

Good Practices' key factors factsheets



Sothern Regional Assembly

Key factors analysis

| Name of the practice | 2: | Cork Transp | ort & Mobility Forum – Railway Station Cork |
|--|--|-------------------|--|
| Means of transport rail transport, e-vehi Railwat Station, | | Walking/Cy | cling, Public Transport, Rail Transport, E-Vehicles, |
| KEY FACTORS OF SU | CCESS | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Y | Trains pass through the Railway Station, Buses have their own dedicated bus entrance lane and there are also cycle/pedestrian walkways |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Y | See above |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | Y | Yes, using a leapcard or purchasing tickets online, in Station or on the bus |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | Y | There is the room and flexibility to integrate new modes if required |
| SERVICE COORDINATION | DESCRIPTION | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | Y | Bus services operate to the station to connect in with arrivals and departure of trains |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | Buses are frequent so if there are major delays customers will avail of the next bus arriving to the station. |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Υ | Leapcard or online tickets, Leapcard can be used on Cork/Midleton and Cork/Cobh routes as well as buses |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | | |

| | information, ticketing, interchange design) | | |
|--|---|---|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | Y | This is managed by CIÉ Property and is the responsibility of IÉ |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | Υ | All of these can be found in Kent Station terminal, there are no Green areas on this side of the Station. |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | N | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Υ | |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Υ | Working lifts to all areas of the interchange and Station. |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Y | The opening of the Interchange has moved the Station and our customers closer to the city. |

| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | Y | Public realm has been upgraded in the vicinity of the station, with provision of enhanced footpaths and cycle lanes |
|---|--|-----|---|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | Y/N | There is cycle parking and also 3 Coke Zero Bike docking stations but no car hire facilities on site. There is a setdown area for drop off and taxis are available on the public road outside the station. The older parking area has charge points for 2 EVs |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | Y | Available throughout the Station Interchange. |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Y | Yes, in the railway Station and at the bus shelters. |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Υ | Dedicated apps for Iarnród Éireann, Transport For Ireland, Leap Card and bike share. |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Y | Occasional Mix Your Mode initiatives highlighting multi-modality with schools in the Cork area |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Y | This GP provides a forum that allows for the interface between users of sustainable transport and the transport infrastructure providers and policy makers. It allows for the opportunity and promotion of integration initiatives by providing a forum for stakeholders to coordinate sustainable and active travel projects, programmes and services. |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Y | This GP is a representative group of stakeholders who have a common interest in sustainable and active travel in Cork City. The forum is made up of representatives from the City Council, Environmental Forum, Cycling Associations, schools and universities, Public Transport providers (rail and bus), Private Transport Providers and large employers. They come together monthly to discuss sustainable transport issues and seek consensus to achieve their overall objective to improve the quality of travel environments, broaden accessibility and |

| | | | achieve behaviour change in favour of sustainable and active travel and improved multi modal travel interchange. |
|-------------------|---|---|--|
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | N | |

| Name of the practice | 2: | Cycle and R | ide Infrastructure associated with Luas Light Rail |
|--|--|-------------------|---|
| Means of transport a rail transport, e-vehic | affected (walking/cycling, public transport, cles, etc.) | Walling/Cyo | cling, Public Transport, Rail Transport |
| KEY FACTORS OF SU | CCESS | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | У | The layouts allow for all modes to function effectively. |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Y | This GP included the relocation of pedestrian crossings and more direct access routes particularly from schools, hospitals and tourist attraction to improve the interchange between pedestrians and tram network. These changes improved the modal interchange between pedestrians and the tram network. |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | Y | Ticket machines and validators are located on all stop platforms, which are adjacent to cycle facilities. |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | У | Cycle facilities are located immediately adjacent to tram stops. |
| SERVICE COORDINATION | DESCRIPTION | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N/A | There are no fixed timetables – just first and last tram and peak and off peak frequency. This information is provided at each stop. |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | Y | Delays or disruption to tram service are communicated through the Passenger Information Display (PID) and via Passenger Announcement (PA), located on each platform. |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | N/A | The 'Leap Card' is an integrated ticket that works across all modes. Not applicable for bicycle interconnections. |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | N/A | Ticketing and service design is uniform across the Luas Light Rail system. At multi-modal interchanges, there are efforts to co-ordinate service information, mapping, directional signage etc. |

| | information, ticketing, interchange design) | | |
|--|---|-----|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N/A | Not applicable to this particular GP, but is being considered by TII at other multi-modal interchanges such as at Connolly and Broombridge. |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | N | Consideration was given to existing adjacent facilities but generally no additional facilities of that nature were installed. Some of the termini proposals included driver facilities, coffee kiosks etc. but construction was put on hold due to recession or wider development by third parties. At Red Cow interchange, a coffee truck was facilitated as part of the works in terms of parking space and access to power. |
| Permeability | High interchange permeability from all directions to pedestrians | Y | Luas Light Rail is an open, on-street system. Further efforts have been made to improve access and permeability to the stops by way of opening up routes through housing estates, constructing pathways and cycle ways etc. |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | Υ | The cycle infrastructure was designed to be identifiable with the Luas Light Rail brand. Materials – paving, shelter structures, information boards etc were coordinated to create a consistent language. |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | У | The cycle infrastructure is maintained to the same standard as the light rail stops and is regularly cleaned. |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | Proximity of cycle infrastructure to tram stops maximizes safety and optimizes existing cctv and other features as well as passive surveillance. Access to stops is carefully considered. The Design Manual for Urban Roads and Streets is a key reference document and encourages safety, lower traffic speeds and better pedestrian priority by design: https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Planning/FileDownLoad%2C32669%2Cen.pdf |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Y | Luas Light Rail was designed on the principle of universal access and has incorporated accessibility features from the outset to allow everybody to access it, regardless of ability. Features include: - Low floor vehicles and gently ramped platforms to allow level boarding for wheelchairs and prams - Passenger information Displays on platform and on board - On-board next stop and destination announcements - Hearing loops - Ticket machines designed to facilitate wheelchair users, to minimize glare and with voice instruction - Accessible websites and travel apps |

