

## The Task

To recommend a long term public transport system in the Oslo area which have the capacity and quality to manage zero growth in private car use and increase walking and biking without reducing the citizens mobility

## Concept study Methodology

- Demand analysis
- Objectives and requirements
- Concept options
- Concept analysis
- Concept study and recommendations

## **Project Management**

### **The study has been conducted on behalf of:**

- The Ministry of Transport and Communications
- The Municipality of Oslo
- The Akershus County Council

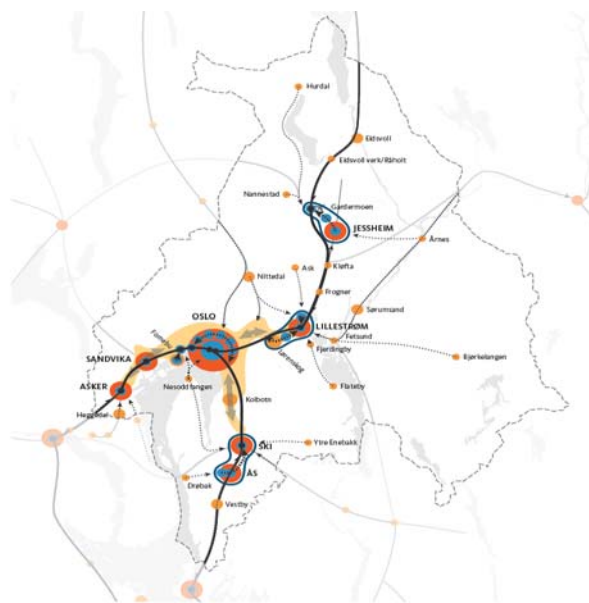
### **Project team:**

- The Norwegian National Rail Administration
- The Norwegian Public Road Administration
- The Public Transport Authority Ruter Ltd.

## **The Context**

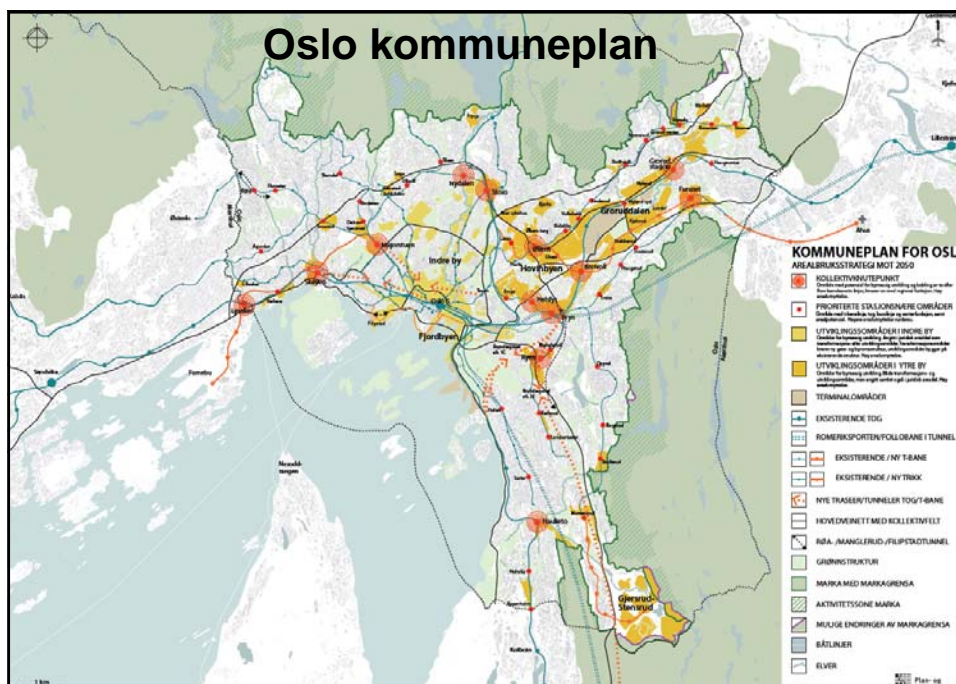
- The Oslo – area, the fastest growing capital in Europe
- Urban sprawl – not sustainable
- Squeezed between the Fjord and the Marka
- Lack of urban development areas

