



Understand Swedish Bus Rapid Transit

Edvin Ramberg, Traffic planner at the City of Helsingborg

What is BRT?

- High-quality bus system
- Originates from South America
- Dedicated bus lanes, signal priority, metro-like stations
- BRT interesting in a smaller-scale Swedish context but needs to be adapted to that scale.
- There is no defined BRT-line in Sweden; rather, BRT concepts or BRT-inspired solutions are used.



Traditional public transport modes in Sweden

- Bus
- Tram/light rail
- Metro
- Train



Planning tool for Bus Rapid Transit in Sweden (Allansson et al, 2024)



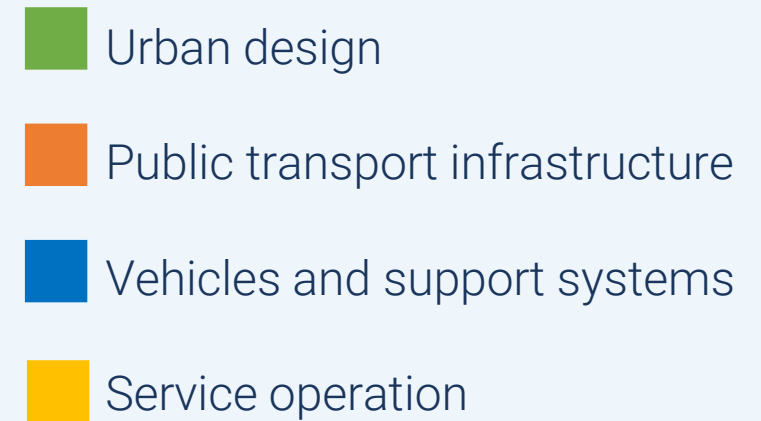
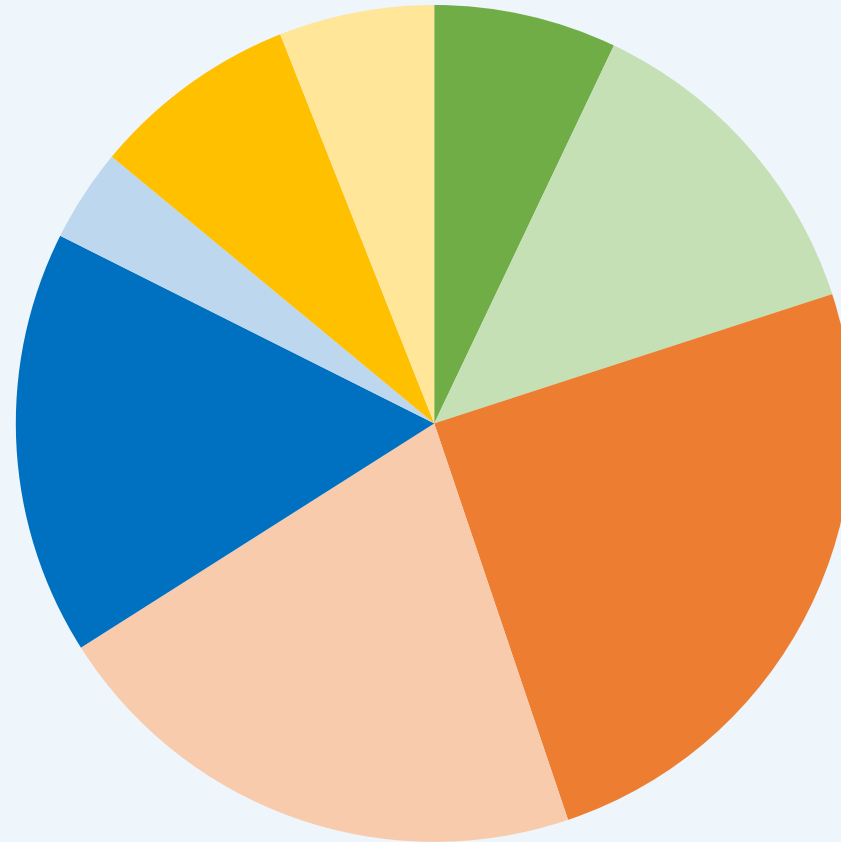
- Because of the uncertainty regarding what is Swedish BRT, a planning tool was made.
- To help planners in early development of a BRT-line
- Can be used to compare a planned BRT-line with existing Swedish BRT-lines and find best practise
- Consists of 25 parameters, 4 categories with a total of 100 points to be earned

