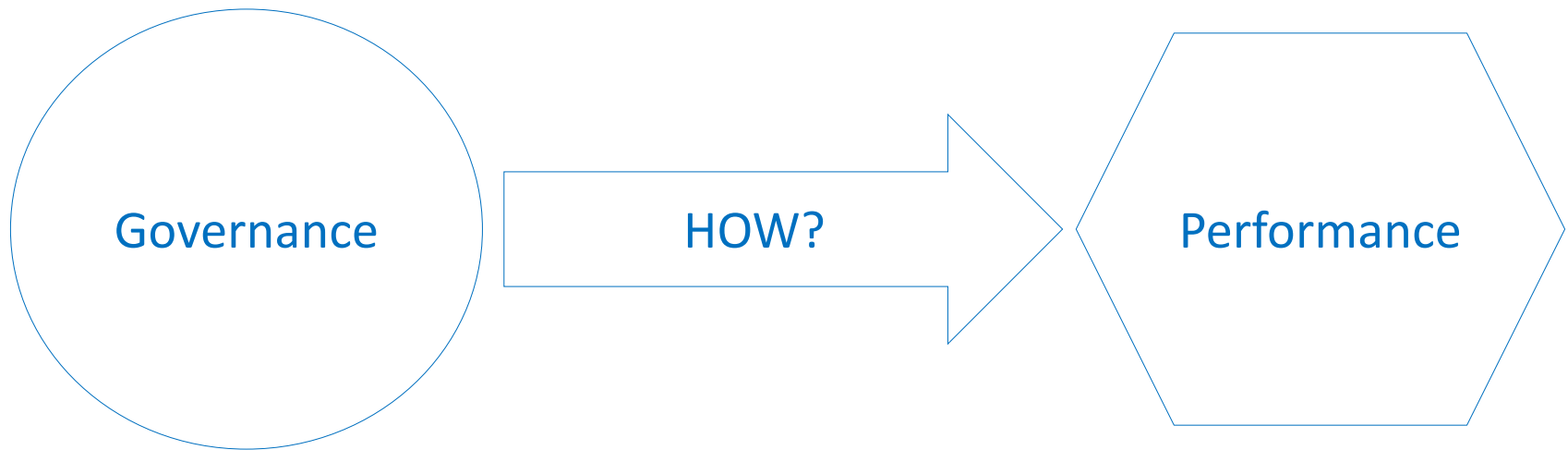


Making Public Transport More Attractive

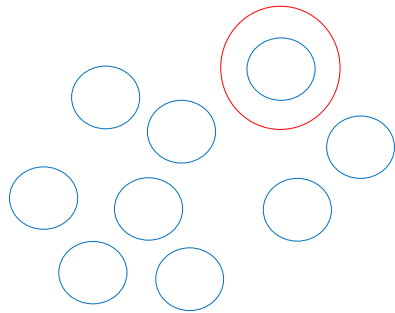
How I decided to study Oslo

broad question



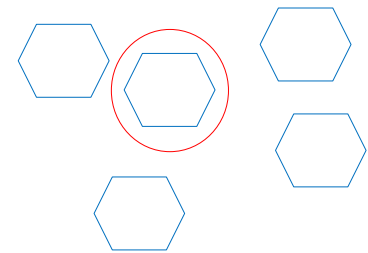
usual approach

Governance



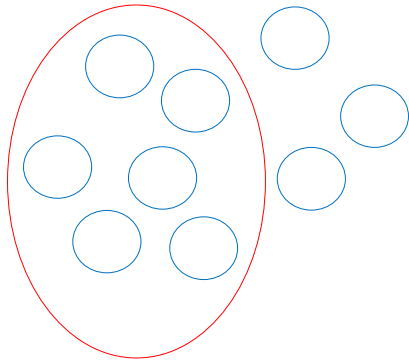
HOW?

Performance



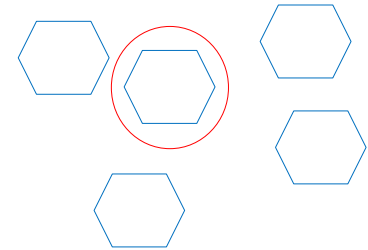
proposed approach

Governance



HOW?