| | | | Cycle infrastructure was designed to allow ease of access. Bicycle guiding strips were installed on steps in the vicinity of stops. Physical barriers are minimized by design. |
|---|--|---|--|
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Y | Bike facilities are located adjacent to the stops. Inter-visibility between stops and cycle infrastructure was important, for reasons of safety, convenience and promotion of use. A common architectural language also helped to create a link. |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | Υ | TII worked with the Local Authorities to improve accessibility standards in the vicinity of stops where possible. |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | Y | This GP allowed for the installation of a range of cycle and ride measures including new cycle lanes, 300 new cycle parking spaces, covered shelters and bicycle lockers adjacent to tram stations in Dublin to improve the modal interchange between cyclists and the tram network. Kiss and ride and taxi space is provided where possible. |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | Y | Bespoke totems were designed to accompany the bike parking, which functioned as an identifier, a wayfinding structure and a local area map point. |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Y | Area maps and wayfinding are located at bike parking totems. Real time information, help-points etc. are located at adjacent stops. Customer Service Officers move from stop to stop on a continuous basis. |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Y | Information on all Luas Light Rail services is available on a dedicated website. Web-based cycle and ride information could be improved. |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | N | More could be done in this area – campaigns, car-free days, free bike servicing at stops etc. |
| Passenger Motivation | How did passenger motivations impact on design decisions | Y | A decision to choose quality bicycle lockers and well-designed furniture as opposed to the cheapest solution was driven by passenger motivations for comfort, personal and bicycle safety and weather concerns. Therefore, high end bicycle lockers and bespoke shelters and totems were installed at tram stations that provide dry, durable, safe, well-lit bicycle facilities and satisfied the passenger need for security/comfort. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |

| Joint governance | Presence of targeted policy actions, | Υ | In line with National Transport Authority's National Cycle Policy: Smarter Travel 2009 as well as City and |
|-------------------|--|---|--|
| and initiatives | framework conditions, | | Regional Development Plans. |
| | recommendations, norms, etc. | | |
| Coordination and | Presence of win win co-operation | Υ | TII worked extensively with the Local Authorities, other transport providers and third party stakeholders as |
| cooperation | schemes among key stakeholders, | | part of these works. |
| | fostering modal interchange and | | |
| | seamless mobility | | |
| Sharing solutions | Activation of technical planning tables, | N | Further work in this area required. This would be a useful development in the process. |
| | shared decision processes with citizens | | |
| | and users, to build solutions enabling | | |
| | modal interchange and seamless mobility | | |

| Name of the musetice | | Cusan Sahar | ala Tuanal Duaguanana |
|--|--|-------------------|--|
| Name of the practice | 5; | Green-Schoo | ols Travel Programme |
| Means of transport a rail transport, e-vehic | affected (walking/cycling, public transport, cles, etc.) | Walking/Cyo | cling & Public Transport |
| KEY FACTORS OF SU | CCESS | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | | |
| SERVICE COORDINATION | DESCRIPTION | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | | |

| | information, ticketing, interchange design) | | |
|--|---|---|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | | |
| Permeability | High interchange permeability from all directions to pedestrians | Y | The audits which are undertaken by students assess the permeability of the route to school and indicate where desire lines are and recommends areas for improvement. These recommendations may identify laneways/cut throughs or other informal desire lines which when opened up and formalized will increase the permeability of the local urban environment. |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | | |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Υ | This GP assists in ensuring safe and sustainable travel for students by undertaking walking and cycling audits of the environment. These audits are then submitted to the Local Authority (Municipality) who then upgrade the route by installing infrastructure to improve safety for travel to schools. The key types of infrastructure which have been installed include; new bus zones, speed sensor signage, new footpaths, improved/replaced warning signs, new pedestrian crossings, new road markings and new lighting. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | | |

| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | | |
|---|--|---|---|
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | | |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | Y | Green-Schools provides cycle and scooter parking in schools which facilitates parents to park their bikes and use public transport for the rest of their journey. |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | | |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | | |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | У | This GP seeks infrastructural audits for journeys to schools both walkability and cycleability audits which are undertaken by the students who then submit same to the owner of this GP who undertake the installation of transport infrastructure upgrade. As this policy is student led – the behaviour change starts in the classroom, expands to the school and then to families which eventually fosters change in the community. The key types of infrastructure provided are; new bus zones, speed sensors, new footpaths, improved/replaced warning signs, new pedestrian crossings, new road markings and new lighting. Green-Schools also offer bespoke training, educational workshops, campaigns and competitions to participating schools to promote multi modal journeys. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |

| Joint governance | Presence of targeted policy actions, | | |
|-------------------|--|--|--|
| and initiatives | framework conditions, | | |
| | recommendations, norms, etc. | | |
| Coordination and | Presence of win win co-operation | | |
| cooperation | schemes among key stakeholders, | | |
| | fostering modal interchange and | | |
| | seamless mobility | | |
| Sharing solutions | Activation of technical planning tables, | | |
| | shared decision processes with citizens | | |
| | and users, to build solutions enabling | | |
| | modal interchange and seamless mobility | | |

| | | 1 | | | | |
|---|--|---|---|--|--|--|
| Name of the practice | Name of the practice: | | Limerick Smarter Travel – Workplace Mobility Management Programme | | | |
| Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Walking/Cycling, Public Transport, Rail Transport, Green Vehicles | | | | |
| KEY FACTORS OF SU | CCESS | | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | | | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | | | | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | | | | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | | | | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | | | | | |
| SERVICE COORDINATION | DESCRIPTION | | | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | | | | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | | | | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | | | | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | | | | | |

| | 1 | ı | |
|---------------------|--|---|--|
| | information, ticketing, interchange | | |
| | design) | | |
| | | | |
| Interchange | Presence of Interchange facility | | |
| management | management agreements identifying | | |
| schemes | interfaces and responsibilities between | | |
| 30.110.11103 | all the parties involved in managing and | | |
| | serving the interchange facility | | |
| QUALITY OF THE | DESCRIPTION | | |
| | DESCRIPTION | | |
| INTERCHANGE | | | |
| ENVIRONMENT | | | |
| Urban realm | Presence of facilities that add value to | | |
| | the user experience, especially during the | | |
| | waiting time (retail, catering and | | |
| | collection lockers, wifi, toilets, green | | |
| | areas, etc) | | |
| Permeability | High interchange permeability from all | | |
| Permeability | | | |
| | directions to pedestrians | | |
| Perception | Built and urban design solutions ensuring: | | |
| | direct sightlines among different parts of | | |
| | transport interchanges, Using the same | | |
| | architectural style to reinforce legibility, | | |
| | clear relationship with the urban realm | | |
| Comfort | High standards of cleanliness and comfort | | |
| | (covered areas/passages, seating/waiting | | |
| | areas, lighting, presence of bins, etc) | | |
| Cafatu and accusitu | | | |
| Safety and security | Urban design ensures high levels of | | |
| | safety, especially in road crossing (lower | | |
| | speed limits near the stops, pedestrian | | |
| | crossings, etc) and security (video | | |
| | surveillance, etc) | | |
| ACCESSIBILITY | DESCRIPTION | | |
| | | | |
| Universal design | Interchange spaces are designed for all | | |
| 0 | passengers, particularly those with | | |
| | reduced mobility (presence of boarding | | |
| | equipment, ramps, assisted travel, | | |
| | | | |
| | escalators, staircase aids for bikes, | | |
| | wheelchairs, strollers, etc.) | | |
| Close proximity | Design solutions that reduce both actual | | |
| of modes | and perceived interchange distance | | |
| | among means of transport | | |
| | | | |
| | | 1 | |

| Accessible | Ensure routes in the wider area are of the | | |
|---|--|---|--|
| pedestrian routes | same accessibility standards as within the interchange facility | | |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Y | As part of this GP large employers (over 250 employees) will provide displays in the workplace detailing travel apps, real time travel information for cyclist, public transport etc. |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | | |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Y | Promotion of NTA cycling and walking challenges to partner workplaces throughout the year. Bike mechanic visits and bike fixing demonstrations in partner workplaces during bike week. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Y | This GP is run by Limerick City and County Council in conjunction with the National Transport Authority with the aim to engaging large employers (over 250 employees) to create a mobility management plan for their organisation to promote multi modal sustainable travel for their employees. |
| | | | They undertake a sustainable transport assessment and based on this, facilities are enhanced: increased bicycle parking, showers, lockers, public transport displays, promotion of sustainable transport. Follow up surveys are conducted with employees after 1, 3 and 5 year to ensure behavioural change is embedded. |
| | | | Mobility management plans are requested to accompany planning applications that may affect current congestion levels and Limerick Smarter Travel will recommend conditions to be included in the planning |

| | | | decision including reduced car parking, increased cycle parking, collaboration with public transport operators |
|-------------------|--|---|--|
| | | | etc. |
| Coordination and | Presence of win win co-operation | Υ | Round table seminars for partner workplaces so that successes and challenges encountered through the |
| cooperation | schemes among key stakeholders, | | smarter travel programme can be discussed and learned from. |
| | fostering modal interchange and | | |
| | seamless mobility | | |
| Sharing solutions | Activation of technical planning tables, | | |
| | shared decision processes with citizens | | |
| | and users, to build solutions enabling | | |
| | modal interchange and seamless mobility | | |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Local Link Rural Transport Programme Walking/Cycling, Public Transport, Rail Transport | | | |
|--|--|---|--|--|--|
| | | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Y | The appropriate High Frequency Services would use the multi model interchange areas / hubs available in the bigger towns of the county. | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | | | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | | | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | | | | |
| SERVICE COORDINATION | DESCRIPTION | | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | Υ | Service timetables where possible are coordinated to make connections with other public transport providers, this allow for a more integrated transport system that is specifically designed to meet the needs of both commuters and local rural passenger needs, and in doing so is flexible and accessible to Passengers | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | Y | Where possible Local Link bus services will wait for the arrival of other services to make connections with both Local link service and other Public transport providers. This is not reciprocated by other public transport providers. | | |

| Ticket | Presence of a comprehensive multi- | | |
|-----------------|--|---|--|
| coordination | modal ticketing system | | |
| Standardisation | Presence of uniform technical, service | | |
| | and design specifications (particularly | | |
| | information, ticketing, interchange | | |
| | design) | | |
| Interchange | Presence of Interchange facility | | |
| management | management agreements identifying | | |
| schemes | interfaces and responsibilities | | |
| | between all the parties involved in | | |
| | managing and serving the interchange | | |
| | facility | | |
| QUALITY OF THE | DESCRIPTION | | |
| INTERCHANGE | | | |
| ENVIRONMENT | | | |
| Urban realm | Presence of facilities that add value to | | |
| | the user experience, especially during | | |
| | the waiting time (retail, catering and | | |
| | collection lockers, wifi, toilets, green | | |
| | areas, etc) | | |
| Permeability | High interchange permeability from | | |
| | all directions to pedestrians | | |
| Perception | Built and urban design solutions | | |
| | ensuring: direct sightlines among | | |
| | different parts of transport | | |
| | interchanges, Using the same | | |
| | architectural style to reinforce | | |
| | legibility, clear relationship with the | | |
| | urban realm | | |
| Comfort | High standards of cleanliness and | | |
| | comfort (covered areas/passages, | | |
| | seating/waiting areas, lighting, | | |
| | presence of bins, etc) | | |
| Safety and | Urban design ensures high levels of | | In conjunction with the Local Authority, the local urban interchange was redesigned |
| security | safety, especially in road crossing | Υ | to allow accessibility to services for Passengers with reduced mobility, this redesign |
| | (lower speed limits near the stops, | | included the mandatory speed reduction and pedestrian crossing to be retained |