Rating



Visualisations of the results

- Dark colour shows the share of earned points
- Light colour shows the potential to maximal amount of points



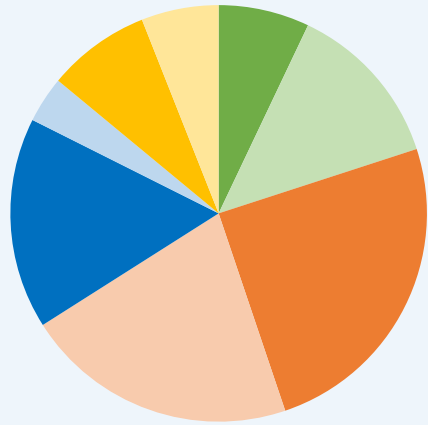
Category

Urban design

- Directness
- Distance between bus stops
- Sharp curves
- Parallel cycling infrastructure

Vehicles and support systems

- Identity
- Real-time information
- Boarding through all doors



HELSINGBORG

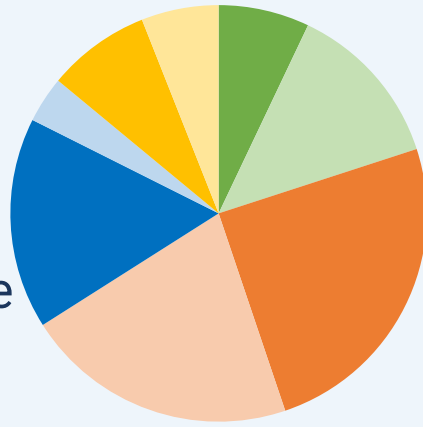
Category

Public transport infrastructure

- Share of bus lanes
- Placement of bus lanes
- Bus priority at intersections
- Bus stop design

Service operation

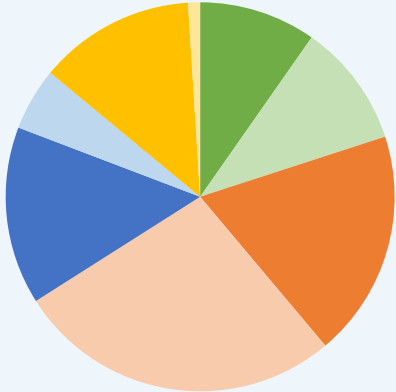
- Frequency of the busses
- Operating hours



