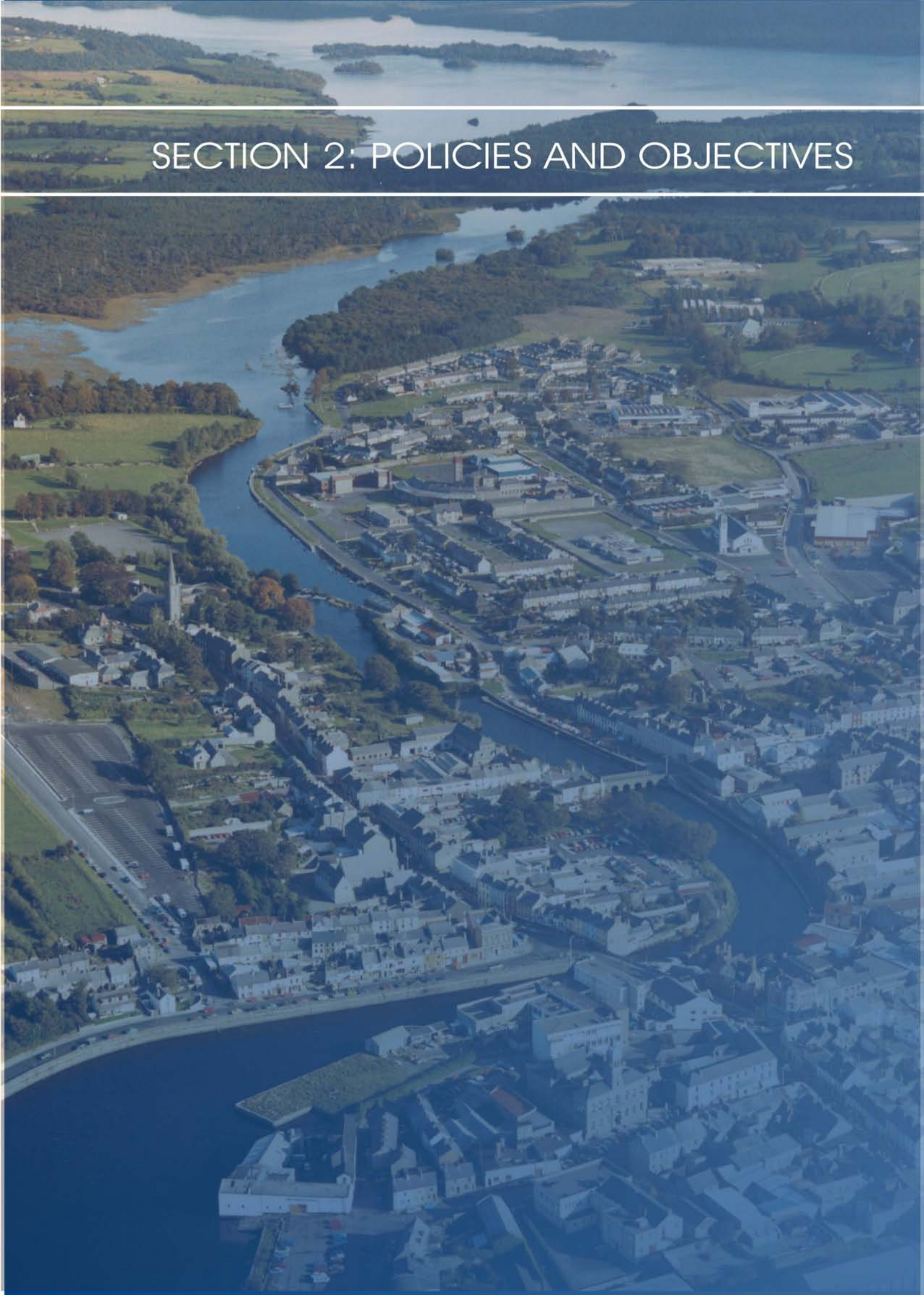
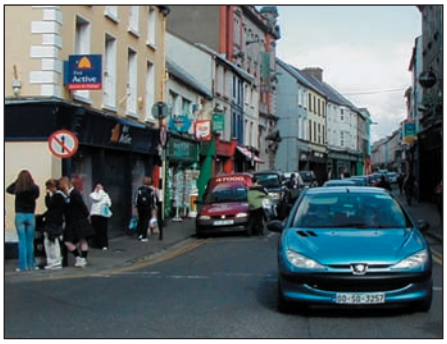
SECTION 2: POLICIES AND OBJECTIVES





A thorough movement assessment takes account of all modes of transport

2.1 Sligo: Effective Transport and Movement

2.1.1 Aims

It is the aim of the local authorities to create a vibrant urban area with a good provision of public transport, reduced congestion and an attractive urban centre, which is not overburdened by the car.

