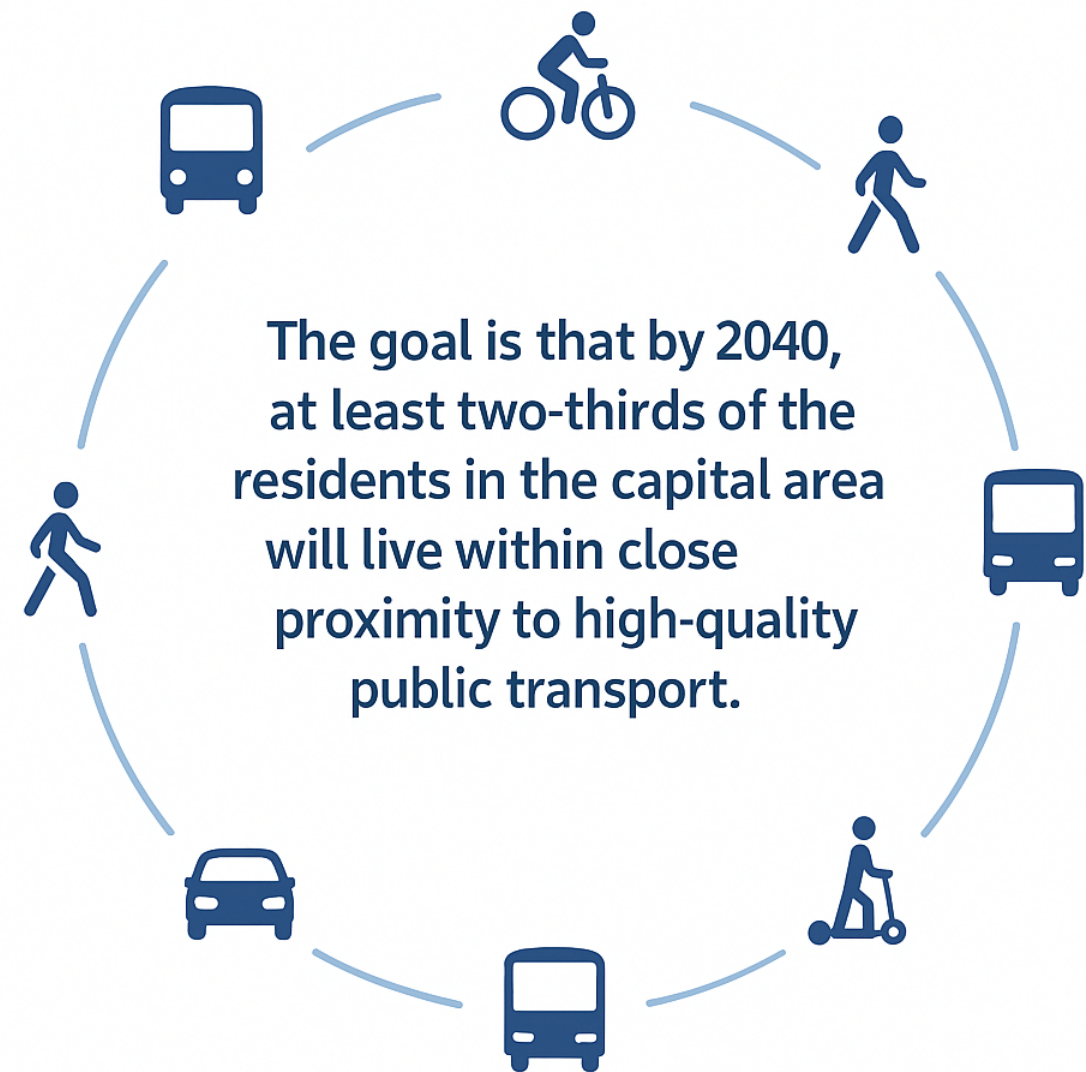




# The Challenge - Modal Split Goals

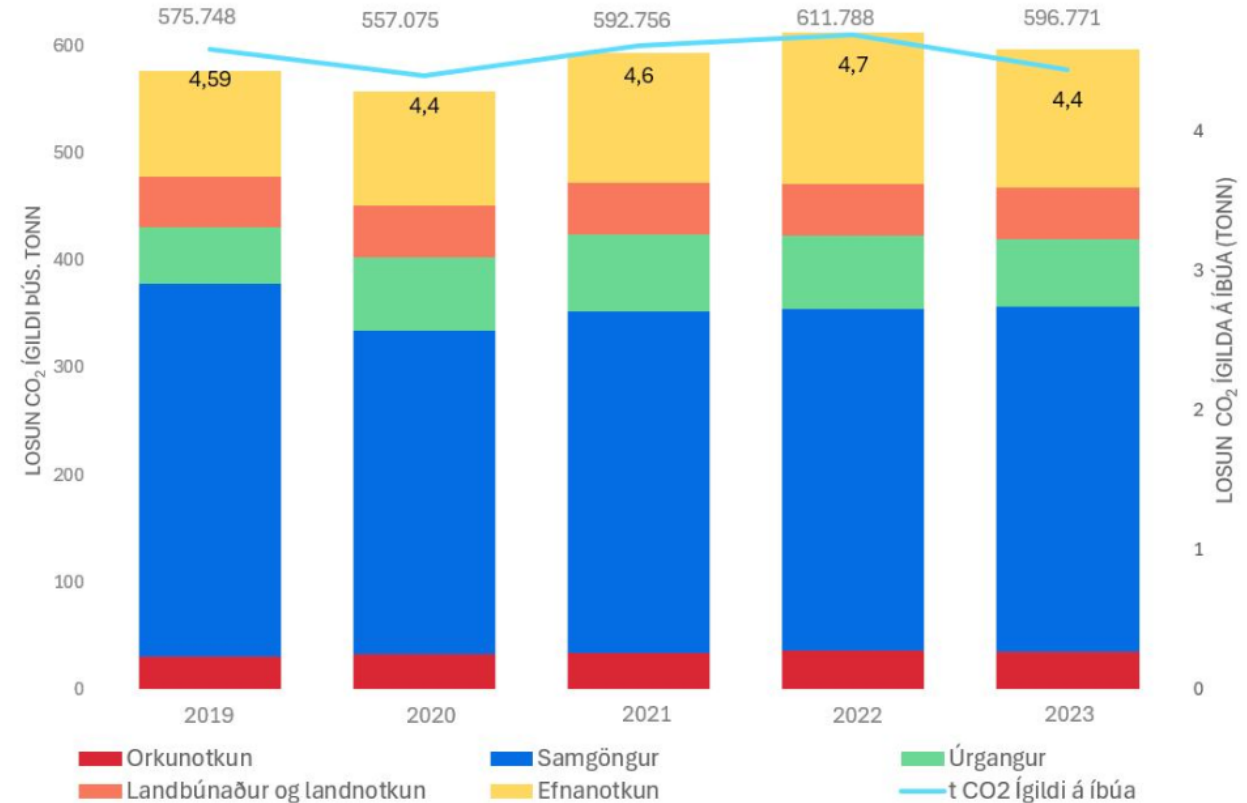


\* DATA FROM TEMS - THE EPOMM MODAL SPLIT TOOL DATABASE EXCEPT DATA FROM A TRAVEL SURVEY IN REYKJAVIK CONDUCTED BY CAPACENT IN 2011.



# Regional Goals

- Carbon neutrality by 2040
- Borgarlínan = flagship project for sustainable mobility