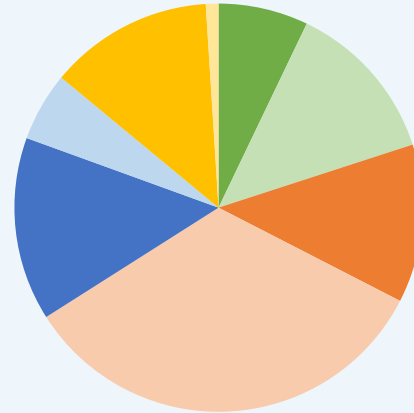
HELSINGBORG

The result for some of the Swedish BRT-lines

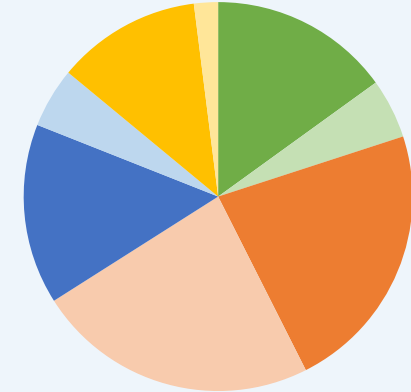
MalmöExpressen Linje 5: 59,1p ★



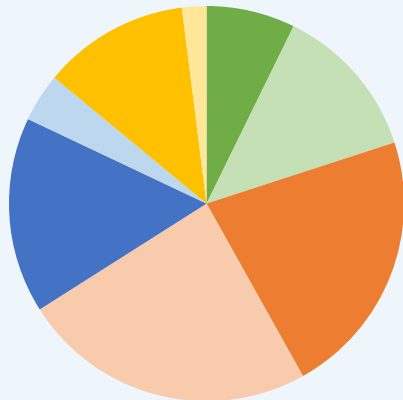
MalmöExpressen Linje 8: 49,2 p ★



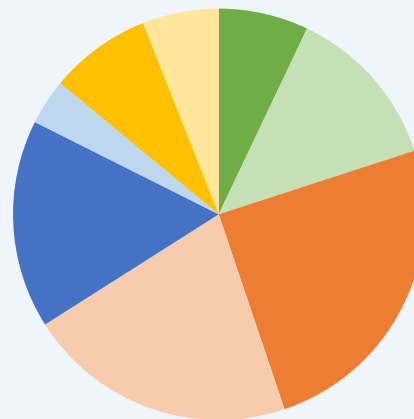
HelsingborgsExpressen: 64,6p ★



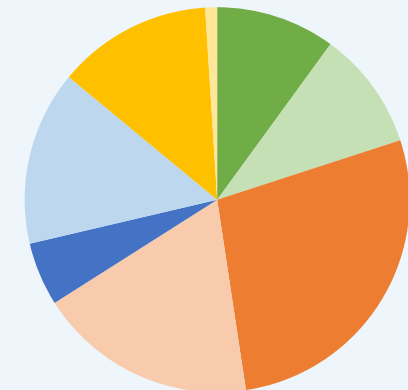
Jönköping Linje 4: 58,2p ★



Karlstad Linje S: 57,3p ★

