



Article

Sustainable Transport Integration: Global Success Stories

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Introduction

Alone, no single alternative transportation mode can challenge the dominance of private use vehicles, but when combined effectively, public transport and active travel can offer people increased travel choices.

This article explains the importance of effective integration between different sustainable transport modes, drawing upon case studies from around the world.

More sustainable transport choices, like public transport, walking, cycling and wheeling benefits everyone. Better integration reduces reliance on cars, a reliance that may drive some people into financial hardship to access essential services, employment and education. Enabling choice is key to [ensuring a just transition to net zero](#) as transport professionals endeavour to decarbonise the sector. At the same time, improving integration between active travel and public transport enables more people to build physical activity into their daily lives. The health benefits are significant- [being physically active reduces a person's risk of dementia by 30%, depression by 30%, heart disease by 40%, type 2 diabetes by 40% and osteoporosis by 50%.](#)

Modal shift to sustainable transport is key to creating a cleaner and greener transport network, reducing the health implications of air and noise pollution and helping the UK to deliver on its climate commitments.

'A highly car-dependent society creates well-recognised negative impacts, which affect some people more than others. Poor air quality, physical inactivity and exclusion from opportunities compromise quality of life and the nation's prosperity'

Quote from CIHT (2024) *A transport network fit for all our futures*

Last year (2024), the Department for Transport announced [plans](#) to develop a new integrated national transport strategy for England aligning with the [government's manifesto commitment](#) to facilitate seamless journeys and promote active travel networks.

CIHT has consistently called for an integrated national transport strategy and welcomes the government's commitment to deliver one. In the [CIHT response to the strategy's call for ideas](#), we called for the strategy to:

1. Deliver a sustained modal shift in line with the sustainable transport hierarchy – thus contributing to the net zero mission.
2. Improve resilience and access to reliable and affordable connectivity to economic opportunity for people and business – thus contributing to the growth mission.

3. Deliver a safer, cleaner, and more inclusive transport network – thus contributing to the health mission.
4. Improve customer choice and experience – thus contributing to the breaking down barriers to opportunity mission.

Global case studies

Please see the appendix for more details on the following case studies from around the world:

- [Integrating active travel and public transport in urban areas: Lessons from France](#)
- [Integrating cycle and rail in the Netherlands](#)
- [Digital Integration in New Zealand](#)
- [Integrated transport hubs in Singapore](#)
- [Timetable Coordination in Switzerland](#)

Conclusion

Alone, no single alternative transportation mode can challenge the dominance of private use vehicles, but when united effectively, truly integrated sustainable transport offers people increased choice in how they travel.

Viewing the challenge through a global lens is key and will provide a useful contribution to the UK Government's plans for developing an Integrated National Transport Strategy.

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APPENDIX

Integrating active travel and public transport in urban areas: Lessons from France

Prioritising public transport and active travel is essential for creating climate-neutral, energy-efficient cities. France exemplifies this with efficient, affordable, and user-friendly urban transport systems. In some cities like Montpellier, public transport is even free for registered residents.¹

Major cities such as Paris, Lyon, Marseille, and Rennes operate metro systems, while others rely on integrated networks of trams, buses, cycle paths, and pedestrian zones. Cities like Strasbourg and Montpellier are actively promoting sustainable, multimodal transport options for residents and visitors alike.

In Montpellier and Nantes, folding bikes and scooters are permitted on buses and trams, with dedicated spaces available. Non-folding versions have time restrictions, and only one is allowed per platform. Nantes also operates Navibus shuttle boats on the Erdre and Loire, which allow bikes on board year-round with crew approval.



Poster advertising free public transport in Montpellier.

Spotlight on Nantes

Since the early 2000s, Nantes has transformed urban mobility through the EU's VIVALDI programme, emphasising cycling and reducing car use. Pedestrian zones expanded, and a “trambus” line was introduced. The city's cycle network grew from 225 km in 2000 to 655 km in 2019, with car lanes repurposed for cycling. The number of cycle racks increased from 2,000 in 2002 to 5,600 in 2010. Nantes aims for 12% of trips to be made by bike by 2030.