Therefore it is the main objective of the local authorities to create an integrated and environmentally sound transport system, in particular with;

- Accessibility.
- Choice of transport access for all.
- Strong integration between transportation planning and land use planning.
- General reduction of the need to travel (especially by car) by land use planning which promotes higher densities and a sustainable mix of uses.
- Optimum use of existing transportation infrastructure by traffic management, and reduced travel times and congestion.
- Shift from car use to more environmentally friendly modes of transport.
- Quality interchange facilities between road, rail, bus and bicycle.
- Integration of public transportation system with a quality bus and rail service, alongside the promotion of cycle facilities and pedestrian movements.
- Provision for future traffic and transportation needs in Sligo.
- Protect the historic city centre from the impact of traffic congestion.

2.1.2 Overview - Sligo as a Regional Transportation Node.

Sligo functions as the major transportation node in the North West of Ireland. The city is strategically located along the National Primary Route N4 connecting with Dublin, via Mullingar and Longford. Other primary and secondary routes connect Sligo with Belfast, Galway, Enniskillen, Donegal, Letterkenny, Derry, Limerick and other major centres in the region.

The N4, N15 (to Donegal), N16 (to Enniskillen), N17 (connecting Galway and southern parts of the country) and N59 (to Ballina) have been identified for investment in road improvements in the National Development Plan 2000-2006. Continuing improvements to these roads will enable the catchment area of Sligo to expand - particularly south to parts of Mayo and Roscommon via the N17 and N4 and to Donegal via the N15. Improvements to the N16 will improve connections to Enniskillen, Belfast and other parts of Northern Ireland.

Sligo also functions as the major rail and bus distributor centre for the North West Region. The Sligo-Dublin rail route is identified under the NDP 2000-2006 and is undergoing improvements to the track. Bus services run from the bus terminus located at the railway station and therefore this area acts as a significant transport node of strategic importance.

Sligo Port - important in the local and regional economy

Sligo Regional Airport is situated five miles from the city centre at Strandhill and it runs a commuter service to Dublin. It is an important means of access to the northwest by both the tourist and business interests. International airport services to the region are supported by Knock, just 45 minutes away.

The Port

While the significance of the port in national terms is quite low, it remains important in the local and regional economy, supporting local industry and providing a sustainable transport mode for imports and exports.

2.1.3 Strategic Road Proposals

The 1995 Sligo Traffic & Transportation Study commissioned by Sligo Borough Council and carried out by McCarthy & Partners, Consulting Engineers was formally adopted by Sligo Borough Council in 1995. This study was updated in 1999 and included in Appendix 2.5 of "N4 Sligo Inner Relief Route, Environmental Impact Statement" dated February 1999. The recommendations contained in this study form the basis for the provision of road traffic facilities in the Borough. (see Map 10, Concept Route Transportation Map, page 30).

The Plan proposed the following :

- Proposals for the development of strategic road network outside the city centre.
- Proposals for the city centre that rely on the provision of new roads and car parks.
- Immediate proposals for the city centre that do not rely on the provision of new roads.

The overall concept defined by this Traffic Plan consists of the Inner Relief Road followed at a later stage by the W2 Western Distributor Road and by an Eastern Crossing of the Garvogue River . The Western Distributor Road will improve access to western areas of Sligo Borough and facilitate residential, commercial and industrial development. The eastern river crossing would provide an important north-south link on the eastern side, link communities on either side of the river and help relieve city centre congestion. The provision of the Inner Relief Road will reduce traffic flows in the city centre and allow pedestrianisation of city centre streets.

