

4.1 Smart Mobility Hubs, Groningen Drenthe (NL)

Network of **57 Smart Mobility Hubs** implemented in the provinces of Groningen and Drenthe, The Netherlands, allowing for **multimodal travel** for everyone and enabling more sustainable and inclusive mobility



4.1.1 About Groningen and Drenthe

<u>Country</u>	<u>Region</u>	<u>Target Area</u>	<u>Population</u>	<u>Population density</u>	<u>Visitors/year²²</u>
The Netherlands	Groningen-Drenthe	5 640 km ²	1 081 708 ²³	 G: 247.9 inhabitants/km ² D: 184.5 inhabitants/km ² <small>24</small>	Approx. 3.000.000 ^{25 26}

Groningen (586.937 inhabitants) is a large city located in the northern part of the Netherlands, and capital of the homonymous province. Due to its university and cultural life, Groningen is considered as the most important city in the area.



Figure 58 - Drenthe province

The territory of the province of Groningen is extremely flat and largely dedicated to agricultural activity, in particular livestock farming. The province of Drenthe (494.771 inhabitants) borders the province of Groningen to the north. In addition to the capital Assen, the other main urban centres of the province are Emmen, Meppel and Hoogeveen. The territory is flat and consists mainly of land generally used for livestock with no major rivers or lakes. Agriculture is therefore an important source of work, even if industrial areas are located near the largest cities.



Figure 59 - Groningen province

²² This indicator is referred to annual overnight stays at the level of target area. If you use another indicator, please specify

²³ Eurostat, [Population on 1 January by NUTS 2 region](#) (2021).

²⁴ Eurostat, [Population density by NUTS 2 region](#) (2019).

²⁵ <https://www.marketingdrenthe.nl/expertise/feiten-cijfers#:~:text=Drenthe%20ontving%20in%202022%20bijna,7%25%20ten%20opzichte%20van%202021.>

²⁶

https://www.provinciegroningen.nl/fileadmin/user_upload/Documenten/Beleid_en_documenten/Documentenzoeker/Werken_en_ondernemen/Toerisme/Kerncijfers_Vrijtijdseconomie_provincie_Groningen_2019_-_2020.pdf

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4.1.2 Description of the Mobility Solution

The Smart Mobility Hubs represent a mobility solution implemented in both the provinces of Groningen and Drenthe, with a collective network of over 57 hubs (34 Groningen and 23 Drenthe).²⁷

The main objective of the smart hubs is to allow for multimodal travel for everyone, enabling more sustainable and inclusive mobility. People should be able to reach every desired destination with their preferred travel mode.

In order to reach this objective, the mobility hubs are located at maximum 15km distance from people’s home mainly at train and bus stations or park and ride locations. These hubs therefore represent nodes in the public transport network that connect at least one train, or high-quality bus, with an on-demand transport solution.²⁸ This is one of the cornerstones of the strategy of the public transport authority Groningen-Drenthe²⁹.

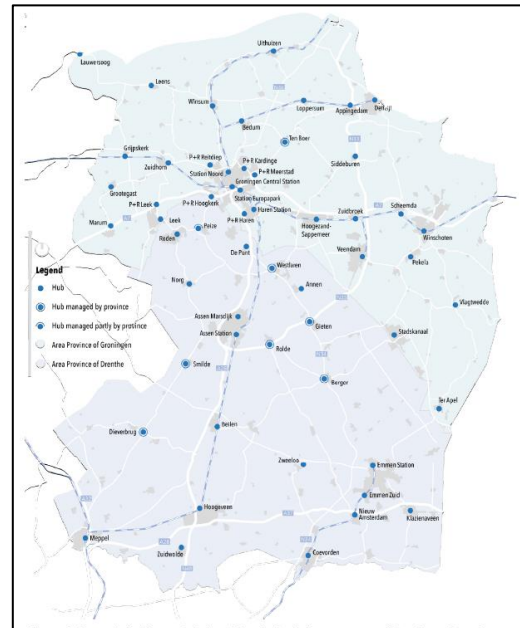


Figure 60 Map of the Smart Mobility Hubs locations



Figure 61 – Design of a Smart Mobility Hub

The hubs are used as sites for various pilot projects like: (i) wifi and water at all hubs; (ii) bicycle lockers at bus hubs; (iii) offer of shared electric bikes; (iv) sustainable waiting areas; and (v) parcel lockers providing a 24h pick-up service.³⁰