¹ The relationship between universal free public transport and active travel can prove complex. For more information on this topic, please see [Rethinking passive transport: Bus fare exemptions and young people's wellbeing - ScienceDirect](#), [The effects of free-fare public transportation on the total active travel in children: A cross-sectional comparison between two Finnish towns - ScienceDirect](#)

Airport Integration

The Réseau Vélo Île-de-France (VIF), launched in 2019, is developing a safe cycling network across the Paris region. Once completed, it will enable cyclists to travel between Charles de Gaulle Airport and Vélizy-Villacoublay in under an hour.

For more information, please see [VIVALDI | CIVITAS](#) and [Un réseau cyclable pour l'Île-de-France : le VIF – Collectif Vélo Île-de-France](#)

Integrating cycle and rail in the Netherlands

The Metropolitan Region Rotterdam the Hague (MRDH) is a voluntary alliance of 21 municipalities in South Holland, anchored by Rotterdam and The Hague and home to around 2.4 million residents. Operating under the Dutch Joint Regulations Act, MRDH focuses on improving public transport, cycling, car travel, road safety, and sustainability.

MRDH oversees public transport concessions within the region for buses, trams, and metros (excluding national trains), aiming to make travel more efficient and accessible. In 2018, MRDH introduced a policy on chain mobility, which promotes combining transport modes—such as cycling and public transport—across 84 regional hubs. The goal is a seamless travel experience that encourages the use of sustainable transport over private vehicles.

Chain mobility relies on minimising obstacles during transfers between travel modes. Key focus areas include:

- **Bicycle Parking:** Safe and sufficient parking in logical locations with policies to discourage long-term or abandoned bikes.
- **Park and Ride (P+R):** Strategically managed to align with regional goals; not fully demand-driven, with complementary measures like paid parking and promoting cycling.
- **Local Accessibility:** Hubs must be easily reachable by foot and bike through safe, direct routes.
- **Shared Mobility Services:** While OV-fiets (bike rentals) at train stations are widely used, shared bikes, scooters, and cars at other hubs are still emerging.



- **Quality Experience:** Customer satisfaction targets are a minimum score of 7–7.5 out of 10, with continuous feedback informing improvements.

MRDH coordinates with municipalities, transport operators, and landowners to create an Initiation Document for each hub, outlining improvement plans. These are formally approved by all parties involved. The region is currently finalising documents for all 84 hubs, with implementation as the next step.

For more information, please see <https://mrdh.nl/wie-zijn-we>

Digital Integration in New Zealand

New Zealand is making plans to devise the world's first integrated nationwide ticketing solution.

Using the public facing brand Motu Move, the National Ticketing Solution (NTS), a partnership between the New Zealand Transport Agency Waka Kotahi (NZTA) and 13 Public Transport Authorities (PTAs) will provide quick, safe and easy-to-use payment methods for all public transport across the country, with the system expected to be rolled out by the end of 2026.



Using Motu Move, customers will be able to pay for buses, trains and ferries using contactless and digital payment methods, as well as a prepaid Motu Move card and pre-bought tickets. The new system will also provide better data on public transport use, which will help PTAs to improve their networks in a more targeted way.

Christchurch airport pilot

A pilot testing contactless payments started in December 2024, on Route 29 from Christchurch Airport to the city.

NZTA shared:

'The pilot on Route 29 in Christchurch has been a great success, so far seeing over 10,000 debit or credit card payments – that's 35% of all adult trips. This volume is well above expected levels, and we're pleased to confirm there have been no issues with the contactless payment technology.'

Moving towards nationwide implementation

The next phase of the project will see Motu Move rolled out in Timaru and Temuka, followed by Greater Christchurch in mid-2025.

For more information, please see [Motu Move | NZ Transport Agency Waka Kotahi](#)



Integrated Transport Hubs in Singapore

Integrated Transport Hubs (ITHs) are integrated bus interchanges linked to adjoining Mass Rapid Transit (MRT) stations, as well as residential, commercial and retail spaces.