| | pedestrian crossings, etc) and security (video surveillance, etc) | | |
|---|---|---|--|
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Υ | Interchange areas are available in some more urban areas for those with reduced mobility, but additional accessible interchange areas are needed to allow Passengers access the full range of services that is available to those without mobility issues. |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Υ | We would as a norm Public transport designated stops for services, with the exception of more rural areas where such interchange/ Hubs are not available, but these would be a highly desirable for the Passenger interchange and customer convenience. |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | | |
| Parking facilities | presence of cycle parking areas, cycle/e-car hiring spots as well as kiss and ride for cars and taxis near the interchange node | | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real-time information (help points, staff) | Υ | Where possible timetable information and contact details are available to Passengers. |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). | Υ | Service information is available through website and social media, the National Transport Authority manage the National Journey planner and all service information should be available here also. |

| | Information delivered in accessible formats (for impaired people) | | |
|-------------------------------------|---|---|--|
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Υ | Information and social media sites kept up to date and relevant. Kids Go Free campaign during summer months to benefit and encourage usage by younger passengers to enable convenient transport modes available, and to encourage the practice of using Public Transport modes by youth in all areas. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | | |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Υ | Co operation and Co ordination between Local Authority has been productive over the past few years. With consultation on a Bus Stop Audit for the County and the redevelopment of accessible bus stops in Dungarvan, the largest urban town in the County, being undertaken and finalised last year giving access to passengers of reduced mobility that was not available previously. Co operation between Rural Transport Programme and Bus Éireann has not been forthcoming to date. |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | Υ | A Transport Plan is underway and consultation is ongoing between the Local Authority, Southern Regional Assembly and the Rural Transport Programme. |
| Integrated Transport System | Modal Interchange Connections | Υ | This GP provides the opportunity to connect more rural areas to bus and rail transport hubs. This initiative provides more responsive local bus connection from set points or direct from people's homes with a semi flexible transport service i.e. bus can divert off route when required. It provides a more integrated transport system that is specifically designed to meet rural needs or those with accessibility difficulties. |



County of Northeim

Key factors analysis

| Name of the practice: | | Citizens' bus Bodenfelde | | |
|---|--|--|---|--|
| Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | public transport, walking, cycling, rail transport | | |
| KEY FACTORS OF SU | CCESS | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Yes | Enough space for interchange | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | | Not applicable | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | No | Purchasing in the bus | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | | Not applicable | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | no | Passengers have to coordinate their timetables theirselves as they order the bus to get to the next train station | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | No | Not applicable | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | No | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly information, ticketing, interchange design) | | Not applicable because the bus is divided is not really connected with other transport means via timetables, ticket purchasing etc. | |

| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | | Not applicable because the bus is divided is not really connected with other transport means via timetables, ticket purchasing etc. |
|--|---|-----------|---|
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | No | There are no waiting times because the bus is picking you up at home and brings you back there. |
| Permeability | High interchange permeability from all directions to pedestrians | | Not applicable |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | | Not applicable |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | | Not applicable |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | | Not applicable |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Partially | |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | | Not applicable |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the | | Not appplicable |

| | interchange facility | | |
|---|--|-----------|--|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | | Not applicable |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | | Not applicable |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | partially | |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | No | |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | No | |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | No | |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Yes | Volunteers, major work together to implement the bus |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | No | |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | EcoBus | | |
|--|--|------------------------------------|--|--|
| | | public transport, walking, cycling | | |
| KEY FACTORS OF SU | CCESS | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | No | The EcoBus has used the entire public road space and has served all approachable addresses and points in the operating area. As required, certain bus stops were also shared (eg at Kreiensen and Bad Gandersheim railway stations and at the Domänenhof in Bad Gandersheim). | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | No | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | Yes | Here was used the same procedure as for regular buses: The tickets are sold on the bus by the bus driver or at the ticket agencies. | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | No | Since the EcoBus runs everywhere, no explicit connection points had to be set up. Most relevant, however, was the station Kreiensen, where the existing bus stop was used directly at the station. | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | No | The EcoBus operated without a timetable. It was up to the passenger to book their travel times of the EcoBus' coordinated with the times of other means regular transport. | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | No | Unfortunately, there was no organized delay management, especially if the EcoBus was delayed; so it had to be calculated with sufficient time buffer. However, the passenger could simply cancel the EcoBus free of charge at the original departure time in case of delay of the regular mode and re-book easily to a new departure time. This was especially relevant at the station Kreiensen, if the trains were late. | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Yes | The fair of the EcoBus was completely included in the tariff of the Verkehrsverbund Süd-Niedersachsen (VSN). Does mean that the EcoBus has the same prices as the regular service and you could easily change from the bus and train to the EcoBus (or vice versa) with the same ticket. In addition, the EcoBus, the Schöne Weekend | |

| | | | Ticket and especially the Niedersachsenticket recognized (the latter even sold on the bus). |
|--|---|-----|--|
| Standardisation | Presence of uniform technical, service and design specifications (particularly information, ticketing, interchange design) | Yes | The technology of selling tickets was exactly the same as the bus - the cash payment by the driver, who was able to generate a normal VSN paper ticket with the on-board computer. The relevant bus stop timetable also referred to the EcoBus. |
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | No | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | No | |
| Permeability | High interchange permeability from all directions to pedestrians | Yes | The EcoBus was available everywhere in the service area, where a publicly accessible road was available. It was a door-to -door service. |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | No | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | No | The EcoBus was available everywhere in the service area, where a publicly accessible road was available. It was a door-to -door service. |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | No | |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Yes | All EcoBuses were equipped with a multi-purpose storage area for larger luggage, rollators, lightweight wheelchairs (which had to be carried in the EcoBus without a passenger, the passenger had to be able to sit in a normal place), stroller and - if there was room was available - also equipped for up to 2 bicycles. The entrainment was free. For easier entry, there was an additional step and handrails. In addition, the driver was instructed to help when needed when entering and exiting. |

| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Yes | The EcoBus has held at the existing bus stops of the regular service at the connection points to the regular service the EcoBus was held directly at the. |
|---|--|-----|---|
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | No | |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | No | At the connection points to the regular service the EcoBus was held directly at the existing bus stops of the regular service. |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | Yes | Normally, there were no identifiers visible in the street image for the breakpoint of the EcoBus. Only in the app could you see exactly on a map at which point the EcoBus stops. If you ordered an EcoBus to a bus stop, the bus stopped there too. The local timetable notice also referred to the EcoBus. Only at the central stop at the Domänenhof in Bad Gandersheim near the cathedral festival, we have set up a well-visible wooden house in EcoBus design, which also marks the departure point there |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Yes | All information necessary for traveling on the EcoBus was communicated via the EcoBus app or on the booking website. The exact arrival time was sent to the passenger via SMS or push message directly to the mobile phone. Otherwise, there was only a billboard at all bus stops |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Yes | There was an EcoBus app and a website with a booking portal, and with information about the operating area, the service times and prices. An integrated route planning with other means of transport was not yet possible at that time (this feature will be available only from autumn 2019). Barrier-free EcoBus bookings were only possible with the availability of the low-floor buses in the fall of 2018 in the Harz. |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Yes | We have informed about the project by means of posters, flyers, print advertising, household throwing programs and our own project homepage. The local and supra-local press accompanied the project sympathetically and in detail. We also participated in several competitions and were able to win the Special Award Environment of the Innovation Award of the district of Göttingen. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | No | The district of Northeim ympathetically supported the EcoBus pilot experiment. |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and | Yes | The EcoBus team of the Max Planck Institute has worked on the project together with the Regional Transport Authority (ZVSN), with the Transport Association (VSN), with the operator Regionalbus Braunschweig GmbH and with taxi provider from Bad Gandersheim. The customers could call a taxi via the EcoBus app if no EcoBus |

| | seamless mobility | | was available at the time of the request. |
|-------------------|---|----|---|
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling | No | |
| | modal interchange and seamless mobility | | |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Night Owl public transport, walking, cycling, rail transport | | |
|--|--|---|--|--|
| | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Yes | The Night Owl starts at the main interchange for public transport in Göttingen next tot he main railway station. All connecting services are available, there is enough space for an interchange | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Yes | All services are included at the main railway station Göttingen | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | Yes | In the bus, at the ticket machines of the DB and metronom, in the information tower at the Göttingen station square, in the advance booking offices of the transport companies | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | Yes | Yes, some of them are available at the train stations in Northeim, Salzderhelden, Einbeck Mitte, Nörten- Hardenberg, Göttingen and at some bus stops | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | Yes | As the Night Owl starts in Göttingen there are connecting train and bus services from other parts oft he city as well as from other regional rail stops 1 Umstieg auf der Strecke Göttingen – Northeim, RB – Bus Nachteule | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | Partially | Delay in VSN App available | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Yes | - Separate tickets for the night owl only - Student free time card as additional card, free travel in the VSN network: in all regional and city buses, in all commuter trains, in the 2nd car class (not in ICE, IC, EC) | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly information, ticketing, interchange | No | The Night Owl service is part oft he VSN coperate identity and benefits from common marketing campaings from VSN (standing for 16 bus companies) and ZVSN (as the regional transport authority) | |

| | design) | | |
|--|---|-----------|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | Yes | Regional authorities (eg City of Göttingen, Northeim, Einbeck) transport companies |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | No | As the Night Owl i spart of a public transport night service there are rare offers for shops, restaurants in the late evening hours. Public services – e.g. toilets – are available |
| Permeability | High interchange permeability from all directions to pedestrians | Yes | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | Yes | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Partially | ZVSN guidelines for stops |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | No | Will be part of common challenges with the local authorities |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Partially | |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Partially | |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the | Partially | |

| | interchange facility | | |
|---|--|-----------|--|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | Partially | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | Partially | Special sign "Night Owl" in the bus "Nachteule" als Name am Bus |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Partially | Information about timetables are provided via internet, brochures and specific marketing campaigns for bars, Pubs, cinemas, museums at the bus service line. Fahrpläne an Haltestelle, |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Partially | VSN-App |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Partially | Intensive Marketing campaings, see above! |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Yes | IThe night owl is a first step of the ZVSN in the county of Northeim to develop an alternative to private car usage in the late evening. It's part of a road safety concept to reduce accidents and to promote public transport as an alternative. |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Yes | County of Norheim, Bus provider's, Regional Transport Authority (ZVSN), Transport Authority (VSN) |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | No | |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Revitalization of the Ilmebahn public transport, walking, cycling, rail transport | | |
|--|--|--|---|--|
| | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Yes | The Ilmebahn includes an intermodal context: Bus and rail transport. The Ilmebahn operates all bus and train stations including the train stations in Göttingen, Einbeck and Northeim. All connecting services are available, on the central stations, there is enough space for an interchange | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Yes | All services are included at the main railway stations in Göttingen, Northeim, Einbeck.Salzderhelden and Einbeck-Mitte | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | Yes | In the Ilmebahn-Bus, at the ticket machines of the DB and metronom, in the information tower at the Göttingen station square, in the advance booking offices of the transport companies | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | No | | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | Yes | Passenger information systems is on all railway stations available, VSN-App, DB-App | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | Yes | Passenger information systems is on all railway stations available, VSN-App, DB-App | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | No | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | Yes | | |

