

Triborder: an investigation of the local reception of the fast rail connection between Oslo and Stockholm (first activity)

Background information

Authors:

Julien Grunfelder, Head of GIS Department; Gustaf Norlén, Cartographer/GIS Analyst; Mari Wøien, Research Fellow (August 2019)

This document summarises the main elements from the workshops and interviews with local stakeholders. These discussions aimed at answering the following question in a number of medium- and small-sized cities in Värmland–Østfold that might be connected to the future HST corridor between Oslo and Stockholm: ‘What could be the effects of the introduction of a faster train service between Oslo and Stockholm on the urban development in your municipality?’ More precisely, the discussions focused on urban and territorial developments in the selected municipalities (Arvika, Askim, Karlstad, Kristinehamn, Lillestrøm and Årjäng).

Arvika

Arvika has a strategic location along the current railroad between Stockholm and Oslo. The railroad was built in 1871 and has been important for the industries as a mode of transportation of goods. The railroad has also been important for enabling smooth commuting to and from Karlstad. This has meant that it is easier for employers to find people with the right competences compared with other towns of similar size. The possibility to commute also makes the employees stay in the workplace longer. Today, it takes around 50 minutes to commute to Karlstad and there are around 13 round trips per day. With the existing infrastructure it is not possible to add more trips because there is no more capacity. A trip to Oslo currently takes a bit more than two hours. There are some people who commute to Oslo.

Arvika might be getting a stop in the 2:55 scenario although this is not decided. A stop would reduce the travel time to both Oslo and Karlstad and would enlarge the local labour market. The municipality has not prepared for a high-speed railroad other than that they have made sure that there is a double-track through the whole built-up area. It will be difficult to build more tracks or to expand the existing station.

A faster railroad connection would be positive for companies because it expands the labour market making it easier to find people with the right competences. It could also be positive for the growth of the municipality because more houses could be built (it can be easier to attract building companies to invest). There are already quite a lot of second-home owners from Norway, and this might also increase with a faster train connection. A faster train connection without a stop in Arvika would not contribute to the development of the municipality.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Arvika	02:11	00:46	03:16	Not located along the suggested high-speed line.			0:43	0:25	2:10

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, TenTacle, 2:55 and own estimates.

Askim

Askim is the first Norwegian station for the HST line suggested by the TenTacle. The railway from Askim is connected to *Østfoldbanen*, was completed in 1882 as part of the eastern line connecting Ski–Mysen–Sarpsborg. Askim station is located 53 km south-east of Oslo, with a current 57 min journey to Oslo Central station making it a viable commuter journey.

Askim station is located in the middle of a rather compact town centre. The station underwent a refurbishment in 2014 and has incorporated universal design elements. With a potential HST stop in Askim, it is relevant to enquire about the placement of the HST station, and the likelihood of keeping the station in the middle of the town centre with regard to sufficient parking spaces or shuttle buses, and coexistence or replacement of the existing railway.

Askim is a municipal node of the new Indre Østfold municipality with a population of just under 45,000, and the plans for developing a regional city have been under way since 2015. The urban and social planning aspects connected to these plans have primarily focused on housing and providing social services, industry and economic growth, but transportation is becoming an increasingly important aspect because the expansion of the local labour market and the expanding functional labour market is imminent. This is by way of the centralisation of the new municipal administration in Askim and general effects of the municipal merger with Eidsberg, Hobøl, Spydeberg and Trøgstad.

An HST stop in Askim is likely to contribute positively to the municipal development, both as a commuter destination and an expansion of the Oslo labour market, and as a more attractive area for the establishment of competence-based enterprises and migrants. Other opportunities include an expansion of their tourism and cultural industry, a bolstering of the existing trade and industrial sites, and the development of Askim as a conference destination.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Askim	0:57	no direct train connection		0:20	0:31	2:10	Not located along the suggested high-speed line.		

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, VY, TenTacle, 2:55 and own estimates.

Karlstad

Karlstad would get a high-speed train station if a high-speed train line is decided to be built along the Oslo–Stockholm corridor. The city, which is the main urban centre of the Värmland region, is considered as an important transport node along the transport corridor. Therefore, both alternatives studied, TenTacle and 2:55, have considered suggesting a high-speed train stop in Karlstad. The HST station will most probably be a part of the existing main train station of the city that is located in its central area.

Currently, Karlstad can be seen as a peripheral city within a domestic and Nordic context. A better train service eastward would also provide better accessibility to Stockholm. A better train service westward would integrate Karlstad into the labour market of the Oslo region. It would also encourage more Norwegians to visit Karlstad and Värmland. They currently correspond to 7% of the spending in Karlstad, and this figure would most probably increase. From a regional perspective within Sweden, the improvement of the accessibility by train would better connect the two regional centres of Karlstad

and Örebro, which would tend towards a single integrated functional region. The current travel time between these two labour market centres is too long (1h25 is the shortest train connection) for daily commuters.

In Karlstad, the new main train station is currently under way, independently of any HST project, and will be ready by 2025 with an improvement in capacity. In relation to the possible arrival of the HST service, plans in the surroundings of the station highlight the development of buildings for both residential and business purposes. These developments would host new companies as well as commuters living in Karlstad and commuting along the HST corridor (e.g. Oslo) and contribute to densifying this area. Karlstad does indeed expect to continue having a growth of its number of inhabitants and jobs in the city centre. A growth that will be further strengthened by the arrival of the HST.

In 2019, the day population is more important than the night population in Karlstad. This is mainly explained by the number of in-commuters being larger than the number of out-commuters. However, the number of out-commuters has been increasing during the last couple of years and the possibility of having an HST station might reinforce this trend, especially if Oslo can be reached in less than an hour.