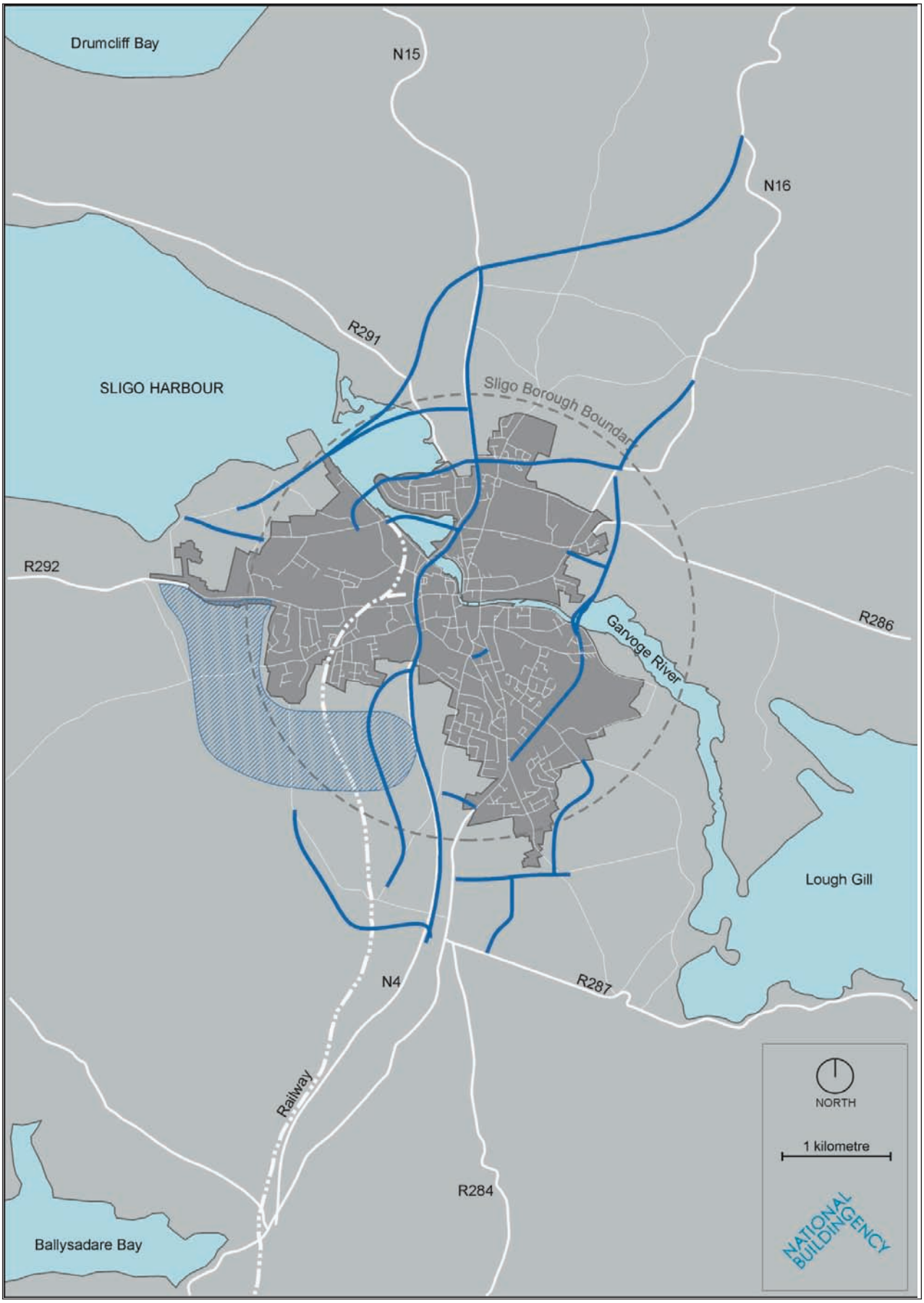
2.1.3.1 The Sligo Inner Relief Road

This route was first proposed in 1983 and is at advanced design stage. The route alignment begins at Carrowroe and will run to the west of the city centre and link up with Hughes Bridge and the N15. It will commence at the northern end of the completed Collooney dual carriageway at the Carrowroe Interchange. From the Carrowroe Interchange, it will proceed northwards as a dual carriageway as far as Summerhill College. A grade separated interchange will be provided in the Caltragh area, with an at grade roundabout west of Summerhill College. The route consists of an urban facility between Summerhill College and Hughes Bridge. This section of the route will be an urban street and will be characterised by at grade signal controlled junctions, including pedestrian crossing facilities at John Street, Lord Edward Street, Lynn's Place and Ballast Quay. The route forms part of an overall scheme for reducing traffic volumes in the City Centre, which will permit better pedestrian facilities and the improvement of the city centre townscape.

The Compulsory Purchase Order for the Inner Relief Road was confirmed by the Minister for the Environment and Local Government in August 2000. Advance works for the route, which include demolition contract and advance archaeological works have been carried out. Further advance works have been scheduled for 2003 with construction of the main works scheduled to start in 2004.

Lands along this route are strategic in nature. In keeping with the development strategy for the city and environs, the Inner Relief Road and its extension to the N15 (Donegal Road) will provide the 'backbone' or 'spine' of Sligo, acting as a strategic development corridor with lands on either side being reserved for high quality mixed land uses including enterprise and employment, commercial (non-retailing) and residential developments (higher densities).

Map 10: Concept Route Transportation Map




Vehicular Congestion in Sligo

2.1.3.2 The Western Distributor Route (W2)

The Western Distributor Road is proposed to commence at the proposed Caltragh Interchange on the Inner Relief Road. The road will pass through Maugheraboy, Oakfield and Ballydoogan and will link up with the Strandhill Road. Current proposals envisage the route linking with existing roads at First Sea Road (Screens Road) through the IDA Industrial Estate Road to Ballast Quay to Hughes Bridge. This would require the improvement of Ballast Quay and the widening of Hughes Bridge. Future alternatives may also include crossings of the harbour rather than using Ballast Quay and Hughes Bridge. The new road is seen primarily as a route to facilitate development in western parts of Sligo rather than as a bypass of the city. Sligo Borough Council have commenced the route selection process for this route from the Caltragh Interchange to the Strandhill Road. The initial phase of this process involves a constraints study along with the associated public consultation.