| | information, ticketing, interchange design) | | |
|--|---|-------------------------|--|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | Yes, partially | Ilmebahn Ltd, DB Regio |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | Yes, partially | Some of them are available at the train stations in Northeim, Salzderhelden, Einbeck Mitte, Nörten-Hardenberg, Göttingen |
| Permeability | High interchange permeability from all directions to pedestrians | Yes | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | Yes | Bus services are near the train station |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Partially | |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Yes | Will be from the DB Regio and from the Ilmebahn Ltd controlled |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Partially Bus & Bahn | The busses are uniform, all have the sign "Ilmebahn". All trains from the DB Regio are uniform. |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | Yes | |

| Accessible | Ensure routes in the wider area are of the | Yes | |
|---|--|-------------------|---|
| pedestrian routes | same accessibility standards as within the interchange facility | | |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | Yes | There are many parking facilities for cars and for bikes at all railway stations |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | Partially | Signs for station in Einbeck Mitte insufficient, in Salzderhelden available. |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Yes, partially | Most railway stations include timetables, maps and help points, staff. |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Yes | VSN App, VSN website, DB App and DB website |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Yes | Communication companies, marketing |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Yes | Policy actions from Lower Saxony State |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Yes | Promoter and builder is the Ilmebahn GmbH Einbeck, partners: county of Northeim, Einbeck city, public transport authority (bus services), DB Regio (train services) and Lower Saxony Transport Authority (LNVG), many votes necessary |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling | NO | |

| modal interchange and seamless mobility | |
|---|--|
| modal interchange and seamless modificy | |
| | |



Municipality of Funchal

Key factors analysis

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Intelligent crosswalks – Energetic Efficiency and Road Safety Walking and cycling | | |
|--|--|--|--|--|
| | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | N | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Y | The smart cross in particular leads in a safer way, pedestrians to the public transport interface. | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | N | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | N | | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | N | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | N | | |

| | information, ticketing, interchange design) | | |
|--|---|---|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | Υ | The solution allows bypassers to access internet through wifi. |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | N | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | N | |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | Road crossing was improved with the implementation of motion sensors on the pavement. Also, CCTV was deployed, along with usb chargers and wi-fi. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | N | |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | N | |

| Accessible | Ensure routes in the wider area are of the | N . |
|---|--|---|
| pedestrian routes | same accessibility standards as within the interchange facility | |
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N N |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | N S S S S S S S S S S S S S S S S S S S |
| SERVICE INFORMATION | DESCRIPTION | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | N . |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | N . |
| CHANGING BEHAVIORS | DESCRIPTION | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | N N |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | N N |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | N . |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens | N . |

| and users, to build solutions enabling | |
|---|--|
| modal interchange and seamless mobility | |

| Name of the practice: | | Kiss & Ride – Improving Pedestrian Access near schools | | | |
|---|--|---|---|--|--|
| ranie or the practice | | Table a rade improving redestrial recess field scribble | | | |
| Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Walking and public transport | | | |
| KEY FACTORS OF SU | CCESS | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Υ | One major advantage relies on the possibility of drivers to temporarily park their vehicle near the sidewalk, on a dedicated parking spot, without creating constraints for other drivers, while allowing their children to leave the vehicles in a safe way. | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Υ | The intervention allows a clear route from the leave and pick off area to the school. | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | N | | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | Y | The intervention allowed intermodality since it contributed to increase the accessibility conditions for school for pedestrians and public transport users. | | |
| SERVICE COORDINATION | DESCRIPTION | | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N | | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | N | | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | N | | | |

| | information, ticketing, interchange design) | | |
|--|---|---|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | N | |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | Y | The actions were comprised of road markings dedicated for temporary parking, introduction of urban furniture to allow a safer pedestrian mobility and reinforcement of sidewalks. |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Y | Creation of waiting and leaving area for drivers to leave their children near schools. |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | Reinforcement of traffic signs (reduced speed) and introduction of traffic calming measures such as road markings. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | N | |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | N | |

| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | N | |
|---|--|---|---|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | N | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | N | |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | N | |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Υ | The intervention showcases the importance of fostering defensive driving as well as the importance of leaving children safely near schools. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | N | |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Y | Schools are beginning to request this measure. |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens | N | |

| and users, to build solutions enabling | |
|---|--|
| modal interchange and seamless mobility | |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Pedestrianization and road restriction policies to foster walking | | |
|--|--|---|---|--|
| | | Walking although other modes are affected | | |
| KEY FACTORS OF SU | CCESS | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | N | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Y | The intervention contributed to suppress the irregularities regarding the national accessibility law; The urban rehabilitation took place in one of the most important streets in the city core; Local traders are shown to be receptive towards the measure, since it allowed to reduce car traffic and boost economic sales (will be assessed in the next semester); The intervention proved to increase attractiveness. | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | N | · | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | N | | |
| SERVICE COORDINATION | DESCRIPTION | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | N | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | N | | |

| | information, ticketing, interchange design) | | |
|--|---|---|---|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | Y | The intervention also aims to improve urban attractiveness within the area, namely through urban furniture to increase comfort and safety. |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | Y | In terms of urban design, the same actions are being applied, namely the deployment of road markings for people with sensorial disabilities and pavement tailored for pedestrian use. |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Y | Furniture will be deployed within these areas, namely waiting areas, benches, public lighting (increase). |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | Traffic calming measures were deployed to prevent the entrance of vehicles (bollards). Also, it includes changing the traffic circulation in the surrounding area to reduce the traffic volume. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Y | The intervention includes, like mentioned above, a tailored pavement for people with sensorial disabilities. |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | N | |

| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | N | |
|---|--|---|--|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | N | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | N | |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | N | |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Y | The intervention will demonstrate the benefits of closing down streets to traffic, in terms of local development, sustainability and urban attractiveness. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Y | Given that the area is now restricted to load and unload operations (as well as emergency vehicles), the Municipality is currently preparing a regulation. |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | Y | Despite some resistance, local traders are expected to gradually accept the measure. |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens | N | |