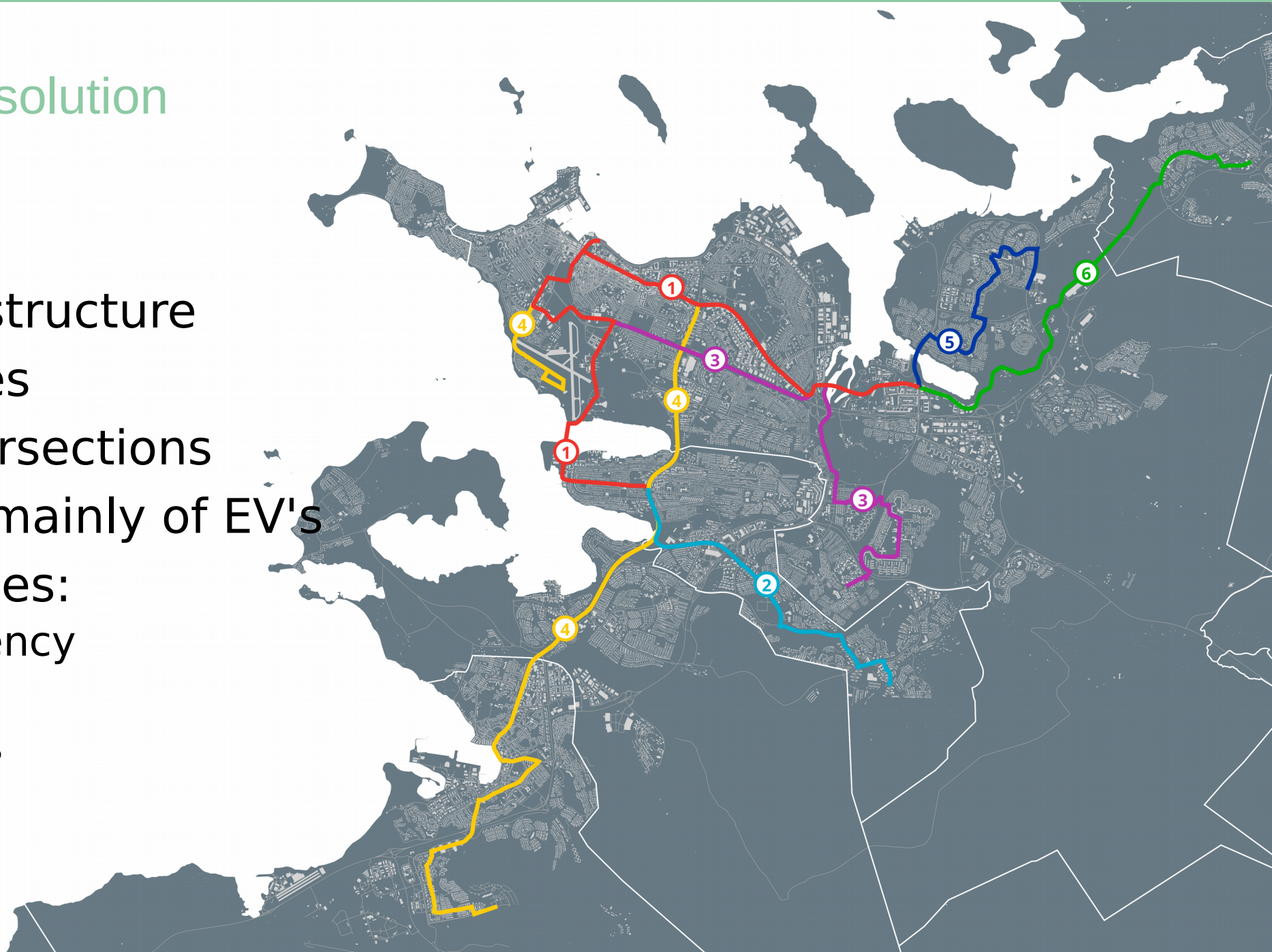
Community greenhouse gas emissions in Reykjavík decreased between 2022 and 2023. Emissions were 612,000 tons of CO<sub>2</sub> equivalent in 2022 and 597,000 in 2023. Transportation produces the most emissions, followed by the construction industry.