In 2024, there were 12 ITHs: Ang Mo Kio, Bedok, Boon Lay, Buangkok, Clementi, Joo Koon, Sengkang, Serangoon, Toa Payoh, Bukit Panjang, Yishun and Woodlands.

Sheltered and air-conditioned, ITHs offer commuters the opportunity to run errands and shop comfortably, before transferring to their connecting buses or trains. They also include cycle parking and family washrooms.

Prioritising accessibility

ITHs include [several features](#) designed to make them accessible and inclusive for everyone including large print signs, priority queue seats near bus waiting lines, accessible changing rooms, wide corridors and ramps and commuter care rooms.

All bus interchanges and MRT stations are also [Dementia Go-To Points \(GTPs\)](#). GTPs are 'safe return' points where members of the public can bring persons living with dementia/people who appear to be lost and are unable to identify themselves or find their way home. Staff at GTPs are trained to identify the person who has been brought to them and will assist to reunite them with their caregiver, where possible. They also function as touch points within the community which serve as resource centres that provide information and useful resources on dementia.

Newer ITHs, including Ang Mo Kio, Boon Lay and Toa Payoh also feature directional floor stickers and nostalgic murals as part of the '[Find Your Way](#)' initiative by Dementia Singapore. The initiative seeks to help persons living with dementia find their way around our bus interchanges and MRT stations with greater ease and confidence.

Designing highways and transportation for people with dementia

CIHT's accredited e-learning course focuses on the importance of considering dementia for design, planning transport infrastructure, and providing services to make travel more inclusive.

This [CIHT Learn](#) course is freely available to CIHT and BCoE members. For more information, please see [Designing highways and transportation for people with dementia](#).

For more information, please see [LTA | Integrated Transport Hub](#)

Timetable Coordination in Switzerland

Pulse Timetables (also known as Timed-Transfer Systems) refer to a public transport scheduling strategy where multiple public transport routes are coordinated to arrive and depart from a central hub (or multiple transfer points) at the same time. This allows passengers to easily transfer between routes with minimal waiting time.

Such an approach is used extensively within the intercity and regional rail systems of Switzerland, which boasts [Western Europe's highest number of public transport trips per capita](#).

[The integrated pulse timetable in Switzerland is planned around the national rail network](#). Hourly or half-hourly long-distance trains come together (or 'pulse') on the hour and half-hour at the network's core stations of Zurich, Basel, and Bern. A similar approach is applied at designated pulse points on local and regional rail networks throughout the country: buses and trains arrive before the pulse time, wait a short time to allow passengers to change between services, and then depart. The pattern repeats every hour (or half hour), and as a result, trains also depart all intermediate stations at repeated times every hour. [Spotlighting the remote and mountainous region of Lower Engadine](#) reveals that a pulse timetable-based approach can deliver a viable, high-quality, fixed public transport network in a region with very low population densities.

[Such an approach provides numerous benefits for travellers:](#)

- Public transport departures staggered at regular intervals, as opposed to competition-boosting bunching seen in the UK.

- Easily understandable and memorable ‘clock-face’ departure times.
- Reduced wait times between services.

For more information, please see [Watching the Swiss: A network approach to rural and exurban public transport - ScienceDirect](#)

About CIHT

CIHT provides strategic leadership and support to help our members develop, deliver, and maintain sustainable solutions for highways, transport infrastructure, and services that:

- Address the challenges of climate change
- Support the economy
- Help address societal inequalities
- Reduce environmental degradation
- Respond to a changing world

We bring members together to share, learn, and feel confident about addressing these challenges through the application of good practice, by embracing innovation and by acting with integrity. It is through this and the values that CIHT can demonstrate and deliver on thought leadership and shaping the highways and transportation sector for the public benefit.

Whether you are a student, apprentice, work in the private or public sectors or are a company director, CIHT has a place for you and a commitment to fulfilling your professional development needs throughout your career.

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