| and users, to build solutions enabling | |
|---|--|
| modal interchange and seamless mobility | |

| Name of the practice | 2: | Public transport fare reduction | | | |
|---|--|---|---|--|--|
| Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Public transport although other means are indirectly affected | | | |
| KEY FACTORS OF SU | CCESS | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | N | | | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | N | | | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | N | | | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | N | | | |
| SERVICE COORDINATION | DESCRIPTION | | | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N | | | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | | | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Υ | This measure allows for an integrated ticket system encompassing public transport operator on several levels. | | |
| Standardisation | Presence of uniform technical, service and design specifications (particularly | N | | | |

| | information, ticketing, interchange design) | | |
|--|---|---|--|
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | N | |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | N | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | N | |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | N | |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | N | |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | N | |

| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | N | |
|---|--|---|---|
| Parking facilities | presence of cycle parking areas, cycle/e- car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | N | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real- time information (help points, staff) | Υ | The features of the new fare was highlighted on the public transport operators website |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | Y | One of the public transport operators has already developed an app that highlights the service. |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | Υ | These new prices can potentially contribute to an increase of more public transport users. |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | Υ | The measure is a result of a national policy that was regionally adapted. |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | N | |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens | N | |

| and users, to build solutions enabling | |
|---|--|
| modal interchange and seamless mobility | |



Municipality of Timisoara

Key factors analysis

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Modernization of the intermodal public transportation stations within the Growth Pole Timisoara Walking/cycling and public transport | | |
|--|--|---|---|--|
| | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Y | There is enough space for interchange. | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest- distance 'desire lines' within the interchange space | Y | Many sidewalks in the city have clear/well-defined pathways for pedestrians and for bicycles. | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | У | The Local Public Transport Company currently has 17 kiosks/points of sale spread around the city near big interchange nodes where people can purchase tickets (paper tickets and electronic wallet). Newspaper stands sell only paper tickets for public transportation. All means of transportation have validation machines mounted inside, which can be used for validation of both classic paper tickets and electronic wallets. Also, for people who want to pay the ticket by phone, there is an online app they can download and use - 24pay. Signs with the app are on every means of transportation, so all people have to do is scan a QR code and pay for the ticket. 350 POS for easy purchase of tickets (by contactless card issued by any bank) on trams, trolleybuses, buses and vaporettos – to be installed on all means of transport by June 2019. In two- | |

| | | | months time, the payment for tickets via sms will also be implemented. |
|--------------------------------------|--|---|---|
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | N | |
| SERVICE COORDINATION | DESCRIPTION | | |
| Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | Y | Timetables are coordinated for departures and arrivals, some means of transport on various routes are supplemented in order to reduce passenger waiting and transfer time. The timetable was established in such a manner so that the means of transport arrive at the stop in time regardless of traffic. There is a dispatch which is connected with the electronic panels in the stops and the GPS system on the means of transport. |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Υ | The Local Public Transport Company manages an integrated ticketing system, used on all means of transport. There is an electronic wallet people use for all means of transport, and the paper tickets are valid on all means of public transport. The bikes' electronic system requires the use of the electronic wallet which is used for all other means of transport (the electronic wallet system was implemented in 2008). |
| Standardisation | Presence of uniform technical, service and design specifications (particularly information, ticketing, interchange design) | Y | The Public Transport Company is authorized to have repairs on their own vehicles, which is done according to the procedures in the user manual. |
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |

| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
|--|---|---|---|
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | N | |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm | N | |
| Comfort | High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | Y | Trash bins are placed close to bus stops. Every stop is illuminated during the night time. Stops are covered and have benches for people to use while waiting. The means of transport and the stops are cleaned on a daily basis. |
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | Y | Most traffic lights in Timisoara are equipped with surveillance cameras, especially in major road junctions. All means of transport are equipped with video surveillance inside. All bikes in the VeloTM system have GPS trackers on them. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for | Y | The rehabilitated trams, the trolleybuses and the articulated buses are equipped with boarding ramps for people with reduced mobility. There is also a green line for people with reduced mobility where they can announce the fact that they need assistance for boarding at a certain stop and a certain hour of the day. |

| | bikes, wheelchairs, strollers, etc.) | | |
|--|--|---|--|
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | N | |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | N | |
| Parking facilities | presence of cycle parking areas, cycle/e-car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, local area information, etc.) | N | |
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real-time information (help points, staff) | Y | Timetables are available in every bus, tram, and trolleybus stop. Some stops have electronic boards announcing the departure times. Timetables and maps are available online http://www.ratt.ro/grafice_scoala.html or http://www.stpt.ro/grafice_scoala.html |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling | Y | There are two mobile applications that provide passengers with free direct access to real time bus information via mobile phones. The website http://www.transporturban.ro/ro/timisoara/ gives passengers the opportunity to |

| | (integrated journey planner). Information delivered in accessible formats (for impaired people) | | access a route planner. |
|-------------------------------------|---|---|---|
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | N | |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | N | |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | N | |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | Y | There are online forums on public transport where passengers share ideas and give feedback on various decisions, etc. |