Target user groups and needs

The main target group consists of those people who use more than one transport mode to reach their destination, and specifically those that combine public transport with shared or private modes of transport. This mobility solution is supposed to reach as many people as possible, which is why these hubs are best

placed in multimodal nodes to connect public transport stops with on-demand transport.³¹

Involved Bodies

The main stakeholders involved are the Province of Groningen, the Province of Drenthe, the Municipality of Groningen, the Public Transport Authority Groningen-Drenthe, and the Publiek Vervoer Groningen-Drenthe.

²⁷ [University of Groningen, Hub programme Groningen and Drenthe: State of hubs, governance, and future outlook \(2021\).](#)

²⁸ Ibid.

²⁹ <https://ovbureau.nl/en/het-ov-in-de-regio/>

³⁰ Ibid.

³¹ [University of Groningen, Hub programme Groningen and Drenthe: State of hubs, governance, and future outlook \(2021\).](#)

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It is interesting to note that, Publiek Vervoer, a body created as a collaboration between all municipalities in Groningen and Drenthe, is responsible for managing group transportation (for the elderly, disabled or chronically ill, and the youngest).³²

These are the actors directly involved with the hub programme and they coordinate the general development of the programme, as well as meet monthly. Furthermore, there other types of stakeholders: (i) the ones collaborating with the local stakeholders (e.g. Groningen Bereikbaar) and (ii) national level asset managers and landowners (e.g. NS, ProRail).³³

Officially the provinces of Groningen and Drenthe are the implementing authority for the hubs. However, the public transport authority of Groningen-Drenthe (OV bureau) is in charge of innovation and investment in the regional public transportation system. Therefore, the OV bureau is contracting the project leader and hub advisor responsible for implementing the hub project. Since the bus-network in Groningen-Drenthe is privatised, the public authorities collaborate with the bus operator when implementing and/or improving the hubs. The strategic course is set out by the board of Public Transport Authority. The board consists of public officials of the provinces of Groningen and Drenthe, and of the city of Groningen. The board is responsible for the budget of the programme and approves the financial statements of the hub programme³⁴.

Mobility services provided/addressed and results

	N. hubs ³⁵	Daily users	Hubs with parcel safes ³⁶	Hubs with bicycle parking	Hubs with water tapping points	Hubs with free Wi-Fi	Hubs with talking post for travel information	Hubs with a gym
Groningen	34	17.000 ³⁷	0	8	13	8	4	1
Drenthe	23		4					

There are three types of hubs in Groningen-Drenthe: HOV/BRT hub, Basic-hub and Additional-hub³⁸.

	Type of bus services	Frequency of bus services	Nr of travellers per day
HOV/BRT hub	Fixed routes and times	Every 5, 10 or 15 minutes	10.200 (60%)
Basic-hub	Fixed times	At least every 60 minutes	5.440 (32%)
Additional hub	On-demand	On-demand	1.360 (8%)

For more information on facilities at the hubs go to <https://www.reisviahub.nl/hubs/>

Supporting technologies

³² Ibid.

³³ Ibid.

³⁴ <https://ovbureau.nl/het-ov-bureau-groningen-drenthe/>

³⁵ Ibid.