## The Borgarlínan solution

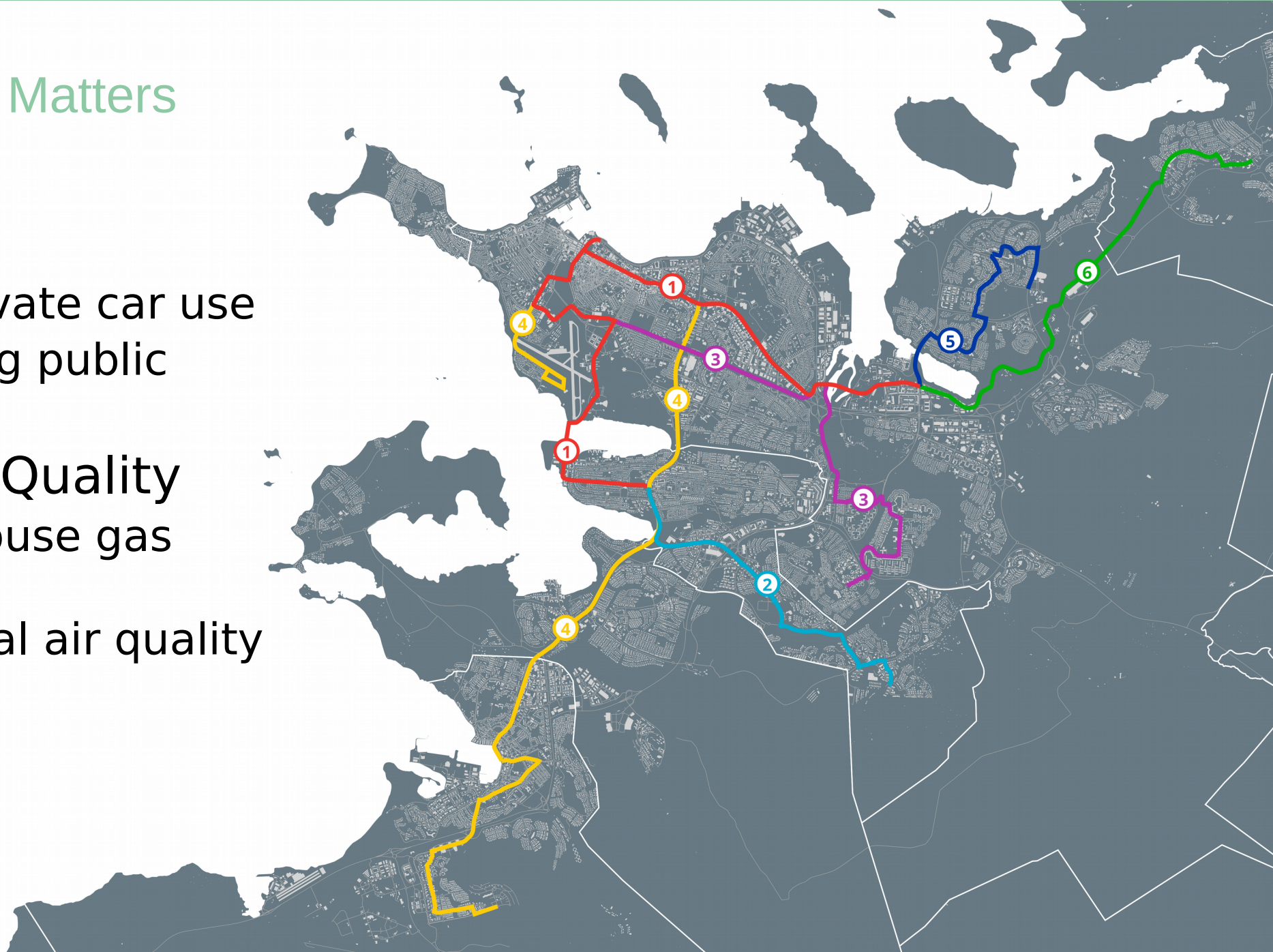
- BRT system
- 57 km of infrastructure
- Dedicated lanes
- Priority on intersections
- Fleet consists mainly of EV's
- Design principles:
  - Service frequency
  - Reliability
  - Low emissions





