Introduction

The vision of Galway City Council and Galway County Council for transport for Galway is to create a connected city region driven by smarter mobility.

Principles

1. To promote and encourage sustainable transport, and in particular to make it convenient and attractive to walk, cycle or use public transport.

2. To improve accessibility and permeability to, and within the city centre for pedestrians, cyclists and public transport users, while also maintaining an appropriate level of access for vehicular traffic for commercial and retail purposes.

3. To maximise the safety and security of pedestrians, cyclists and other transport users, particularly within the core city centre.

4. To manage and increase transport capacity, where necessary, for the efficient movement of people and goods into and within the city.

5. To provide opportunities to enhance the city centre Public Realm through traffic management and transport interventions.

6. To maintain and develop transport infrastructure and services to a high degree of quality and resilience.

7. To adopt a ‘smarter technology’ approach to all transport interventions, whereby transport infrastructure and services are future-proofed.

A connected city region driven by smarter mobility.
Travel Demand

The existing transport network is experiencing difficulties meeting current transport demands, with delays and congestion becoming increasingly prevalent.

Analysing Travel Demand in Galway

This diagram shows the current typical movements between travel zones in Galway City and environs. It illustrates the ‘desire lines’ of motorised car, van and bus transport, i.e. the most direct line between the origins and destinations of journeys, regardless of road layout or bus routes. The thicker lines represent a greater number of journeys. This demonstrates schematically the journeys which people want to make, and clearly shows the dispersed nature of journeys in Galway, with numerous origins and destinations lying outside the city boundary, and many narrower lines showing lower demand crossing the city in various directions.

Vehicular Trips - AM Peak (7:00 - 10:00)

<table>
<thead>
<tr>
<th>Volume (Veh)</th>
<th>Origin Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 500</td>
<td>NUIG, City Centre</td>
</tr>
<tr>
<td>501 - 1,000</td>
<td>Ballybrit/Parkmore, Salthill, Mervue, GMT</td>
</tr>
<tr>
<td>1,001 - 1,500</td>
<td>NUIG, City Centre, Ballybrit/Parkmore, Salthill, Mervue, GMT</td>
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<tr>
<td>1,501 - 2,000</td>
<td>NUIG, City Centre, Ballybrit/Parkmore, Salthill, Mervue, GMT</td>
</tr>
<tr>
<td>2,000+</td>
<td>NUIG, City Centre, Ballybrit/Parkmore, Salthill, Mervue, GMT</td>
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Source: The data is from Census 2011

Current Challenges

The existing transport network is experiencing difficulties meeting current transport demands, with delays and congestion becoming increasingly prevalent, particularly for vehicular traffic and public transport. As the economy continues to grow, and the role of Galway City as a regional gateway develops, it is critical that the transport network can evolve to meet future travel demand. The key challenges to be addressed by the GTS include:

- Transforming Galway City Centre from an area of congestion and high volumes of traffic to a destination of choice for residents, workers and visitors;
- Reducing reliance on travel by private car;
- Delivering a public transport network that offers journey time reliability and frequencies sufficient for an attractive service which meets demand;
- Providing complementary facilities such as Park & Ride for the benefit of people accessing the city from the surrounding rural areas;
- Facilitating city-bound, cross-city, cross-county and strategic east-west travel on the National and Regional road network without impacting on the functionality of the city;
- Improving accessibility to and through residential areas for sustainable travel modes to increase the appeal of alternatives to the private car;
- Providing connectivity by walking, cycling and public transport to major employment and educational facilities;
- Minimising the impact of traffic congestion on Galway City Centre to allow the city to grow in a sustainable manner; and
- Achieving efficiency and resilience on Galway’s transport network across all modes.
There is a strong demand for movements into the city centre and east-west movements across the city. The model has been used to quantify the potential impact of orbital bus services via Quincentenary Bridge versus cross-city bus services travelling via the city centre. Hourly boardings for an orbital service are approximately 50% of the hourly boardings for the equivalent service travelling via the city centre.

Multiple services through the city centre also provides more frequent buses along the central section, which will attract high passenger usage due to low waiting times. This also provides passengers with opportunities to transfer between services to reach a wider range of destinations. An orbital bus service would carry only those passengers with final destinations close to the route.