³⁶ <https://www.reisviahub.nl/pakketkluisen/>

³⁷ <https://www.reisviahub.nl/ondernemen/>

³⁸ <https://www.crow.nl/getmedia/66bd8f5f-f633-457a-90c4-86a3759c3096/3-Presentatie-hubs-Groningen-en-Drenthe.pdf.aspx>

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The ITS systems available at the hubs are real-time traffic information and the possibility to charge the Public Transport (PuT) card³⁹ (in the Netherlands there is the system of OV-chipkaart that gives users access to all modes of PuT⁴⁰). The hubs are also integrated in the MaaS-pilot in Groningen-Drenthe⁴¹.

Engagement aspects

The network of stakeholders involved in the SMART hub mobility solution is best described by the following figure.

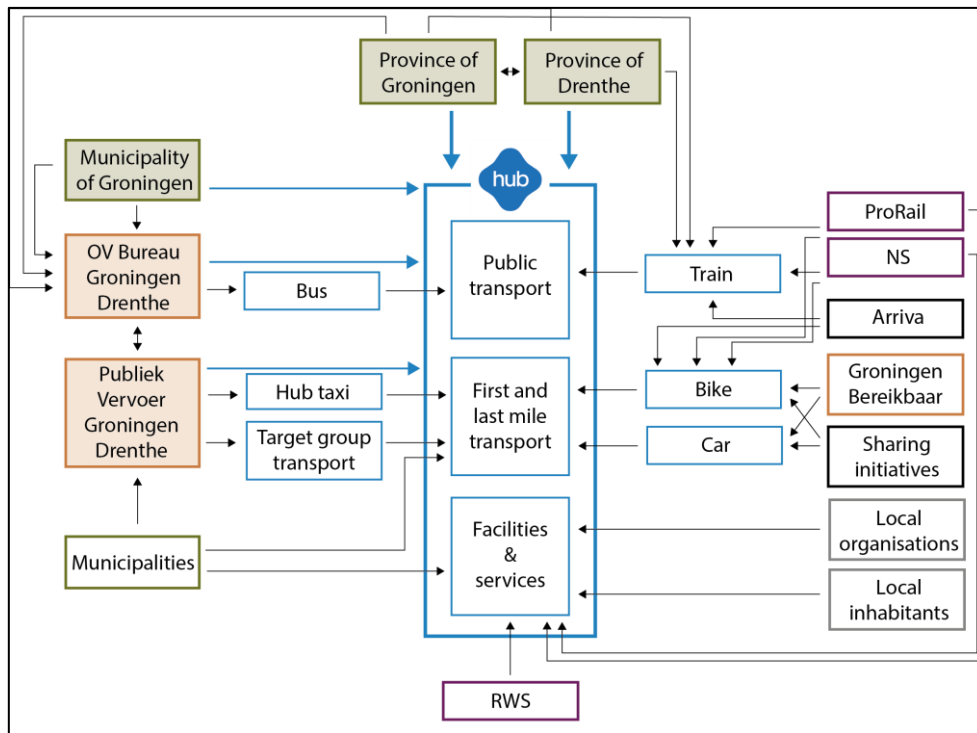


Figure 62: Stakeholder network of the hub program of Groningen-Drenthe
Source: University of Groningen (2021).

Stakeholders that are directly involved in the hub programme through the hub core team are indicated in the figure above with filled-in boxes and blue lines that lead to the 'hub': province of Drenthe, province of Groningen, municipality of Groningen, the OV Bureau and Publiek Vervoer. These parties coordinate the general developments of the programme. The thicker blue lines run from the two provinces as they are the primary decision-makers and funders within the programme.

The municipality of Groningen represents municipalities within the hub core team. Other municipalities are not involved in the overall coordination of the programme, yet each of them is the key decision-maker at the hub(s) located within their municipality.