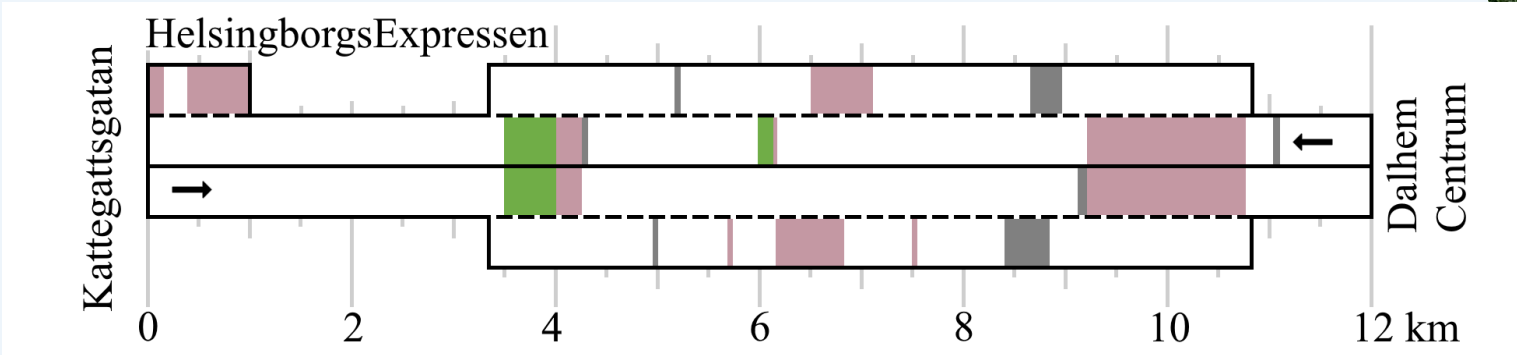


Barkarby Stombusslinje 175, 58p ★



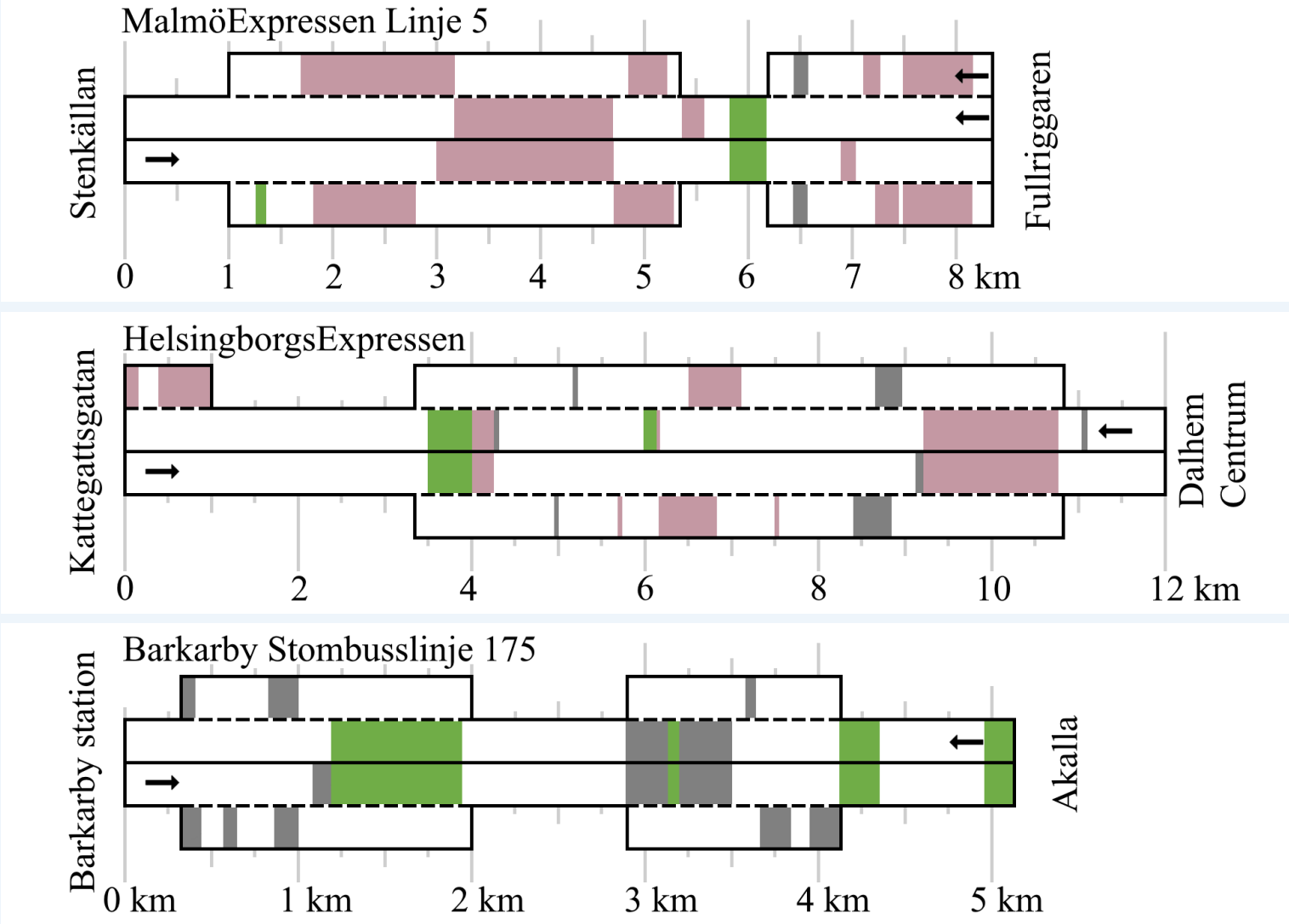
How is the placement of bus lanes?

- Only separated by a painted line
- Visually separated bus lane
- Physically separated bus lane



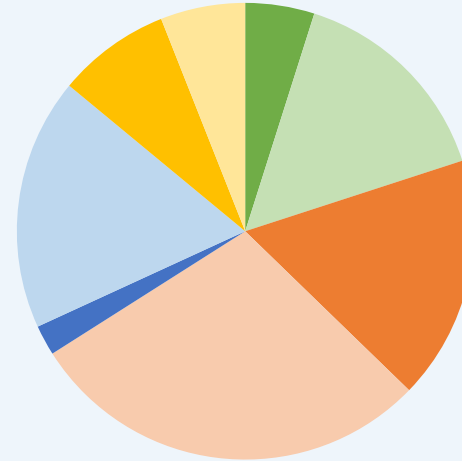
Placement of bus lanes

- Only separated by a painted line
- Visually separated bus lane
- Physically separated bus lane