## Why Borgarlínan Matters

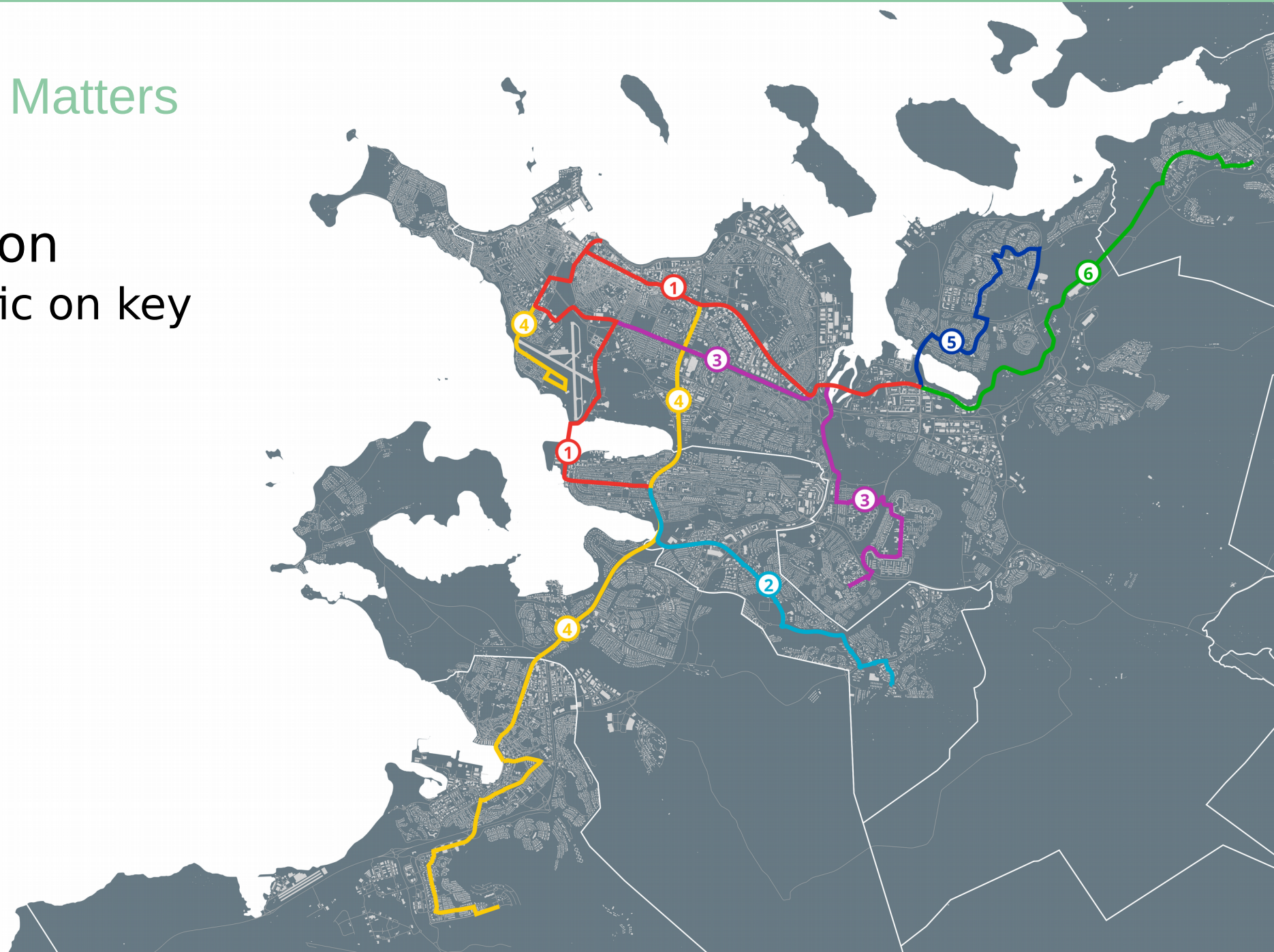
- Borgarlínan
  - Reducing private car use
  - Strengthening public transport
- Climate & Air Quality
  - Cuts greenhouse gas emissions
  - Improves local air quality