³⁹ <https://www.reisviahub.nl/hub-vol-voorzieningen/>

⁴⁰ <https://www.iamexpat.nl/expat-info/dutch-expat-news/how-ov-chipkaart-works-netherlands>

⁴¹ <https://www.provincie.drenthe.nl/onderwerpen/verkeer-vervoer/openbaar-vervoer/maas-slimme-manier-reizen/>

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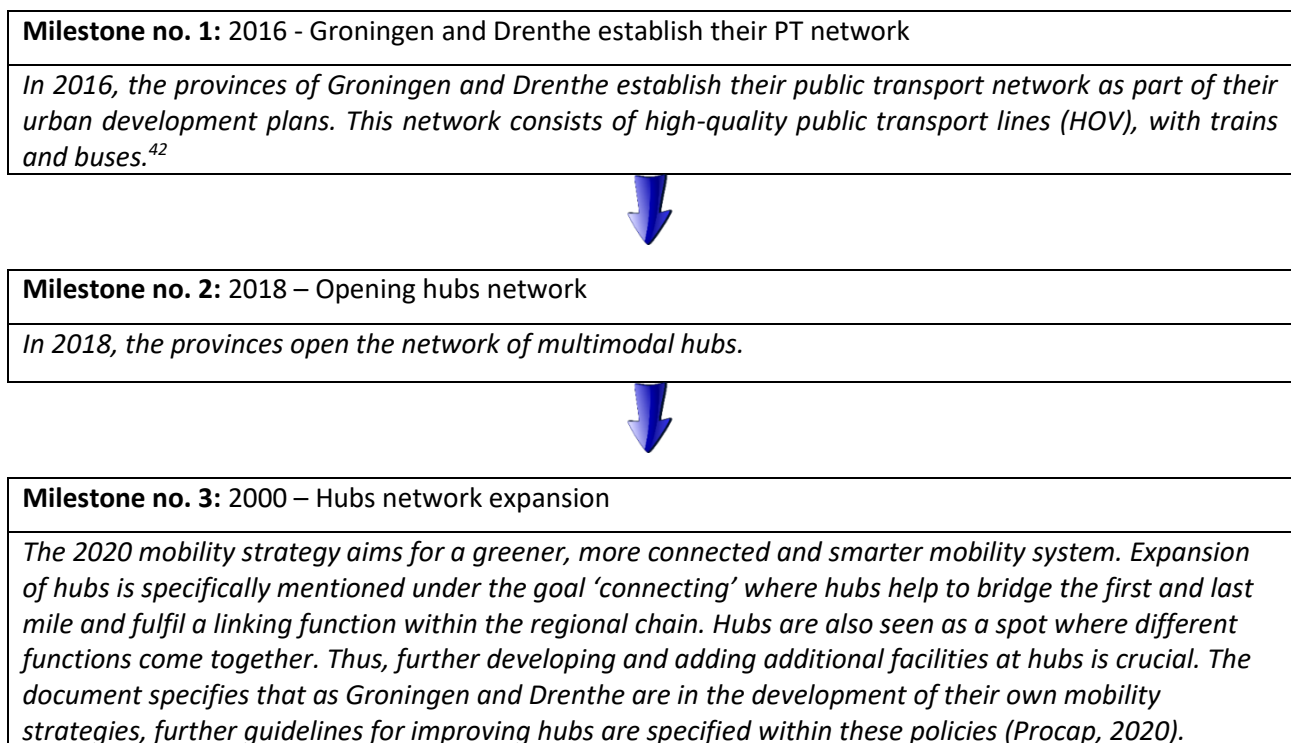


Stakeholders indicated in orange are collaborations of the regional and/or local stakeholders. While the OV Bureau and Publiek Vervoer have a role in all hubs, Groningen Bereikbaar is only involved in P+R locations around the city of Groningen.

Stakeholders indicated in purple – National rail infrastructure manager (ProRail), National railways (NS) and the national road authority (RWS) are national level asset managers and NS is often the landowner around train stations where hubs are frequently located. Next to their roles of a train operator (NS) and rail provider (ProRail), these parties are owners of the train stations and have their own guidelines for developments at these stations – i.e. the larger hubs. Rijkswaterstaat (RWS) is involved with hubs where part of a hub is located along a motorway.