Performance



step one: getting the variables right



expert survey

Q1. what performance metrics are suitable to measure strategic PT outcomes?

Q2. what organisational features might drive strategic outcomes?



brainstorming



shortlisting



rating (point allocation)

rating of performance indicators

Performance Indicators	Avg. Points	Std. Dev.	High	Mode	Zeros	Rank
User Satisfaction	15,91	11,03	50	15	11%	1
Cost-Recovery Ratio	15,24	9,07	30	20	14%	2
Modal Split	13,2	9,68	40	20	20%	3
% of Inhabitants (or users) living within walking distance to Frequent PT Service	9,78	7,71	30	10	23%	4
Ridership per Capita	9,57	8,7	30	5	25%	5
Ratio between Travel time in PT and Car	8,22	6,36	25	10	25%	6
On-time Performance according to Timetable	8,04	6,95	20	0	32%	7
Total revenue and total cost	7,28	8,39	30	0	45%	8
Cost per Passenger Km	6,98	6,77	26	0	36%	9
Comfort	5,78	5,88	20	0	41%	10

From: Hirschhorn, F., Veeneman, W., & van de Velde, D. M. (2018). Inventory and rating of performance indicators and organisational features in metropolitan public transport: A worldwide Delphi survey. *Research in Transportation Economics*, pp. 144–156. <https://doi.org/10.1016/j.retrec.2018.02.003>