The reasons for the Western Distributor Road include:

- To improve access to the existing IDA industrial / business park at Finisklin and to proposed industrial zoned land at Oakfield.
- To improve access to other residential zoned lands on western side of Sligo Borough.
- Improve access to Strandhill Airport.
- To provide alternative access to western areas without having to go through the city centre.

2.1.3.3 Eastern River Crossing (E2)

The proposed E2 route crossing the Garvogue River to the east of the city centre (as proposed in previous development plans) is to be retained. The crossing will provide for the strong north – south desire line to the east of the city centre and will link communities on either side of the river particularly with the presence of significant trip generators at Sligo Institute of Technology and the General Hospital. Access roads to this crossing will be built as urban streets and will assist in relieving traffic congestion on the eastern side of the city centre. The route will also provide an important public transport role in the future.

2.1.3.4 Enniskillen Road N16 and Bundoran Road N15

It is proposed to realign the existing N16 Sligo- Enniskillen road. The proposal consists of rerouting the N16 Sligo – Enniskillen road to intersect the existing N15 at Teesan and for the N15 to enter Sligo as a dual carriageway to Hughes Bridge. Traffic volumes on the existing N15, in any event indicate that any future upgrading of the N15 into Sligo to Hughes Bridge will require the N15 to be widened to Dual – Carriageway status.

2.1.3.5 Western By-Pass

As part of a long term strategy it is proposed to introduce the concept of a Western Bypass of the City. It is envisaged that it will commence at either the Caltragh Interchange (and possibly form part of the W2 Western Distributor Road) or possibly start further to the south at the Carraroe Interchange. It will run through Ballydoogan and Finisklin with a number of options for crossing the environmentally sensitive harbour area. Although it is seen as a long term objective, it is included in this development plan so as to ensure that no short term planning and development decisions may hinder or restrict its implementation in subsequent development periods, for lack of foresight or vision. A route will be investigated which preserves the integrity of the area bound by the two Sea Roads as a residential zone and avoids the serious effects of a motorway development on an area which includes both long established residences and recently developed housing. Route selection options will focus on alignments that lessen the impact on residential development.


Pedestrian / Vehicular conflict in Sligo

2.1.4 Intra-Urban Roads - Providing accessibility within the city and its immediate environs

As Sligo grows and expands, it will be necessary to ensure that adequate links can be maintained between different parts of the city, north and south, east and west. In order to ensure this accessibility, a number of routes within the expanding urban environment are proposed. See Map 11, Concept Map for ease of access to Sligo and surrounding environs, page 33.

2.1.4.1 East - West Connections

The existing road structure of Sligo reveals that there are a number of important east-west routes in the city and environs, such as the Strandhill Road, the IDA/Finisklin Road, the Mall, Ash Lane, St. Columba's Road, Church Hill/Maugheraboy Road, etc. These roads and future east-west routes will complement the existing and proposed principal north-south routes of the plan (namely the existing N4, the proposed Inner Relief Road and the proposed Western Distributor Road), creating a permeable circulation structure that facilitates movement and inter-connectivity to all parts of the city and environs. Some of additional advantages of the east-west routes, include:

- Facilitating links between different neighbourhood centres (see section 1.5 - Land Use Strategy).
- In keeping with the concept of 'liveability' (section 1.3.1), the routes maintain ease of access to the countryside, providing contact with the natural environment.

The 'lattice' effect provided by a number of north-south and east-west routes creates 'superblocks', where the external road network provides for more intensive traffic movements, while the inner area is given over to a more traffic-calmed environments, suitable for residential and other developments.