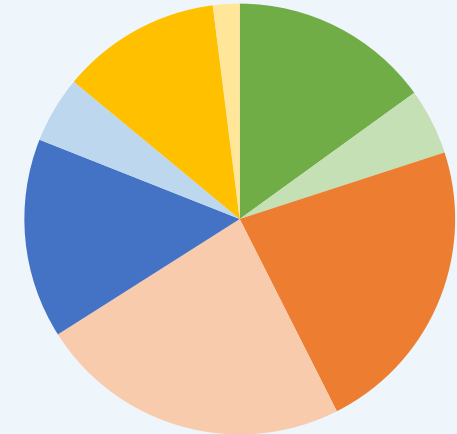


Comparison between different rankings

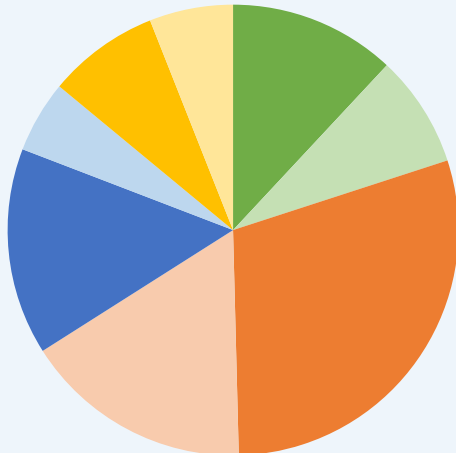
Västerås Linje 1: Not BRT



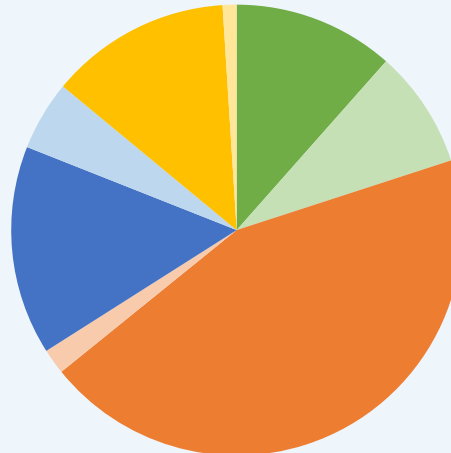
HelsingborgsExpressen: ★