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Increasing travel by sustainable modes in Galway requires improvements to the public transport, pedestrian and cycling networks, and a targeted reallocation of road space from general traffic to these modes. Galway’s road network is currently over capacity, resulting in unreliable journey times for all traffic.

Providing bus priority through the city centre would increase public transport usage in the city, but also increase congestion on the river crossings. Traffic congestion issues will remain without accompanying road network interventions. However, these interventions should not be in conflict with the enhanced sustainable transport network; they should focus on supporting trips that cannot be facilitated by sustainable modes. A comparison of travel times for all users with scenarios of sustainable mode improvements with and without a new orbital traffic route shows that reducing travel congestion requires improvements to sustainable networks and the provision of a new orbital route.

A new road link to the north of the city is therefore proposed as part of this strategy, to deliver necessary capacity and support the delivery of sustainable transport measures.
Galway City Centre Access Network

The road network in Galway caters for a wide variety of journeys by different modes. Without intervention, congestion will worsen as the city grows. The resilience of the road-based transport network is essential to support Galway’s development. The GTS sets out measures to address current and future congestion, including traffic management to prioritise walking, cycling and bus movement, new and improved road links, and management of parking and heavy goods vehicle movements.

A ‘City Centre Access Network’ is proposed to permit traffic to access the city centre at the most appropriate entry point for its ultimate destination, facilitating access to car parks and reducing cross-city traffic along specified corridors. In order to circulate within the city centre, cars will use the orbital River Corrib crossings on the City Centre Access Network.

Traffic will travel in both directions on Lough Atalia Road, use the current one-way system around Dock Road and Merchants Road, and travel in both directions across Wolfe Tone Bridge and along Fr Griffin Road. The City Centre Access Network includes the Crescent and Newcastle Road on the west, which connects to the N6 Quincentenary Bridge and onwards to Sean Mulvoy Road for a two-way connection around the city.

Junctions Index

1. Lough Atalia Road/Fairgreen Road
2. Lough Atalia Road/Dock Road
3. Dock Road/Queen Street
4. Father Griffin Road/Flood Street
5. Father Griffin Road/Claddagh Quay
6. Father Griffin Road/The Crescent
7. The Crescent/St. Mary’s Road
8. Shantalla Road/Newcastle Road
9. Newcastle Road/University Road
10. Newcastle Road/Sean Mulvoy Road
11. Newcastle Road/N6
12. N6/Headford Road/Sean Mulvoy Road
13. Bohernaves/Traun Road/Sean Mulvoy Road
14. Moniveagh/Boin/Old Dublin Rd/College Rd/Wallace Rd
15. College Road/Lough Atalia Road
16. Headford Road/Boithar na mBhán
17. Boithar na mBhán/Prospect Hill/Bóthar Uí Eithir
18. Prospect Hill/Bother/Boithar Uí Eithir
19. Boithar Uí Eithir/Forster Street/Fairgreen Road

N6 Galway City Ring Road

The wider road network is crucial to the operation of the city and surrounding region. Due to the rural nature of the immediate surroundings of the city, and given the wide trip distribution, it will not be possible to provide sufficient public transport alternatives to fully address the transport demand. Even with the anticipated increased uptake in walking, cycling and public transport use, the regional and national road network is likely to suffer an increasing degree of congestion. In the peripheral areas travel by private car will therefore remain part of the transport system.

Upgrades of junctions along the N6 have and will continue to improve the performance of this road, but scope for additional capacity is limited by the number and nature of the river crossings. In order to enhance Galway’s function as a regional city and to permit continued growth, an additional river crossing is required. The N6 Galway City Ring Road project has identified the most suitable corridor for an orbital road scheme for Galway.

Core City Centre Access

Inside the City Centre Access Network, the core city centre area will see road space reallocated to prioritise public transport and active modes, particularly along the Cross-City Link corridor. This will facilitate public realm improvements but requires changes in movements for private cars so that they no longer have priority through the city area, although it remains accessible.