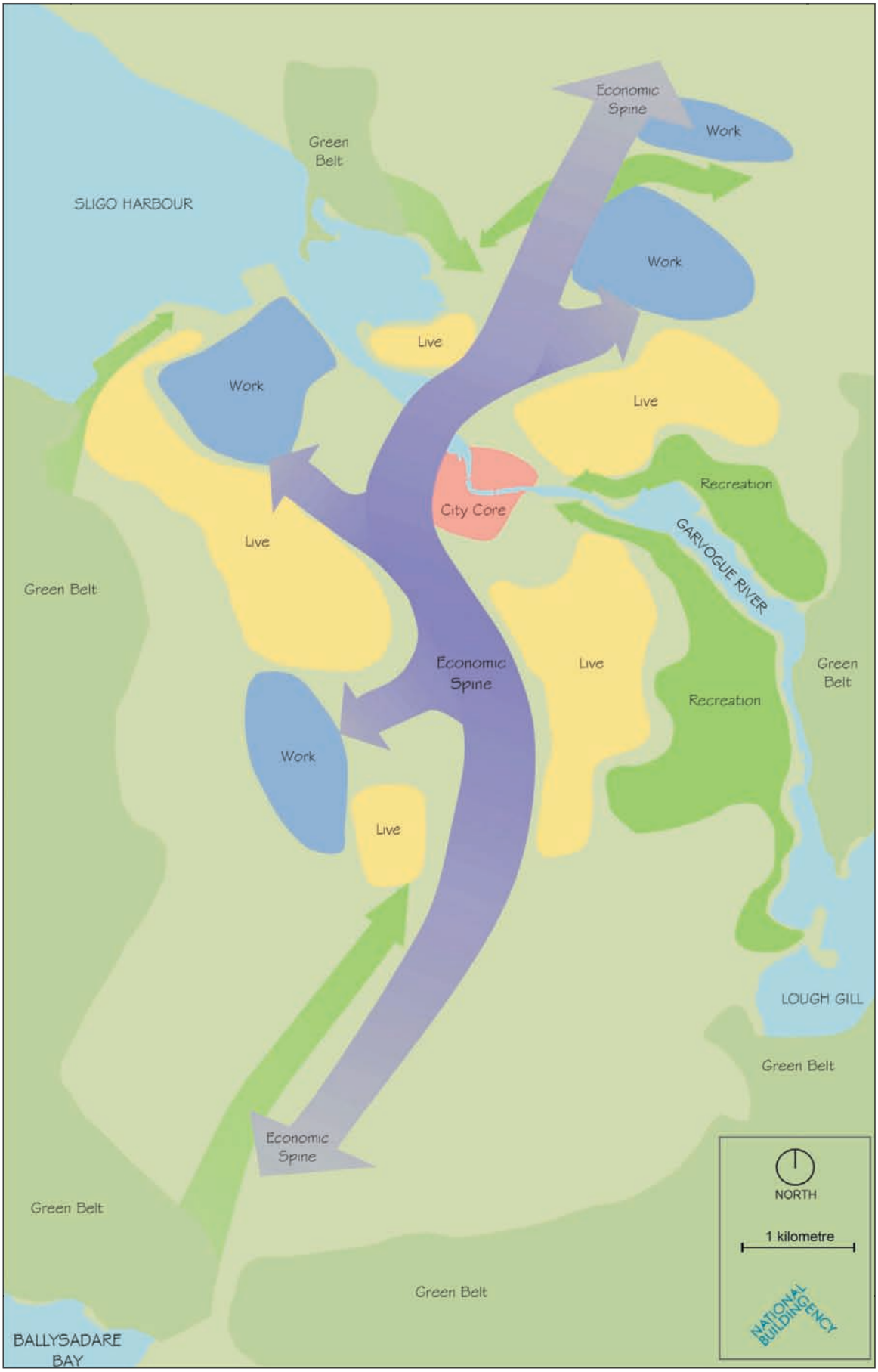
2.1.4.2 A Local North-South Route

With the completion of the Inner Relief Road there will be a significant area of land lying between it and the existing railway line. Between Caltragh interchange and Carrowroe Roundabout, there will restricted access onto the Inner Relief Road. In order to ensure that there is a rational and coherent structure to the development of these lands, and so as to facilitate a future public transport route, a local north-south route is proposed. The route is proposed from Tonafortes (commencing approximately midway between the Carrowroe Roundabout and the Newton Holmes Road) and will run north linking into the Summerhill Roundabout. Thus, in time, a local bus service would be able to travel south from the city centre to the Carrowroe Roundabout, head westwards and then northwards along this proposed route, providing access to the businesses and homes in this large land block. This route will be supported by a number of local roads running east west within the area.

Conclusions

The strategic road proposals aim to increase ease of movement to and within Sligo by redirecting through traffic around the centre. The ease of congestion will be further enabled through the implementation of traffic management measures for the city and the promotion of walking, cycling and public transport initiatives.

Map 11: Concept Map for Ease of Access to Sligo and Surrounding Environs



Trams operate successfully in many European Cities

2.1.5. Public Transport - for a healthier environment

2.1.5.1 Attractive and well-used Public Transport

It is the aim of the local authorities to create a significant shift from traveling by car to other modes of transport. Therefore it is of major importance to improve the attractiveness of public transport in Sligo and Environs. The local authorities acknowledge that changing people's travel patterns is harder to accomplish than establishing them, therefore, the road and land use structure of the city has been designed with public transport routes in mind. The local authorities also acknowledge that public transport is difficult to run on a financially profitable basis and generally requires to be subsidised.