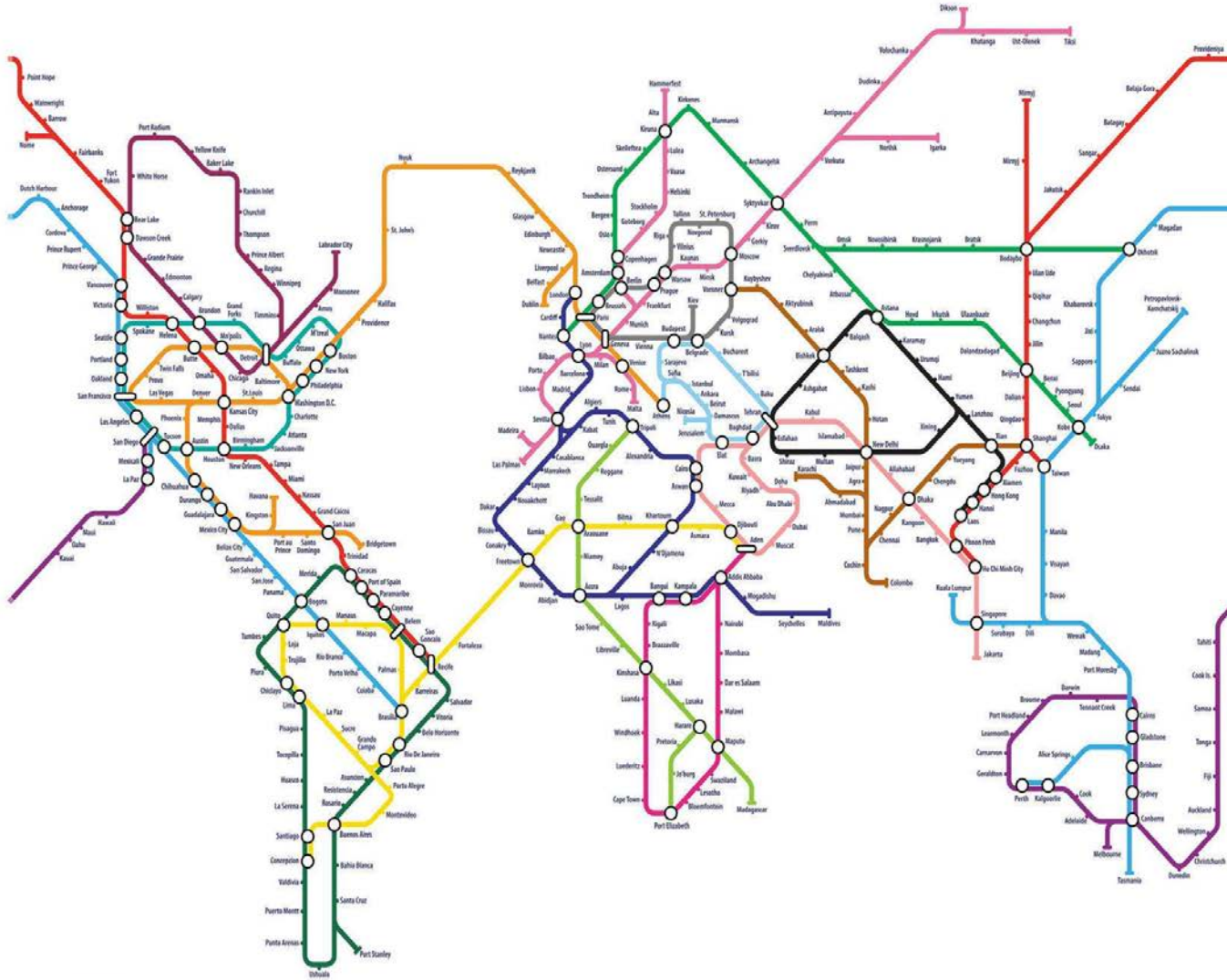
rating of organisational features

Organisational Features	Avg. Points	Std. Dev.	High	Mode	Zeros	Rank
Cross-sector policy Integration	14,65	7,79	30	10	9%	1
Funding: availability, autonomy / control	14,37	11,2	50	15	18%	2
Long-term Strategic PT plan	12,65	7,82	30	10	11%	3
Multimodal and multijurisdictional integrated agency or capability	12,46	8,42	40	10	16%	4
Integrated Fare and Ticketing	10,28	8,81	40	10	25%	5
Clear Legal and Regulatory Frameworks	8,96	6,87	30	10	25%	6
Contracts: risk allocation and incentive structure	8,43	7,5	30	10	27%	7
Skill set and technical expertise of staff	7,43	6,96	25	0	34%	8
Awarding Mechanism	4,5	5,09	20	0	48%	9
Competition among Operators (market concentration)	4,09	4,55	15	0	50%	10

From: Hirschhorn, F., Veeneman, W., & van de Velde, D. M. (2018). Inventory and rating of performance indicators and organisational features in metropolitan public transport: A worldwide Delphi survey. *Research in Transportation Economics*, pp. 144–156.

<https://doi.org/10.1016/j.retrec.2018.02.003>

step two: international case comparison



outcomes ('dependent variables')