## Regional Plan Oslo and Akershus



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## Oslo kommuneplan



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## The Challenge

**Current situation** – lack of capacity in public transport, congestions on roads, unsatisfactory conditions for pedestrians and cyclists in the Oslo area, Oslo S – a main hub for most traffic.

- Growth in passenger transport must be managed through public transport, cycling and walking.
- Public transport capacity must meet demands towards 2030 and 2060.
- Better accessibility for commercial transport on roads.
- Population must be secured proper and sustainable mobility.

## The recommended concept in six minutes

**Youtube link:** [https://www.youtube.com/watch?v=Gj\\_fD16zzrE](https://www.youtube.com/watch?v=Gj_fD16zzrE)



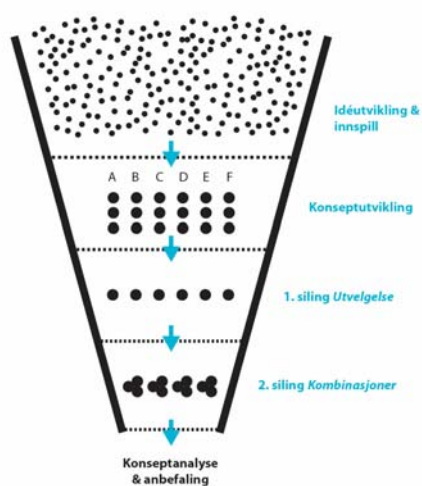
## The recommended concept

- From hub to network



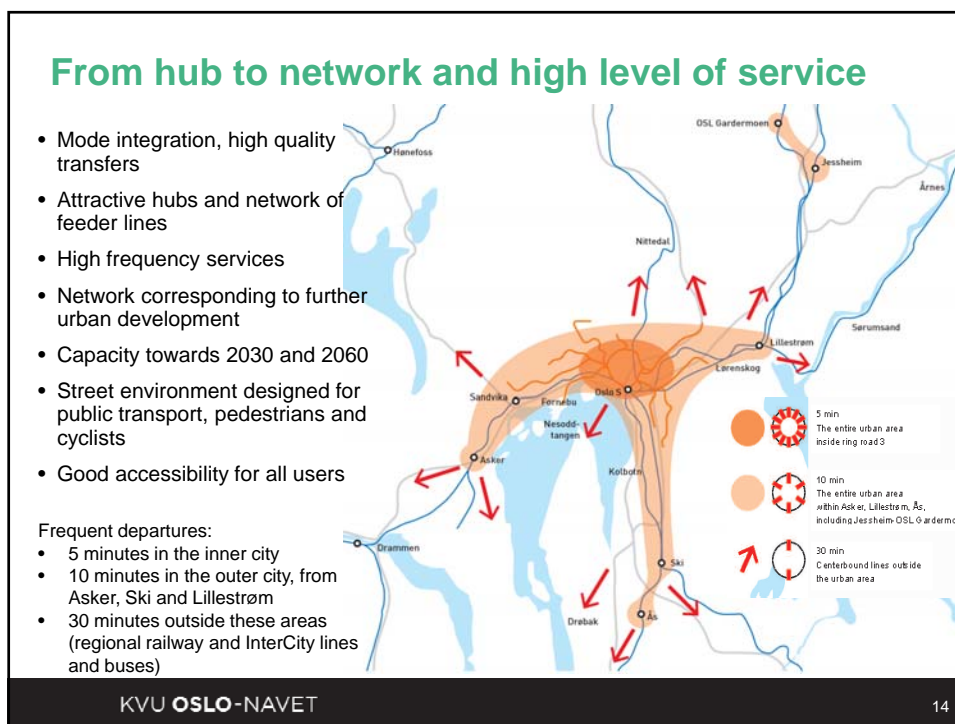
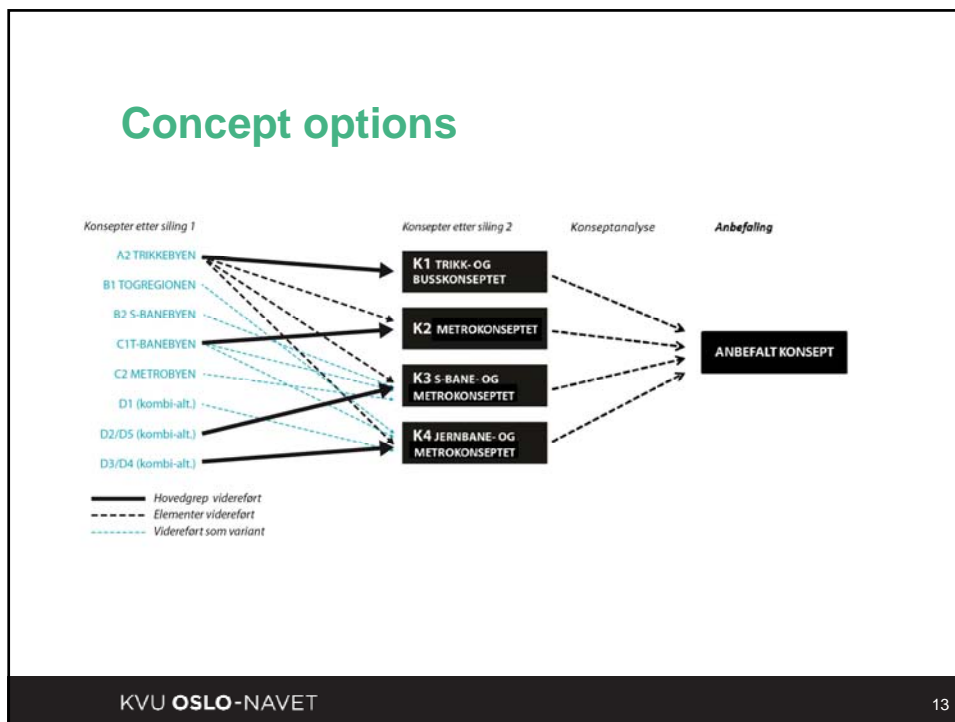
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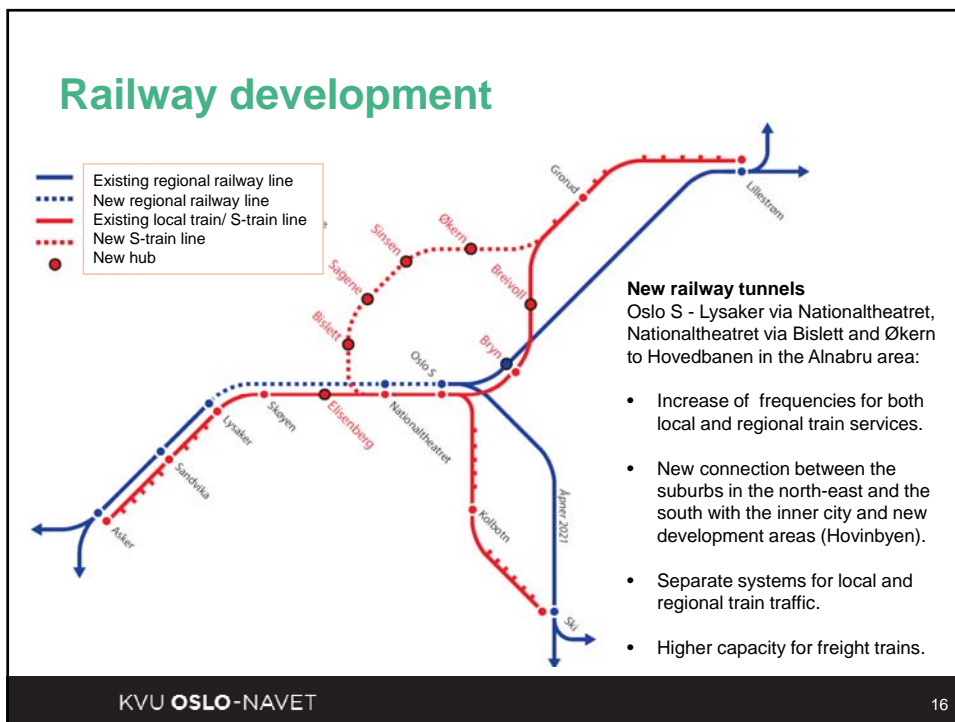
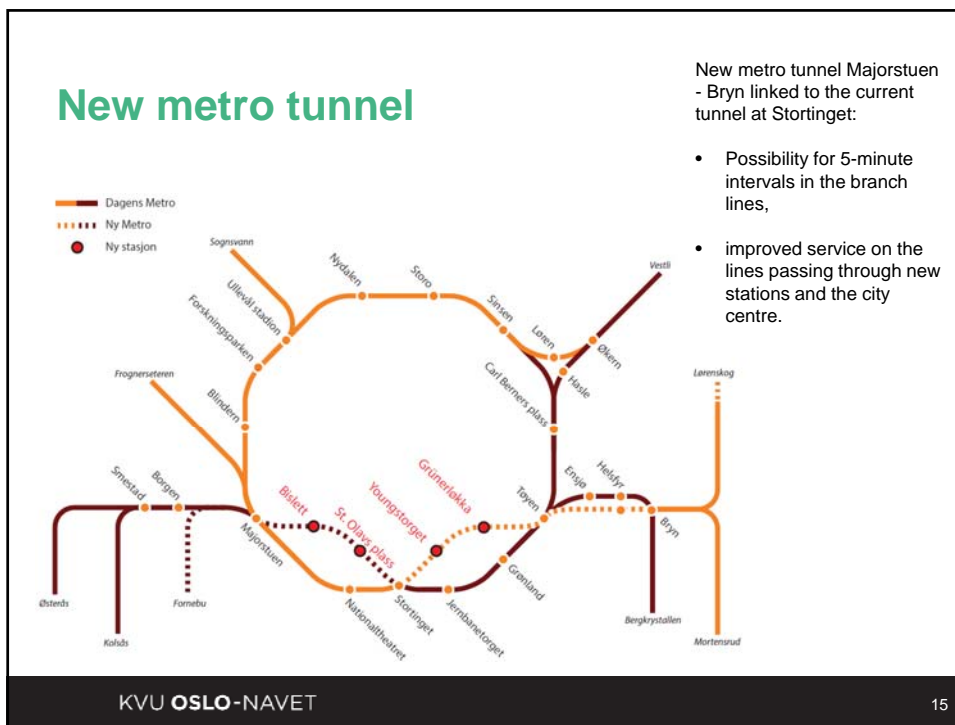
## From 900 ideas to a recommended concept