One possible negative development in Karlstad due to the introducing of an HST service is the risk of losing its function as a stop for groups of tourists, mainly Chinese, between Oslo and Stockholm. However, this development would be offset by new flows of tourists, i.e. residents in the Oslo region.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Karlstad	02:52	/	02:20	00:45	/	01:25	01:05	/	01:50

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, TenTacle, 2:55 and own estimates.

Kristinehamn

Inhabitants of Kristinehamn commute to both Karlstad and Örebro. Current figures are around 1200 commuters for the former and 600 for the latter. Travel times by train to either Oslo or Stockholm are currently too long to have significant flows of daily commuters from Kristinehamn. An improvement in accessibility by HST would make commuting by train a more possible means of transport to reach Oslo in less than two hours.

Unlike Karlstad, it is not clear if Kristinehamn gets a new HST station. This scenario is included in the TenTacle alternative, with direct connections to Oslo and Stockholm. No direct train connection by HST is currently envisaged in the 2:55 scenario.

In the case of a connection to the HST network, it is foreseen that a new station for Kristinehamn would be opened on the outskirts of the city centre. That would increase the probability of having a fair number of HST stopping every day in the municipality. This means of transport might be used by out-commuters, which currently corresponds to a larger group than in-commuters. Reinforcing this trend is not seen as an issue by local planners. Rather, it can be seen as an opportunity for commuters to decide to settle in Kristinehamn where housing is relatively cheap.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Karlstad	02:52	/	02:20	00:45	/	01:25	01:05	/	01:50

Kristinehamn	03:20	00:23	01:58	01:20	00:15	01:30	01:22	No planned HST stop
--------------	-------	-------	-------	-------	-------	-------	-------	---------------------

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, TenTacle, 2:55 and own estimates.

Lillestrøm

Lillestrøm is located only 10 minutes from Oslo Central station by train. It is currently a busy train and bus node, with connections to Sweden via Kongsvingerbanen, has a high frequency of InterCity trains, local train lines and is the only stop between Oslo and Oslo Airport Gardermoen. In the *Sthlm–Oslo 2.55* scenario, Lillestrøm is the natural choice due to its central location as a conference and fair centre, connections to the airport and distance to the capital. Lillestrøm is currently part of Skedsmo municipality, with just over 55,500 inhabitants in 2019. From January 1st, 2020, Skedsmo, Fet and Sørum merge and become Lillestrøm municipality, with a total population of nearly 86,000.

The future plans for furthering the development of Lillestrøm as a city relies on the continued development of the transportation system, especially the development of the InterCity triangle. The development of the InterCity triangle will attract more high-competence-based jobs, including research and innovation and knowledge-sharing companies to the area. The existing railway's impact on the city has been largely positive due to the expansion of the labour market in and around Oslo. The development of the InterCity triangle is also envisioned to help diversify the local labour market and help develop and strengthen a greater, multinodal Oslo region. However, changing the narrative from a commuter town to a destination in itself is crucial to continuing the positive trajectory of the municipality's development. The InterCity development also leans on the '8 million-city' vision connecting the labour markets in and around Oslo to the Västra Götaland region and Gothenburg, as well as the region of Øresund. This may also be seen as a complementarity and extension of the suggested 2:55 alternative, connecting Stockholm to Oslo, Gothenburg and Copenhagen in a larger transportation triangle.

The introduction of an HST is not likely to alter the current situation in Lillestrøm, aside from increased traffic and noise pollution. However, with the 2:55 scenario, Lillestrøm is likely to become a viable labour market to both Arvika and Karlstad, with the latter being less than an hour away. The challenge sits with the development of Lillestrøm as a city beyond its reputation as a major transportation node.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Lillestrøm	0:10	2:23*	05:20*	Not located along the suggested high-speed line.			0:09	0:53	2:46

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, VY, TenTacle, 2:55 and own estimates. *: the indicated train connection is currently not available and replaced by a connection by bus.

Årjäng

Årjäng is located in the western part of Värmland, close to the Norwegian border. The proximity to Oslo means that it already today is part of Oslo's labour market region. Currently, 20% of the population commute to Norway. There is also some commuting to Karlstad. Because there is no existing railroad connection, all travel is by car. Trade is an important part of the economy and labour market of the municipality. This is because of the external shopping malls on the border that attract

Norwegians because of the lower prices. The shopping area is, however, located in Töckefors close to the border with Norway, and not in the town of Årjäng.

Today, there is no railroad in Årjäng. It is not certain that Årjäng will get a new HST station. This scenario is included in the TenTacle alternative, with direct connections to Oslo and Stockholm while no direct train connection by HST is currently envisaged in the 2:55 scenario. With a high-speed train, the commuting would increase even more and Årjäng would be like a suburb of Oslo (only 30 min commuting time). This could lead to new establishment of enterprises and trade as well as increased tourism. Although a train connection could mean more out-commuting, this is mainly seen as something positive because more people might move to the municipality. One negative aspect might be that it could affect the logistics industry (lorries) negatively. This is an important industry in the municipality.

Travel time	Currently			TenTacle scenarios			2:55 scenario		
From/To	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm	Oslo	Karlstad	Stockholm
Årjäng	only bus connection			0:32	0:19	1:58	Not located along the suggested high-speed line.		

Note: TenTacle developed three scenarios ('fast', 'hurtig' and 'express'). The time indicated corresponds to the shortest of the three scenarios. Data source: SJ, TenTacle, 2:55 and own estimates.