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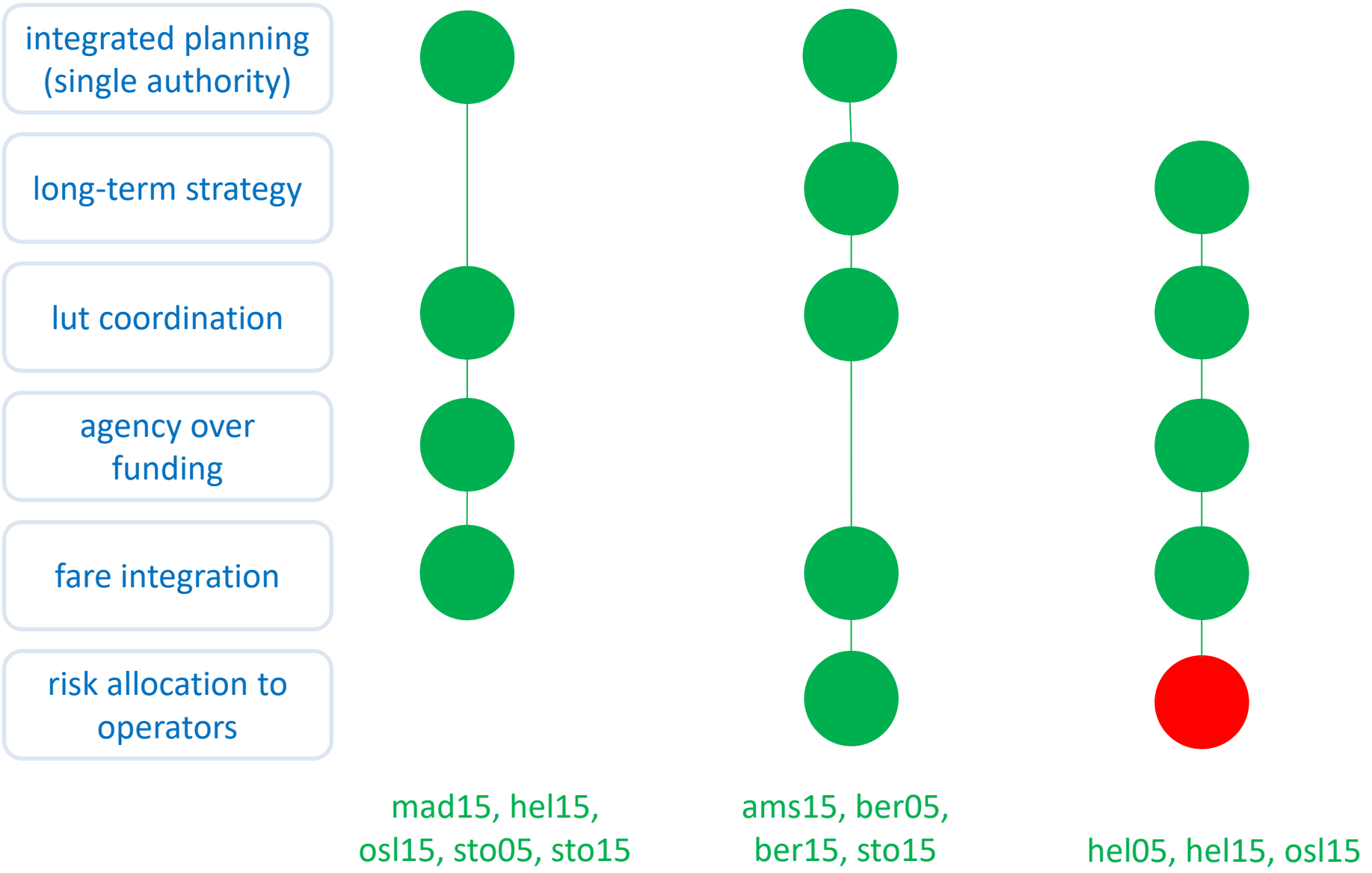
comparative analysis

22 cases: 11 metropolitan areas (in 2005 and 2015) in Australia, Canada, and Europe

Q1. What (combinations of) organisational features lead to higher PT modal split levels? (PT attractiveness)

Q2. What (combinations of) organisational features lead to higher cost-recovery levels? (PT financial sustainability)

preliminary* results: pathways higher modal split



*model pending possible revisions that might alter these findings

step three: within-case studies (ongoing)



many things are happening

Integration land use and transport

- Densification: compact city (from late 1980s and 1990s), Marka border
- National policy provisions for Spatial Planning and Transport coord. (1993 and 2014)
- Regional Land Use and Transport Plan (2015)
- Increasing parking restrictions

Integration within PT and Service Expansion

- Planning Integration: Ruter (2008) – multimodal metropolitan vision
- Ticket and fare integration + app and passenger information
- Frequency, Metro Ring Line, new rolling stock

Funding

- Commitment from Oslo and Akershus
- Oslo packages (growing share of \$ to PT, especially since 2008)
- Urban Agreements (Zero Car Growth)

many things are happening

Integration land use and transport

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LUT

Integration within PT and Service Expansion

- Planning Integration: Ruter (2008) – multimodal metropolitan vision
- Ticket and fare integration + app and passenger information
- Frequency, Metro Ring Line, new rolling stock



PA



FI

Funding

- Commitment from Oslo and Akershus
- Oslo packages (growing share of \$ to PT, especially since 2008)
- Urban Agreements (Zero Car Growth)



AF

but there is more...

Context and timing

- Population and economic growth
- Changing behaviour towards car (younger generation)
- East-West rail and metro tunnels

Environmental Concerns

- Zero Car Growth target: 2008 Parliament White Paper - NTP - Urban Agreements
- Oslo's County emission targets (car reduction, bike boost, car-free city centre)