A two-way Inner City Access Route along Boithar na mBhán, Bóthar Bheanáistín Uí Eithir and Fairgreen Road will provide an additional inner link from the Headford Road to Lough Atalia Road.
The GTS aims to increase priority of walking, cycling and public transport over private cars in the city centre, and remove motorised traffic whose destination lies outside the city centre. This will be achieved using a combination of vehicular routes around the city, and prioritisation of sustainable modes within the city centre area via the proposed ‘Cross-City Link’ corridor, which will create a coherent public space that is attractive with a sense of continuity, identity and perception of a safe environment for all users.

The Cross-City Link, which includes University Road, Salmon Weir Bridge, St Francis Street, Eglington Street, Eyre Square, Victoria Place, Forster Street and College Road, will be restricted to use by public transport vehicles, pedestrians, cyclists, and, in some areas, local residential motorised access. This forms a central route for public transport, cyclists and pedestrians accessing key areas such as University Hospital Galway, NUIG, the retail and recreational centre of the city and public transport hubs at the train and bus stations. Public realm improvements are proposed along the Cross-City Link to provide an enhanced environment for cycling and walking, and overall this will create more pleasant surroundings for journeys to and through the city centre.

These interventions will shape an improved environment creating safer, healthier and more welcoming places that promote sustainable methods of transportation. The images to the right show conceptual representations of the urban character at Galway Courthouse in the vicinity of Salmon Weir Bridge, and on the northern and eastern sides of Eyre Square, as a result of the Cross-City Link.

A connected city region driven by smarter mobility.
Public Transport Network

Public transport provision is a key aspect of the GTS. Public transport in Galway currently has a low mode share of under 10%. A change in the provision and usage of public transport is needed, and an essential component of the GTS is to provide an efficient, reliable and attractive public transport service which can cater for a high proportion of trips to and within the city and environs. This requires journey time reliability and journey speeds sufficient to make the service competitive with the private car.

At present, public transport in the city comprises buses and taisks, with regional connections by coach and rail. Proposals to upgrade these services have been assessed as part of the strategy.

A cross-city public transport network was developed to link residential origins to key destination locations across the city, using the existing bus routes as a starting point. Routes were modified to better reflect the most recent origin-destination combinations, and all routes were designed to allow for cross-city interchange, particularly at stops within the core city centre area.

A high-quality, high-frequency bus service was identified as the most appropriate form of public transport provision for Galway City and its environs.

The bus network will comprise five cross-city routes which serve the major trip attractors of the City Centre, NUIG, and the hospitals, as well as linking all major destinations across the city. Sections of the network which lie on key travel corridors are the primary focus for priority measures such as bus lanes, traffic management measures, and the removal of pinch points and delays. Across the entire network, it is proposed to upgrade the bus fleet, stops and shelters, introduce a simplified ticketing and payment system and improve access to the network on foot.

All services will operate cross-city, providing direct services for passengers wishing to travel to work on either side of the city. East-west connectivity will include Bileama and Oranmore. By pairing cross-city routes, the number of services was reduced from 11 to five, making the network more legible for residents and visitors alike.

Service Frequency

It is critical that the new network is serviced by frequent and reliable bus services. The current bus provision in Galway has relatively poor frequency of services across the network, with only one route operating more than 4 buses per hour per direction in the peak hour.

To ensure a fast, convenient and reliable service, all routes were modified to better reflect the most recent origin-destination combinations, and all routes were designed to allow for cross-city interchange, particularly at stops within the core city centre area.

Network Catchment

An analysis of the population and employment areas quantified the number of residential and commercial properties within a 10-minute walking catchment of the proposed bus network using the existing pedestrian network. The proposed cross-city network will provide a much higher level of accessibility to a high frequency bus service, with over 70% coverage of both residential and commercial properties compared to the current figures of 43% of residential properties and 54% of commercial premises.

The attractiveness and convenience of public transport can be improved by providing opportunities for transfer between services, which can significantly increase the number of destinations served and thus the journey options for travellers. Several interchange opportunities are provided through the city centre by the GTS, which makes each service available to a wider catchment than its individual route.
Cycle Network

Galway is well suited to cycling as a means of transport due to its relatively flat topography and a compact city centre, but the existing cycling facilities are limited and discontinuous. The cycle network proposed in the GTS will provide high quality dedicated cycling facilities and improve priority for cyclists, encouraging cycling both for commuting and as a leisure activity in the city and surrounding areas.