2.1.5.2 Long Term Options for Rail and Tram

There have been two, locally generated, proposals to maximise the use of the existing inter-city railway line infrastructure - one for a rural-suburban rail service connecting Sligo to Ballysadare, Collooney and Ballymote[1] (with possible further extensions to the service) and the second proposal is for a renewable energy scheme (generated from the Garvogue River) that would serve key areas of Sligo with a light tram system[2]. The latter proposal sought to establish Sligo as an example of excellence for new urban areas.

In order for either of these proposed public transport systems to be economical and financially viable (even with subsidies), with an appropriate level of service, Sligo would need to increase its population catchment base in order to achieve the necessary 'critical mass'. Experience in Europe and the UK suggests that this population would need to be in the order of 80,000 - 100,000. Other indicative studies suggest that the immediate area being served would require in the region of 15,000-20,000 employees.

Regardless of the final outcome (tram or suburban train), the Development Plan acknowledges the railway line as a key strategic transportation route. In order for either of these proposals to be viable in the long term, the proposed land use structure on both sides of the railway line will be required to support a service along its route, through modest increases in residential density, the location of significant employment generators and accomodation of mixed uses permitted at future transit stops. These stops are reserved every 600 metres along this route and the land use zoning proposals reflect foregoing requirements.

Redundant Railway line

2.1.5.3 Buses - The solution for the interim period

In general, in Sligo, the relative low population density is an obstacle to a sustainable and efficient public transportation system. It is therefore, not surprising that public consultation and questionnaires have established that inconvenient routing and time-tabling and irregular services are the greatest constraints to using public transport more frequently in Sligo. A questionnaire established that 17% of respondents arrived to the centre by public transport.[3] However, 20% of respondents cited that they would use public transport more often if it was improved.

With a trend towards smaller household sizes, such reductions would need to be off-set with higher densities if an efficient and regular service is to be provided and maintained, particularly along strategic transportation routes. The short-term aim is to optimise the services provided by Bus Eireann to meet the needs and requirements of the population and to achieve higher levels of patronage. Higher frequencies of services during peak hours (8:30-10:00am and 4:00-6:00am) will be encouraged.

As Sligo grows, the alignment of bus routes in the city will need to be altered and new routes created to improve the convenience and accessibility of public transport and to reduce trip-times.

[1] Proposed by the South Sligo Rapid Transit Group -Sligo Commuter Rail Study, Draft Final Report, Halcrow Rail, February, 2001.

[2] 'Renewable Energy Scheme for Local Public Transport System,' Feasibility Study funded under EU Altener II, January 2001 - Report carried out by HBC Planning Consultants and was co-ordinated by Sligo Corporation in co-operation with Sligo City Centre Partnership.

[3] Pedestrian Questionnaire, by the NBA in May 2002.


Connaughton Road Car-Park, Sligo

This has been a key consideration in the preparation of the plan, and the proposed road network enables the provision of a series of loop trips that will link development areas of the city centre by short loops, so as to allow fast and frequent services. These loops aim to minimise walk times to transport stops and to serve the main centres of activity (workplaces, neighbourhood centre, schools, etc.) and the city centre. The local authority will continue to work with Bus Eireann in establishing the integration between the bus service and future land use decisions.

2.1.6 Car Parking - Where to leave the car?

2.1.6.1 Off Street Car Parking

At present there are eight public off-street car parks accommodating 935 cars. In addition there are approximately seven private car parks (excluding smaller car parks associated with the city's smaller businesses) with over 600 spaces.

Table 2: Public Off-Street Car Parks (Source: NBA May 2002)

Car Park	Spaces	Charge
Short Term		
Quay Street Car Park	57	€0.75/hr
Stephen Street Car Park	67	€0.75/hr
Wine Street	261	€0.75/hr
Medium Term		
Abbey Street	81	€1.50/day
Market Place	80	€1.50/day
St. Annes	71	€1.50/day
Long Term		
Connaughton Road	190	Free
Forthill	128	Free
Total	935	

Car Parking Surveys[4] have indicated that in general the peak time for parking in Sligo is between 12 pm and 2 pm when 83%-84% of all available parking spaces are occupied. Upon examination of the different peak times of the various car parks it is evident that different locations have quite different peak times, though occupation levels drop significantly throughout the city after 5.30pm.

The busiest car parks are clearly the inner city car parks, such as Wine Street (including the public car park as well as the private sections), Abbey Street, Stephen Street, Quay Street and the Cathedral Car Park, which show high occupation levels throughout the day.

Within the above car parks illegal parking, double parking or parking in excess of marked spaces occurs, indicating a substantial shortage of available inner city car parking. In relation to the Wine Street Car Park, other surveys[5] have highlighted that 65% of traffic going to the city centre initially intends to park in the Wine Street Car Park, but only 39% actually do, due to lack of available spaces.