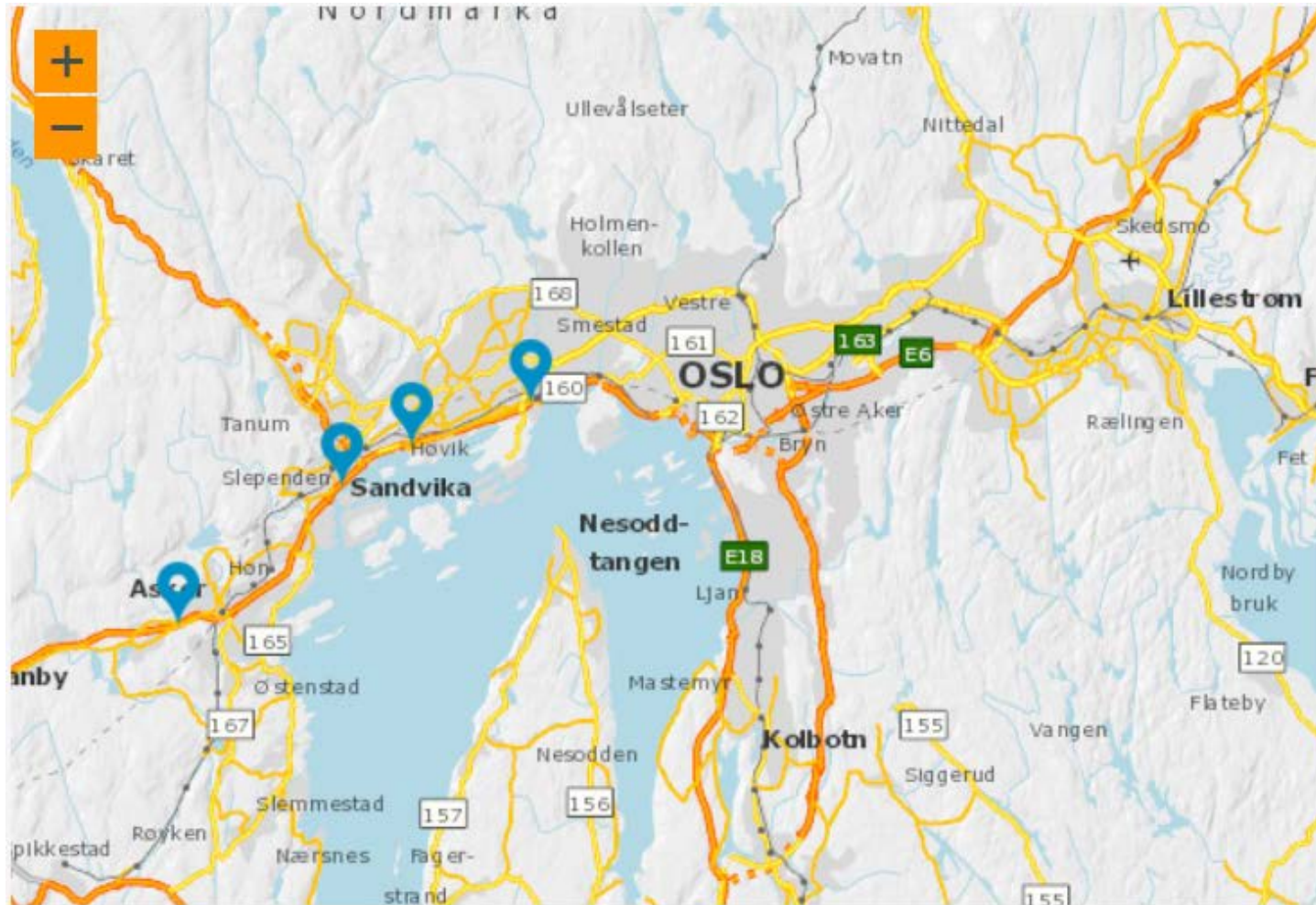
Trust and People

- Good results bring legitimacy: PT and Ruter achieve higher 'status'
- Skillset and technical expertise
- User-driven mindset (gradually since late 1990s): quality of product, 'from moving buses to moving people'

Market

- developers preference for (re)development around stations ('private-led TOD')

and more roads too?



some questions

1. What is missing in this picture of Oslo Akershus?
2. Where is the emphasis on PT coming from? Are priorities shifting towards sustainability concerns/goals? Is it too expensive to build roads but cheaper to invest in PT?
3. Large part of PT investments depend on tolls and, as such, in road expansion and cars being driven. What about urban sprawling and the zero car growth target?

Takk!