# Why Borgarlínan Matters

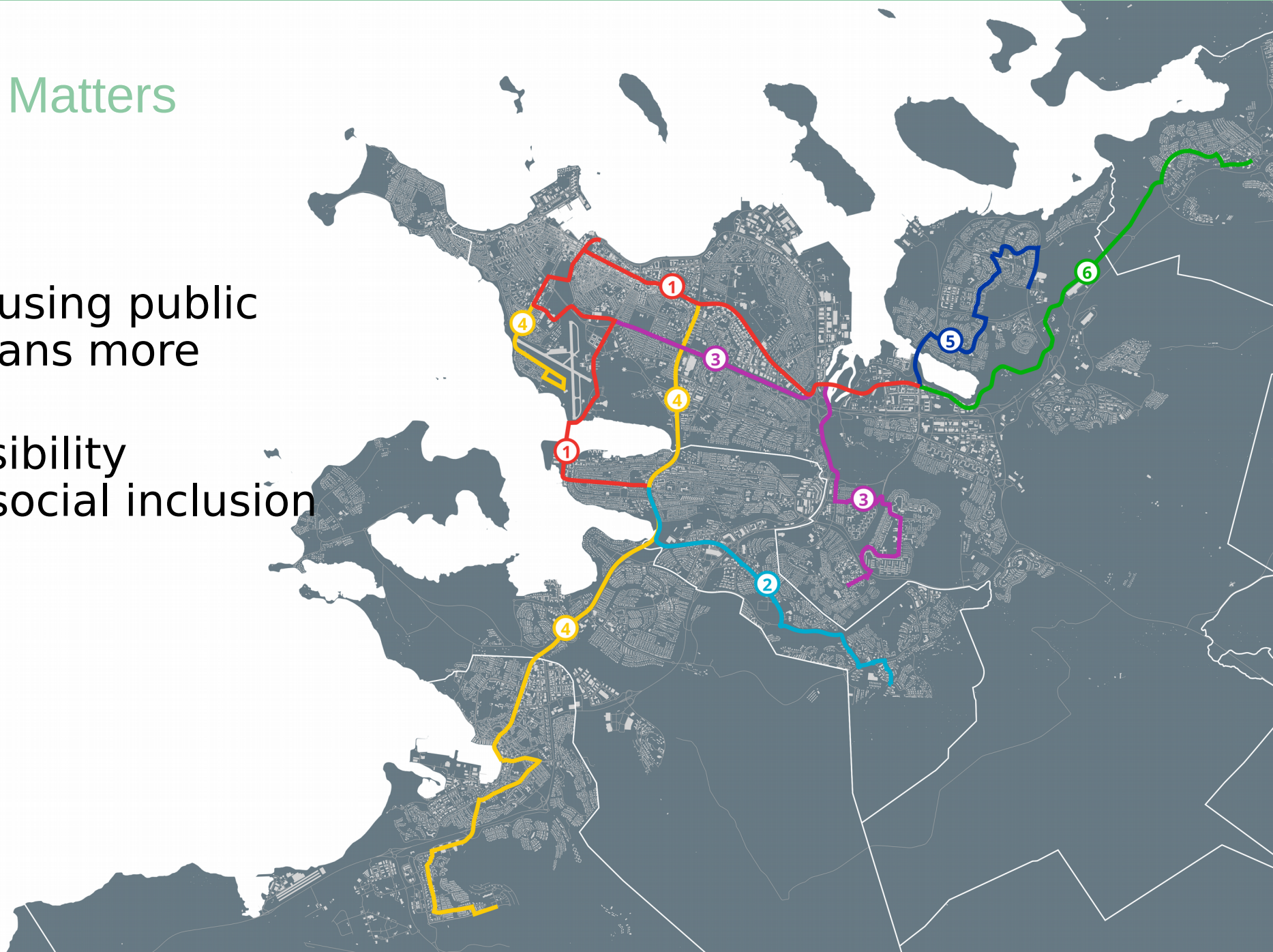
- Noise Reduction
  - Less car traffic on key corridors