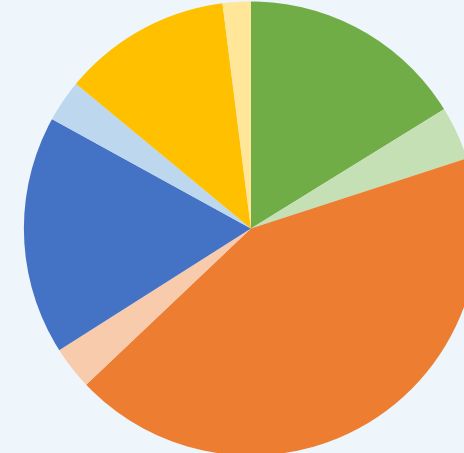
Aalborg Linje 2: ★★



Nantes Linje 4: ★★★

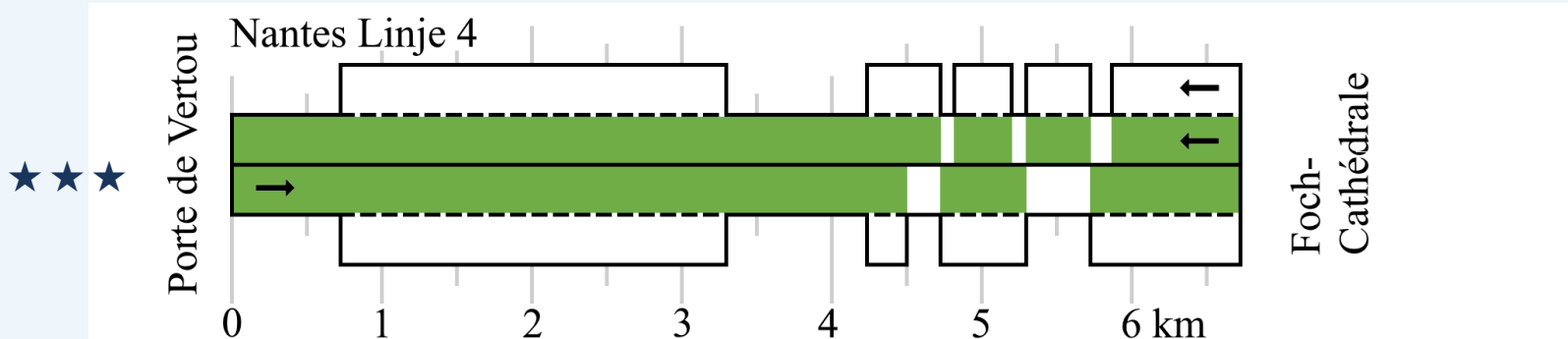
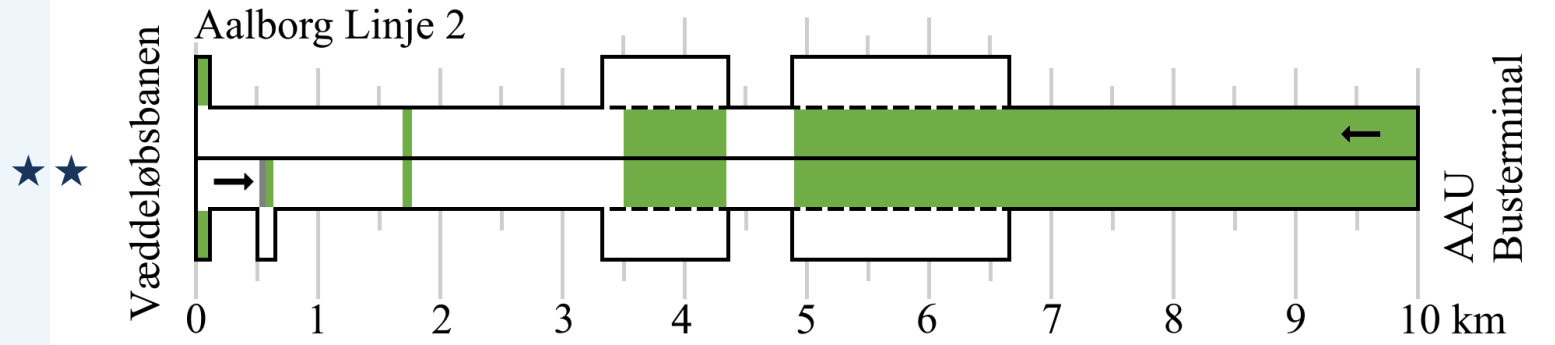
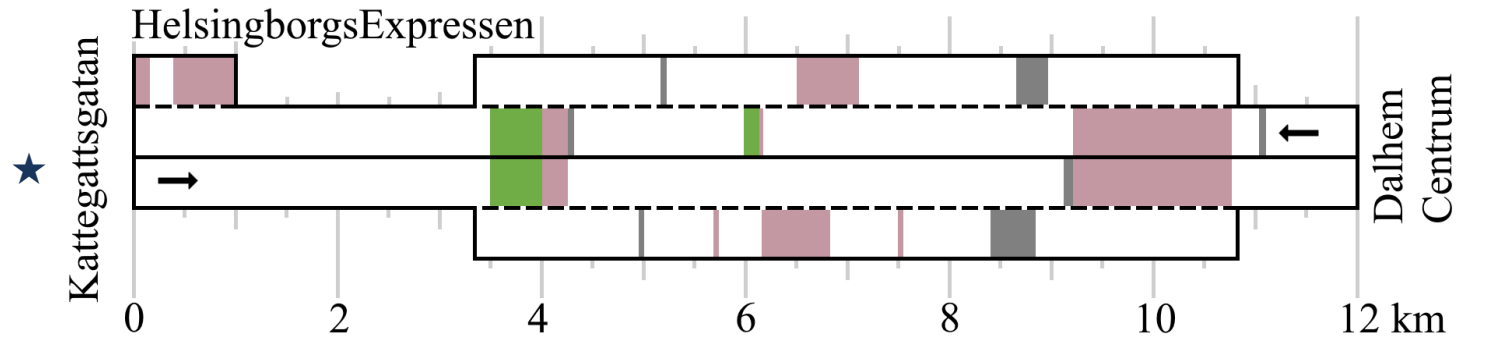