Occupation levels decrease on car parks toward the edge of the city centre, due to factors such as location, topography, etc.

[4] Car Parking Survey by the NBA May 2002
[5] Origin-Destination Survey by NBA and Pedestrian Questionnaire by NBA May 2002

2.1.6.2 Duration of Stay

In general, the predominant trend in the city centre was for cars to park for an average duration of half an hour with a significant number remaining for up to an hour and a half. The surveys indicated the predominance of half hour stays with the notable exception of Johnson's Court which is in private ownership and offers longer-stay parking at cheaper rates for local employees.

A number of other car parks, while conforming to the prevalent trend of short-stay car parking, also accommodated longer-term stays between 6 and 9 hours. This is particularly true for the car parks in close proximity to the city centre, which offer free parking or alternatively charge a low rate, such as Abbey Street, the Cathedral, Connaughton Road and to a lesser degree Forthill. It can be assumed that a high proportion of the users of these car parks (around one third) are people working in the City Centre of Sligo, indicating a demand for all-day parking facilities in close proximity to the centre. It is important to emphasise, however, that the predominant duration of stay in each of these car parks was for a short duration, despite the availability of all day parking facilities.

2.1.6.3 Current Situation: On-Street Parking

On-street parking is restricted in Sligo along designated streets in close proximity to the city centre for reasons relating to congestion and ease of flow. Nonetheless, a total of 1,093 legal on-street parking spaces are available in the city centre. These disc parking spaces permit a maximum stay of one or two hours. As one moves further from the centre of city the pressure for on-street parking is significantly reduced, this being reflected in a decrease in the level of restrictions.

Pressure for short-term on-street parking continues to exist along the streets in proximity to the city centre where parking is permitted, reflecting people's desires to park as close as possible to their intended location – this tendency toward convenience parking has an effect on traffic flow and adds to congestion within the city. Limitations on stay are frequently ignored and there is persistent illegal parking on double yellow lines throughout the day, as people avail of ATMs or convenience shops. Hot-spots include Castle Street, Fish Quay, High Street, O'Connell Street, Grattan Street, Stephen Street and Teeling Street.

2.1.6.4 Car Parking Strategy

The car parking strategy for Sligo aims to ensure that there is an adequate supply of spaces to support the city centre businesses and that these spaces are effectively managed. The main objective is to remove cars as a dominant feature on the city centre's streets so that there is ease of movement for the pedestrian and cyclist, in a safe and attractive urban environment.

Parking control can affect how people will travel. In particular it can lead to:

- Higher car occupancy rates,
- Decreased person-trips
- Less travel delays and therefore, faster travel times
- Increased public transport usage
- Decreased congestion
- Reduced air and noise pollution

In general, in the city centre, there will be a presumption against long-term stay parking in preference to short-term stay and a preference for off-street car parking rather than on-street car parking. Furthermore, in the interests of using the city centre's lands more efficiently and effectively, there is a preference for multi-storey car parks rather than surface car parking.

The aim of the car parking strategy is to see such facilities being restricted to strategic locations on the immediate edge of the city centre. In light of current and proposed developments, three locations for strategic multi-storey car parks have been identified for the city centre:

- Connaughton Road (catering for approximately 800-850 spaces, serving traffic coming into the city from the north and east)
- The Buttermarket (with possible capacity for 700 spaces, serving those coming from the north)
- Wine Street Block (catering for approximately 1500, serving traffic primarily from the south)

The multi-storey car parks will be supported by two surface car parks to the immediate south of the city centre - Cathedral Car Park and Market Yard, and by St. Annes/ Cranmore Lane to the east of the city. An option also exists to explore the possibility of providing additional parking as part of any redevelopment of backlands lying between The Lungy and Market Yard. Concurrent with the development of the multi-storey car parks, there will be a removal of some smaller surface car parking areas at Quay Street and Stephen's Street. These will be the subject of environmental improvements and the development of civic squares or urban parks.

The strategic location of the car parks - situated on the edge of the city centre and the commercial and retail heart of Sligo are within reasonable walking distance of all areas of central Sligo.

Considering the removal of existing surface cars and their replacement with multi-storey facilities, it is envisaged that there will be an increase of close to 2,500 spaces in the city, though this will be off-set against the removal of the surface car parking spaces at Quay Street and Stephen Street, in addition to the removal of some on-street parking to make way for pedestrianisation and environmental improvements. This net increase is expected to be in the region approximately 1,200 spaces, though a portion of these are likely to be reserved for employee use.