The cycle network has been formed on the basis of three levels: Primary, Secondary and Feeder, in addition to the proposed Greenways and the Primary network. In other cases, the network includes on-road cycle lanes and/or wide bus lanes to cater for both buses and cyclists along the same route. The combination of facilities reinforces connections to provide a safe and comfortable environment for cyclists in the city and surrounding areas.

In addition to this, proposed traffic management measures including the Cross-City Link will improve the city centre environment and areas further afield for cyclists.

Bike Share Scheme

The Coca-Cola Zero Bike Share Scheme was launched in Galway in 2014. There are currently 15 stations in Galway City where bicycles can be borrowed and returned, with further stations planned.

Bicycle Parking

Bicycle parking will be provided and/or upgraded near bus stops and key destinations including the city centre, the rail and bus stations, schools and colleges, the hospitals, shopping areas, other large workplaces, and in the regional towns.

Pedestrian Network

As a city of learning with a compact, walkable city centre, Galway enjoys a high walking mode share of approximately 23%, providing a strong foundation for a sustainable walking culture. The city has many assets in terms of pedestrian routes, including the area from William Street through Shop Street, High Street and Quay Street, the canal walkways and the promenade at Salthill.

While most of the pedestrian network is of reasonably good quality, it is limited in some locations with sub-standard footpaths, lack of crossing facilities and greater priority given to other modes. The limited number of crossings of the River Corrib also presents a barrier to walking, in particular due to poor quality facilities and heavy motorised traffic flow on the bridges.

The Cross-City Link initiative will reinforce the pedestrian at the top of the hierarchy of modes and underpin the planned transformation of the city centre. Outside of the city centre, emphasis will be given to increasing permeability within suburban residential areas, improving and updating pedestrian networks, increasing pedestrian safety and maximising pedestrian accessibility to the public transport network.

The GTS will focus on improving and prioritising the pedestrian and road network to encourage and accommodate movement between places and to cater for mobility impaired persons. This will include:

- Revision of junction layouts to provide dedicated pedestrian crossings, reduce pedestrian crossing distances, provide more direct pedestrian routes and reduce turning traffic speeds;
- Creation of permeable pedestrian environments in residential areas, amenable to walking, and maximising accessibility to the proposed bus network;
- Investigation of the introduction of lower speed limits in the core city centre area and on residential streets in conjunction with An Garda Síochána;
- Cooperation with An Garda Síochána in the enforcement of laws in relation to parking on footpaths; and
- Removal of unnecessary street clutter to facilitate ease of movement.

Permeability and Wayfinding

Permeability is a key constraint for cyclists and pedestrians in Galway. Links between residential areas and workplaces alike will be continuously improved for use by active modes by providing more direct routes. In addition, a route signage programme is proposed to aid wayfinding in parallel to the cycle network and pedestrian improvements. Galway has significant potential to enhance and build on the existing pedestrian environment for the city’s residential and commercial community, shoppers and the significant number of tourists who visit the city all year round.
Networks – Complementary Measures

**Smarter Mobility**
- Changes how cities function using intelligent transport services (ITS)
- Galway’s Urban Transport Management Centre (UTMC), Parking Guidance System (PGS), Variable Message Signs (VMS), CCTV and traffic monitoring system
- Leap card expansion, provision of Real-Time Passenger Information at bus stops, and the city Bike Share Scheme
- Provides additional networks capacity, optimises performance, manages demand, and delivers overall efficiency and cost savings

**Land-Use and Transport Integration**
- Creates sustainable city living of neighbourhoods close to employment, shops, community and educational facilities
- Reduces travel demand, car dependency, congestion and greenhouse gas emissions
- Enhances health and wellbeing, with greater investment in public transport, walking and cycling and the public realm.
- Goals include:
  - Reducing the need to travel
  - Reducing the distance travelled
  - Reducing the time taken to travel
  - Promoting walking and cycling
  - Promoting public transport use

**Travel to Education**
- School trips by car contribute to local congestion and impact on travel times by all modes
- Trips to drop off children often form part of a different trip, usually a journey to work, which presents a challenge to developing solutions to school travel for all journeys.
- Improvements to school transport arrangements across the study area include:
  - Upgrades to bus, cycle and walking networks to enable students to use non-car modes, especially as bus and cycle networks run close to educational centres;
  - Behavioural change programmes which encourage students and schoolchildren to travel to school by modes other than the private car;
  - Promotion of school travel plans and participation in the Green Schools Travel Initiative; and
  - Mobility management plans for student travel at second level and third level and targeted promotion of alternatives to the private car to better inform students of their travel options.