| Name of the practice: Means of transport affected (walking/cycling, public transport, rail transport, e-vehicles, etc.) | | Public naval transport – vaporetto, within the project for the rehabilitation of the urban public structure of "Bega" river banks. Cycling/Public naval transport | | |
|--|--|--|---|--|
| | | | | |
| EFFICIENCY OF THE INTERCHANGE | DESCRIPTION | Presence (Y/N) | KEY FACTOR DESCRIPTION IN THE CURRENT GP | |
| Efficient vehicle movements | Presence of sufficient space for interchange (platforms and large vehicles manoeuvring) together with passenger waiting and transit facilities | Y | There is enough space for interchange. | |
| Clear pedestrian routes | Presence of clear and direct routes for pedestrians connecting walking routes, facilities and destinations, as well as helping to select shortest-distance 'desire lines' within the interchange space | Y | There are clear/well-defined pathways for pedestrians and for bicycles along the Bega Canal. | |
| Efficient fare payment and validation | Presence of in convenient locations and devices to purchase or validate a ticket, near the interchange nodes | У | The Local Public Transport Company currently has 17 kiosks/points of sale spread around the city near big interchange nodes where people can purchase tickets (paper tickets and electronic wallet). Newspaper stands sell only paper tickets for public transportation. All means of transportation have validation machines mounted inside, which can be used for validation of both classic paper tickets and electronic wallets. Also, for people who want to pay the ticket by phone, there is an online app they can download and use - 24pay. Signs with the app are on every means of transportation, so all people have to do is scan a QR code and pay for the ticket. 350 POS for easy purchase of tickets (by contactless card issued by any bank) on trams, trolleybuses, buses and vaporettos – to be installed on all means of transport by June 2019. In two-months time, the payment for tickets via sms will also be implemented. The tickets for vaporetto (naval transport) can be purchased on board from the captain. | |
| Flexibility in time and use | Ease of Interchange node design that eases the accommodation of new modes of transport | N | | |

| SERVICE | DESCRIPTION | | |
|--|--|---|---|
| COORDINATION Timetable coordination | Coordinated timetables (coordinated departures and arrivals) of different means of transport to reduce transfer time and improve customer convenience. | N | |
| Delay management | Presence of procedures connecting services wait for each other in the event of minor delays, especially when frequencies are low. | N | |
| Ticket coordination | Presence of a comprehensive multi- modal ticketing system | Y | The Local Public Transport Company manages an integrated ticketing system, used on all means of transport. There is an electronic wallet people use for all means of transport, and the paper tickets are valid on all means of public transport. The bikes' electronic system requires the use of the electronic wallet which is used for all other means of transport (the electronic wallet system was implemented in 2008). |
| Standardisation | Presence of uniform technical, service and design specifications (particularly information, ticketing, interchange design) | N | |
| Interchange management schemes | Presence of Interchange facility management agreements identifying interfaces and responsibilities between all the parties involved in managing and serving the interchange facility | N | |
| QUALITY OF THE INTERCHANGE ENVIRONMENT | DESCRIPTION | | |
| Urban realm | Presence of facilities that add value to the user experience, especially during the waiting time (retail, catering and collection lockers, wifi, toilets, green areas, etc) | N | |
| Permeability | High interchange permeability from all directions to pedestrians | N | |
| Perception | Built and urban design solutions ensuring: direct sightlines among | N | |

| Comfort | different parts of transport interchanges, Using the same architectural style to reinforce legibility, clear relationship with the urban realm High standards of cleanliness and comfort (covered areas/passages, seating/waiting areas, lighting, presence of bins, etc) | У | Trash bins are placed close to bus stops. Every stop is illuminated during the night time. The stops and the vaporettos are cleaned on a daily basis. |
|------------------------------|---|---|---|
| Safety and security | Urban design ensures high levels of safety, especially in road crossing (lower speed limits near the stops, pedestrian crossings, etc) and security (video surveillance, etc) | У | Most of the traffic lights in Timisoara are equipped with surveillance cameras, especially in major road junctions. All bikes in the VeloTM system have GPS trackers on them. |
| ACCESSIBILITY | DESCRIPTION | | |
| Universal design | Interchange spaces are designed for all passengers, particularly those with reduced mobility (presence of boarding equipment, ramps, assisted travel, escalators, staircase aids for bikes, wheelchairs, strollers, etc.) | Y | The interchange spaces along the Bega Canal are designed for all passengers, including for those with reduced mobility – there are ramps that make the access to the vaporetto stops very easy. |
| Close proximity of modes | Design solutions that reduce both actual and perceived interchange distance among means of transport | У | The importance of naval transport to reduce the duration of travelling, avoiding rush hours. There is a connection between cycling tracks and vaporetto stations. |
| Accessible pedestrian routes | Ensure routes in the wider area are of the same accessibility standards as within the interchange facility | N | |
| Parking facilities | presence of cycle parking areas, cycle/e-car hiring spots as well as kiss and ride for cars and taxis near the interchange node | N | |
| Wayfinding | Design solutions to ensure consistent, clear and comprehensible signage, to help passengers to navigate the interchange (Totem pole and entrance sign, platform signage, | N | |

| | local area information, etc.) | | |
|--|--|---|---|
| SERVICE INFORMATION | DESCRIPTION | | |
| Basic components of service information | Presence of timetables, maps and real-time information (help points, staff) | У | Timetables and maps are available online http://www.ratt.ro/grafice_scoala.html or http://www.stpt.ro/grafice_scoala.html |
| On line information | Presence of apps/websites allowing passengers to access information in advance or while travelling (integrated journey planner). Information delivered in accessible formats (for impaired people) | У | Schedule of vaporettos is available on http://www.ratt.ro/grafice_scoala.html or http://www.stpt.ro/grafice_scoala.html |
| CHANGING BEHAVIORS | DESCRIPTION | | |
| Changing perspectives | Measures that help users discovering benefits of a multimodal, interconnected transport (practical demonstrations, communication campaigns, competitions, etc.) | N | |
| POLICY, NORMS AND REGULATIONS | DESCRIPTION | | |
| Joint governance and initiatives | Presence of targeted policy actions, framework conditions, recommendations, norms, etc. | N | |
| Coordination and cooperation | Presence of win win co-operation schemes among key stakeholders, fostering modal interchange and seamless mobility | N | |
| Sharing solutions | Activation of technical planning tables, shared decision processes with citizens and users, to build solutions enabling modal interchange and seamless mobility | Υ | There are online forums on public transport where passengers share ideas and give feedback on various decisions, etc. |