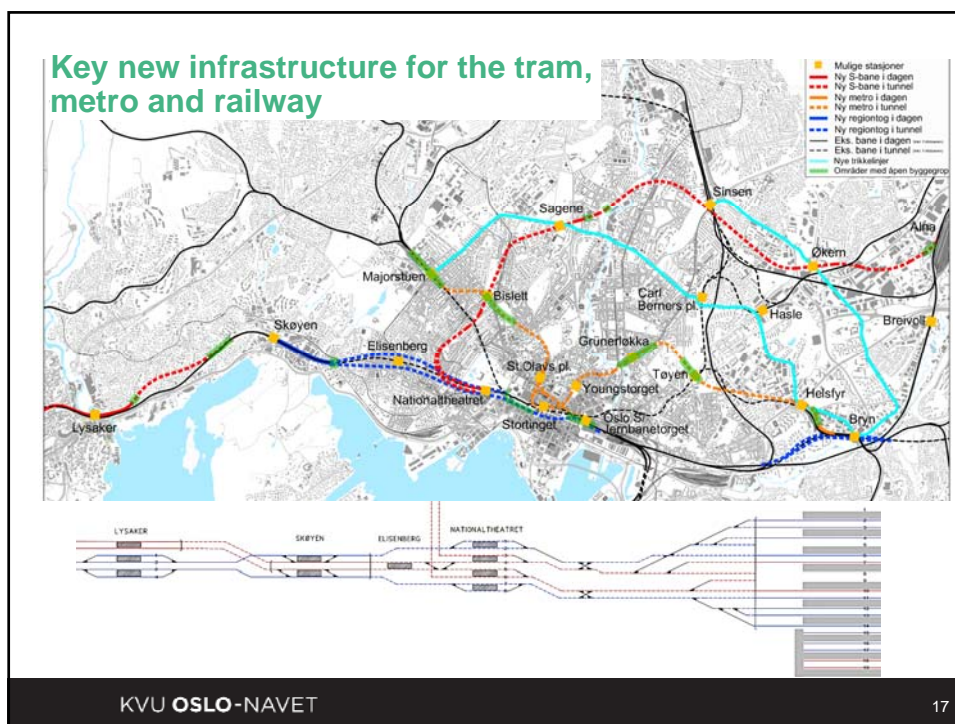
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