Stakeholders in black are commercial parties that are directly involved only at specific hub projects (e.g. coffee shop owners). Grey represents the players on a local level.

4.1.3 Timelines and milestones



⁴² [University of Groningen, Hub programme Groningen and Drenthe: State of hubs, governance, and future outlook \(2021\).](#)

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4.1.4 Long-term assessment

Success, Durability and Expansion

The service is still operating and there are plans to expand the network of hubs within the inner city and villages, specifically in the larger municipalities of Groningen and Assen. The hubs located in the villages will mostly be dedicated to shared mobility modes.

Hub developments are happening all across the Netherlands, as for example in Noord-Holland, and the EU, with examples in Bremen (Germany), Flanders (Belgium), and South-East Scotland.⁴³

Funding and Financing

At the start of the programme, the two provinces and the OV Bureau each contributed €1.5 million to cover the overarching costs (programme manager, branding, communication and some pilots) and the implementation of the DRIS panels (dynamic travel information system) at hubs with bus connections.⁴⁴

Individual hub projects are financed through subsidy schemes and funding programmes (e.g. subsidies for earthquake areas; Nationaal Programma Groningen etc..).

The provinces have a specific budget allocated for the development of hubs; however, local municipalities must contribute as well (but they usually don't have a specific budget available).

In the newest vision document for the hub programme, ca. €600.000 has been designated for the hub programme from 2022 – 2025; with most of the budget going towards programme management, communication, and the new working space for the hub programme, while around €30.000 per year is set for investments.⁴⁵

The development of the hub network is paid with the resources from the Public Transport Authority, the authority gets its financial resources from its mother organisations (provinces of Groningen & Drenthe and the city of Groningen)⁴⁶. The service in itself is not generating income. It is a (multiplier) investment in the public transport system that should make the regional bus services more attractive.

Why is it considered a good practice?

The practice presents a large scale implementation of mobility hubs, integrating transport and other services towards the set up of a network of inclusive hubs. Starting from the co-location of different transport (and its ancillary) services, the two provinces are aiming to improve accessibility to the facilities for everyone, promote suitable transport options for all users, and create a capillary transport network. In this way, the hub is seen as a connecting link between people and facilities.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ <https://gemeenteraad.groningen.nl/Documenten/Bijlage-1-Begroting-2021-OV-bureau-Groningen-Drenthe.pdf>

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4.1.5 Transferability considerations

CONTEXT PECULIARITIES	TRANSFERABILITY CONDITIONS
<p>The city of Groningen is a medium sized city with a strong university. Therefore, the city of Groningen possesses the assets to develop a strong and innovative hubs network. The rural hinterland of Groningen-Drenthe profits from the expertise in Groningen (positive spin-off).</p>	<p>The whole programme is based on the existence of an efficient public transport network with adequate infrastructure. Furthermore, there needs to be cooperation between the different types of stakeholders.</p> <p>There needs to be a clear definition of land ownership since that determines the responsible stakeholder for a specific hub.</p>
DIFFICULTIES ENCOUNTERED/WEAKNESS	LESSONS LEARNT
<p>Difficulty in financing hub development. For example, compared to the province of Groningen, in Drenthe, the municipalities have less money available, while at the same time having more maintenance costs since they have more roads.</p>	<p>The project is a success and is anchored in the long-term mobility strategy of Groningen and Drenthe. The programme team considers 'learning-by doing' a strong point of the project.</p> <p>Lessons learned are:</p> <ul style="list-style-type: none"> - the funding comes from the larger cities/regional governments. Funding in rural municipalities for hubs is missing - Resistance among stakeholders. Stakeholders see the hubs as an inefficient replacement of traditional public transport

References for further details

Organization: Province of Drenthe
 Person contact: Martin Courtz
 Email: m.courtz@drenthe.nl