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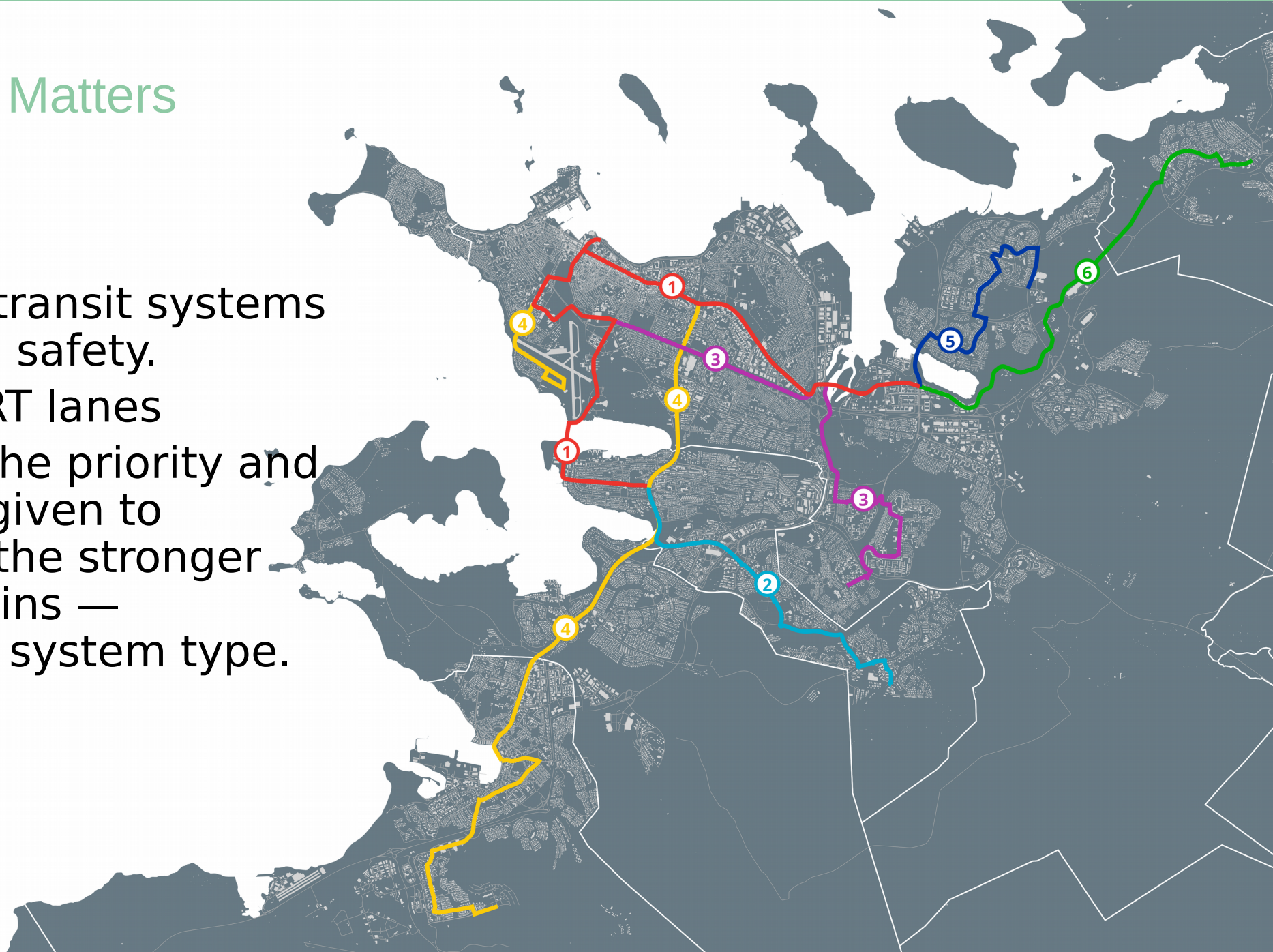
- Public Health
  - More people using public transport means more walking
  - Better accessibility strengthens social inclusion and equity





## Why Borgarlínan Matters

- Traffic Safety
  - High-quality transit systems improve road safety.
  - Dedicated BRT lanes
  - The greater the priority and segregation given to Borgarlínan, the stronger the safety gains — regardless of system type.





“Borgarlínan isn’t just about moving people - it’s about moving Iceland toward a low-carbon future.”

