Custom infrastructure in larger cities

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What do we mean by customised infrastructure?

Making exceptions from the traditional road design practices to facilitate transport efficiency in a larger area, by enabling transport efficient urban planning.
Custom infrastructure guidelines project

• There is a lot of pressure on the Swedish Transport Administration from the municipalities.

• The Swedish Transport Administration in Stockholm: Not possible to significantly reduce traffic congestion by building more roads. Instead, we need to make the best of the current road system (and optimise other transport modes).

• A project was initiated.
73 roads with national interest
Master plan – grey = "urban roads"
• The aim was to create guidelines for:
  – Which roads need to be separated to secure high capacity and resilience in rush hour.
  – Which roads can be customised to allow for a more transport efficient transport system overall.
Background documentation

Transport system
• Which *functions* must the road section provide.
  – Long-distance transports/commuting?
  – Transports of dangerous goods?
  – Connections to important ports and terminals etc.?

Urban development
• Strategic city plans
  – Clear land use planning
  – Strategic mobility planning
  – A regional outlook
Choose direction in two steps (step 1)

Road administration should set rough boundaries for what can be allowed from a national standpoint.

- Passability and accessibility must be secured for the largest roads.
- More detailed system analysis for complex networks.
- Transit-oriented development should lead to higher transport efficiency
Choose direction in two steps (step 2)

Local impacts
• Health impacts (road noise and air quality)
• Social sustainability
• Potential for new housing
• Etc.
When these two steps of analysis have been carried out, a basic direction can be decided on.

Costs and benefits needs to be calculated throughout the process.
Example: Road 260 Sickla
Example: Sickla
Concluding remarks

- Early cooperation is needed
- It is not possible to make decisions without proper background material
- Possibilities for positive effects on both local and national level