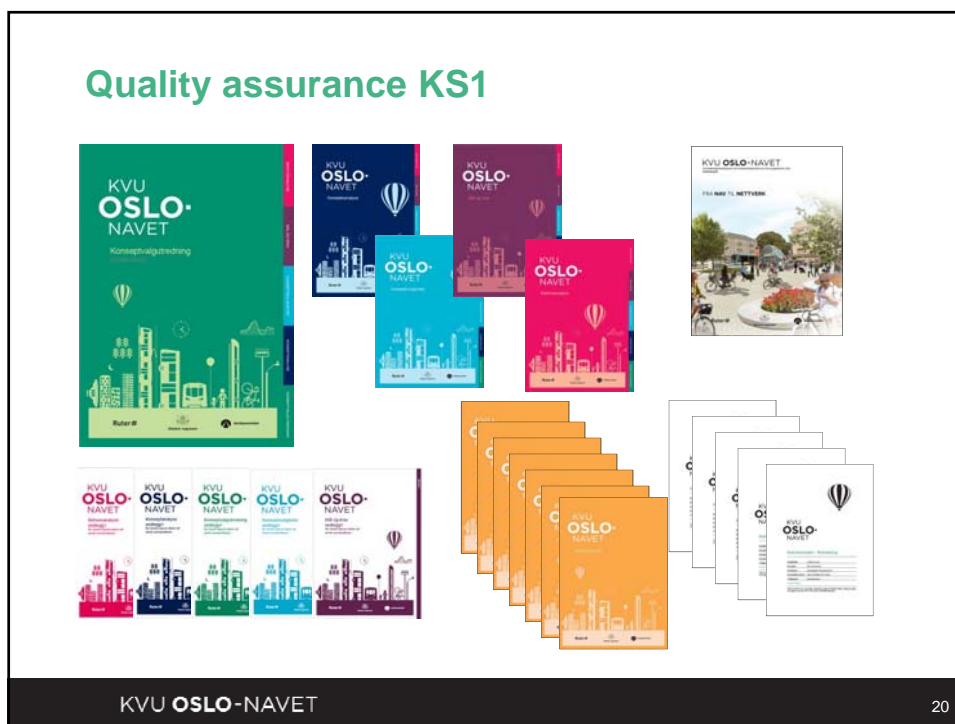
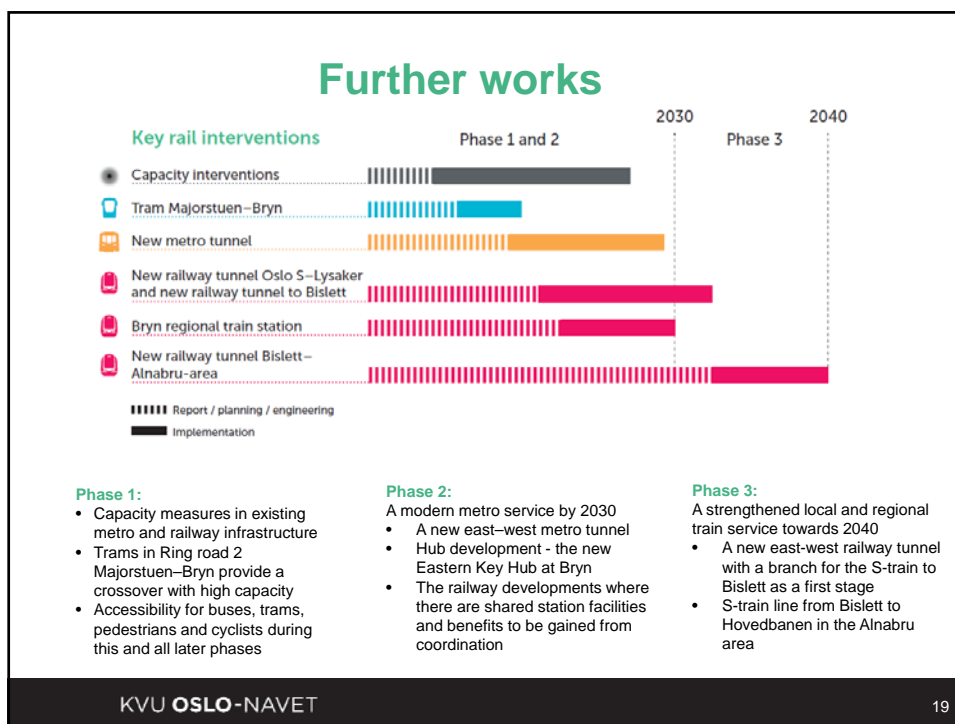
### Infrastructure cost