**Park & Ride**
- Park & Ride sites on multiple approaches to the city will provide alternatives to the private car for those accessing the city from the wider region
- Integrating Park & Ride sites with the proposed high-frequency bus services will maximise financial viability and offer a wider range of destinations with interchange points between routes.

**Heavy Goods Vehicle Management**
- Central area of Galway is unsuitable for heavy goods traffic, and should be restricted to vehicles of a suitable size with destinations (or origins) in the city centre
- Routing and timing of deliveries to the city centre must be managed
- Articulated vehicles will be restricted to accessing and egressing Galway Harbour via Lough Atalia Road

**Parking**
- Currently over 4,000 off-street parking spaces within the city centre, and a further 700-800 on-street spaces, with parking available for as little as €4 per day
- Reducing private car use in the city centre reduces the need for parking spaces
- Availability of off-street parking will be reduced and access routes to off-street parking facilities managed to minimise car circulation within the city centre
- Parking pricing structure needs to set city centre parking costs such that public transport offers a realistic alternative to car travel from a financial standpoint

**Tourist Coach Parking Management**
- Visitor coaches will need suitable drop-off/pick-up locations in the city centre, with layover spaces in managed locations outside the city centre
- Routing for coaches should make use of priority bus lanes where appropriate
Environmental Assessment

A Strategic Environmental Assessment (SEA) has been carried out as part of the preparation of the Draft Galway Transport Strategy.

The objective of the SEA is to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. – Article 1 SEA Directive.

The provisions of the strategy have been evaluated for potential significant effects, and any measures arising from the SEA will be integrated into the final strategy in order to ensure that any potential adverse effects are mitigated.

The Environmental Report for the SEA presents a full description of the relevant aspects of the environmental baseline data for the study area under the following headings and reflects the strategic nature of the GTS:

- Biodiversity, flora and fauna
- Population
- Human health
- Soils and geology
- Water
- Air quality
- Climatic factors
- Material Assets
- Architectural, Archaeological and Cultural Heritage
- Landscape
- Inter-relationships between the above

In identifying the likely significant effects of the GTS on the environment, the SEA addresses positive and negative effects; direct and indirect effects; temporary and permanent effects; short, medium and long-term effects; as well as cumulative and synergistic effects.

An Appropriate Assessment (AA) of the strategy was also undertaken as part of the preparation of the Draft GTS. The purpose of the AA is to provide a focused and detailed impact assessment of the implications of the strategy, alone and in combination with other strategic actions and projects, on the integrity of Natura 2000 sites in view of their conservation objectives.

The Natura Impact Statement for the AA presents a full description of appropriate assessment and potential impacts on site integrity.

The Draft GTS has also been subjected to a Strategic Flood Risk Assessment (SFRA), which addresses the issues of assessment and management of flood risk in plans and land-use plans.

The findings of the AA and the SFRA have informed the SEA and the SFRA has been incorporated into the draft strategy in order to ensure that potential adverse effects are mitigated.

Implementation

The GTS is intended to frame transport developments in Galway City and environs over the next 20 years. The implementation of the strategy and delivery of the specific proposals will be through a series of shorter term implementation plans which will be agreed between the Councils and funding agencies, in particular the NTA. These will ensure that the GTS can be delivered in a timely and efficient manner. It is anticipated that the annual service plans of the City and County Councils will reflect the contents of the Implementation Plans.

Provision will be made for periodic reviews of the strategy to take account of emerging trends and new development opportunities, or to reflect the changing requirements of the evolving Galway transport network.

From a strategic planning perspective, it is anticipated that the GTS will be implemented over three broad time bands: Short, Medium and Long Term.

Outcomes

The proposals set out in the GTS will provide long-term transport, tourism, commercial/retail and public realm benefits for Galway City and its environs.
Straitéis Iompair na Gaillimhe
Galway Transport Strategy

Comhairliúchán Poiblí - Meitheamh 2016
Public Consultation - June 2016