Spårvägen i Lund: ★★★



Placement of bus lanes

- Only separated by a painted line
- Visually separated bus lane
- Physically separated bus lane

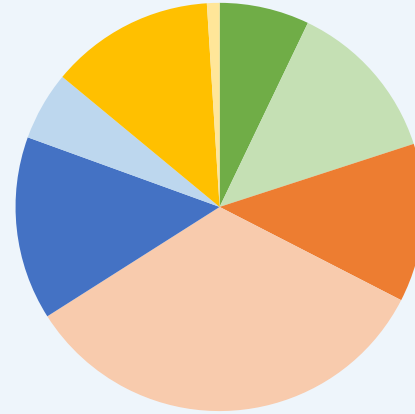


Summary

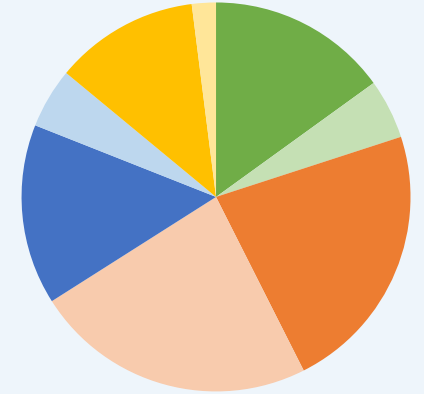
Planning tool helps us to find best practise

- All of the selected Swedish BRT lines reach a one-star BRT standard, but in different ways
- Similarities: frequency, operating hours, boarding through all doors
- Differences: share of bus lanes, placement of bus lanes