Railway tunnel Oslo S–Nationaltheatret–Lysaker/Bislett (incl. Eisenberg station in existing tunnel)	19,6 billion NOK
Railway tunnel Bislett–Sagene–Økern–Alnabru-area	8,8 billion NOK
Regional train station in Romeriksporten at Bryn	3,9 billion NOK
Metro tunnel Majorstuen–Bislett–Stortinget–Grønerløkka–Bryn	16,2 billion NOK
Tram Ring 2 Majorstuen–Carl Berners plass–Helsfyr–Bryn	2,2 billion NOK
Tram Bryn–Økern–Sinsen (Hovinbyen)	1,6 billion NOK
Other interventions for the railway, metro, tram (railway 7,1 , metro 2,1 and tram 0,4 billion NOK)	9,6 billion NOK
Hubs, bicycle interventions and accessibility for buses and trams	9,2 billion NOK
Mark-up for uncertainty	3,0 billion NOK
<b>Anticipated total cost (P50)</b>	<b>74,1 billion NOK</b>

Cost estimates at such an early planning stage are very uncertain and are, overall, estimated to have an accuracy of around +/- 40 percent.

The recommended concept is estimated to be profitable from a social economic perspective, with a **net benefit** per invested NOK of around **0.2**. A targeted congestion charge on roads in Oslo and Akershus - a **net benefit** per invested krone of around **2.6**.

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**Thank you!**

**For more information:**

<http://www.jernbaneverket.no/Prosjekter/Utreddinger/Skal-utrede-nye-tunneler-i-Oslo/english-concept-study-oslo-hub/>



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