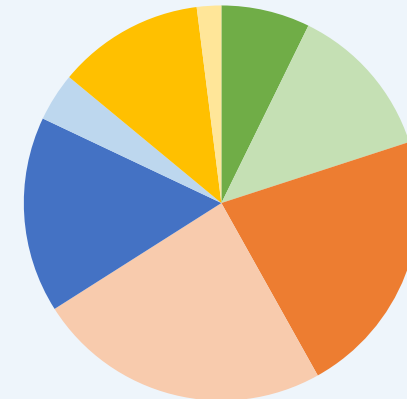
MalmöExpressen Linje 8: 49,2 p ★



HelsingborgsExpressen: 64,6p ★

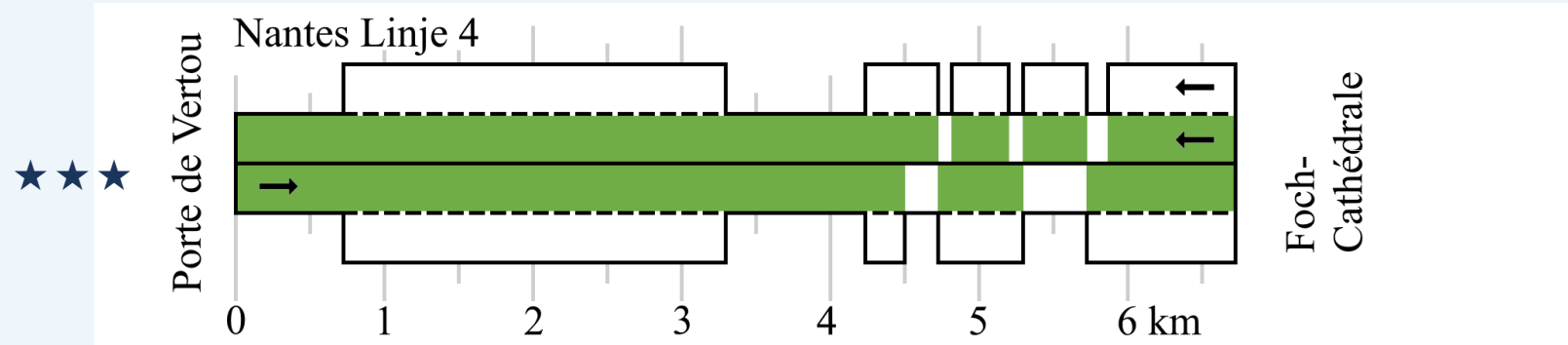
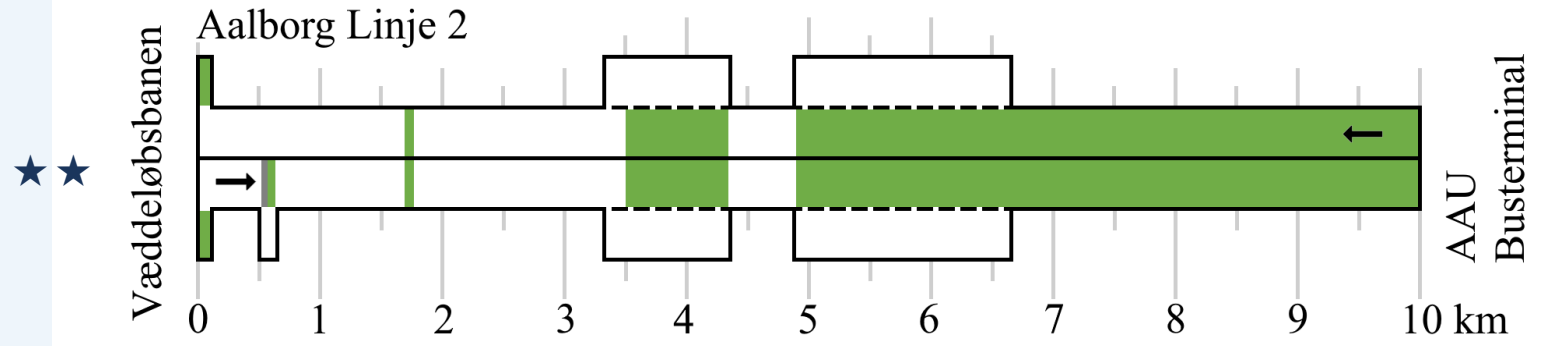
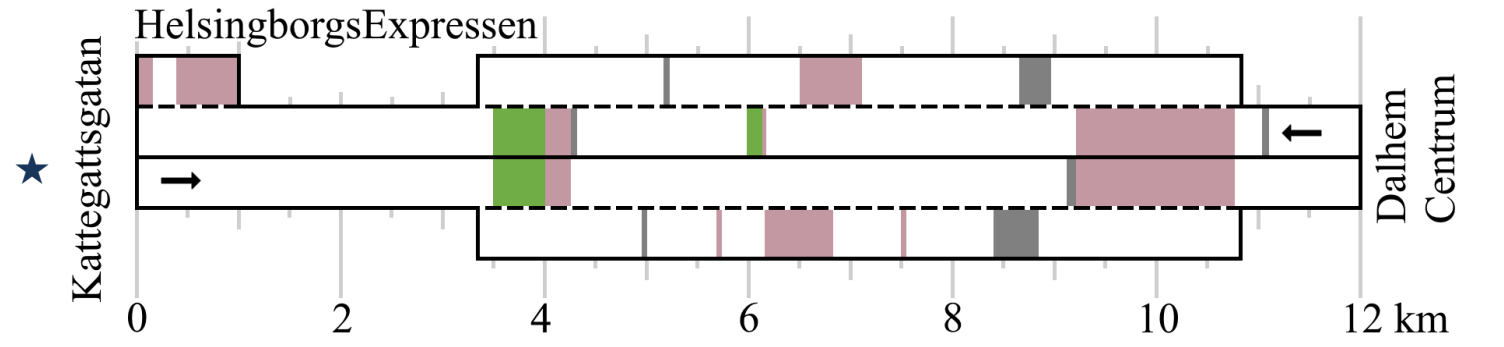


Jönköping Linje 4: 58,2p ★



We are still unsure – what is Swedish BRT?

- Is it a regular bus?
- An upgraded bus?
- A tramline on wheels?





Thank you for listening!

edvin.ramberg@helsingborg.se