Parking management in Sligo also aims to achieve the following:

- Ensure that all spaces are adequately delineated and marked, as inefficient spacing between parked vehicles, often mean fewer vehicles are able to park than would be possible.
- Better enforcement
- Telematics - the provision of electronic reader boards or digital display systems with parking information on the approach roads to Sligo city centre. In time, with the completion of the Inner Relief Road, clear signs should be established on the outer parts of the city directing car traffic to the multi-storey car parks - 'City Centre West', 'City Centre East' and 'City Centre North' thus directing traffic to each of the proposed multi-storey car parks.

2.1.7 Cycling - 'One Car Less'

2.1.7.1 Cycling – Promotion of an Environmentally Sound and Healthy Transportation Mode

Currently cycling does not play a major role as a mode of transport in Sligo, but cycling is a cost-effective, non-polluting and highly flexible transportation mode that reduces congestion in urban areas, fosters improved health and is accessible to young people. Therefore the planning authority aims to promote cycling in Sligo. The city centre is quite flat and feasible east-west cycling links and routes can be identified. North and south of the centre the surrounding hills are showing gradients of more than 10% that may be limiting factors in the daily use of ordinary bikes. But with the introduction of e-bikes (electric power assisted bikes) to the market cycling could be attractive to a wide proportion of the population.

2.1.7.2 Proposed Cycle Routes

A schedule of designated cycle routes has been created linking key destinations, main development areas and attractors, such as leisure facilities, schools, churches, hospitals, work places, recreational areas, colleges etc. (see Development Objective T8, below). One-way traffic systems often make cycle journeys longer and more hazardous. One effective means of reducing the problem for cyclists is the introduction of contra-flow cycle lanes enabling them to avoid diversion.

As part of proposals to address the riverfront and open it up, hard landscaped areas will be created in particular areas, which could be penetrated by cyclists, but would be pedestrian priority. However, they would provide attractive amenities for cyclists. It is envisaged that such hard-landscaped riverfronts would be created:

- From Quay Street along the proposed waterfront developments at the port at Ballast Quay, Deep Water Quay and with a possible connection to Cycle Route 11 (Objective T8).

Where environmental improvements are undertaken in the city centre, or where road construction / improvements are being made the schedule of cycle routes (Objective T8) may be altered.

2.1.7.3 E-Bikes

The introduction of e-bikes could contribute to a more environmentally friendly transport system in Sligo, as shown in a trial run in 2000, making cycling attractive to persons otherwise put off by the topography of Sligo[6]. This concept for e-bikes in Sligo with the required re-charging stations could be provided as a public-private partnership and located within Sligo and at strategic destinations outside Sligo. However, the legal status of e-bikes has still to be fully clarified, following an initial Directive by the Minister of the Environment regarding Electrically Assisted Pedal Cycles on March 4th 2001.

Multi-modal transport

2.1.8 City Centre – a Pedestrian Friendly Environment

It is an objective of this plan to promote greater pedestrian activity throughout Sligo's city centre and discourage vehicular traffic. Most trips, even by car have a walking component. The enhancement of the pedestrian environment improves the enjoyment of Sligo for residents and visitors alike and is crucial for any successful urban renewal initiative. Rockwood Parade, Tobergal Lane and Water Lane are the only existing pedestrian streets and have proven very successful in the regeneration of the riverside and have became a popular amenity within city. Elsewhere, particularly on O'Connell Street, Castle Street and Grattan Street there is a strong conflict between pedestrian and vehicular circulation. The situation is made worse by narrow footpaths that force pedestrians onto the road surface and hinder mobility for wheelchair and push-chair users.

[6] HBC Planning Consultants in association with Sligo Corporation, 'Low Energy Transport for Sligo - Electric Power Assisted Bikes as a Part of an Integrated Transport Solution,' Energy Challenge Competition 1998 under INTERREG II Programme 1994-1999, December 2000.

Pedestrians on O'Connell Street, Sligo


'Home Zone' Concept

In a pedestrian questionnaire survey[7] carried out in the city centre, by far the biggest perceived negative aspect of Sligo city centre was the traffic congestion and related problems. Unprompted, respondents indicated that 'pedestrianisation' ranked as the most popular suggested improvement.

To achieve a pedestrian friendly environment within the historic core of Sligo a package of measures is envisaged for the city centre, within an area defined by Wine Street and Stephen Street in the north, Bridge Street and Teeling Street to the east, Temple Street to the south and Adelaide Street to the west. Ultimately, it is the aim that traffic will be directed around the urban blocks in this area, with measures to discourage through traffic and limit vehicular penetration to service access and local residents only. The named perimeter streets are functioning already as significant traffic arteries within the city. Their traffic load will be facilitated and eased with the implementation of the Inner Relief Route and the development of multi-storey car parks, particularly at Adelaide Street. In order to facilitate the proposed circulation system and particularly a east-west connection to the south of the city centre, it is proposed to establish a short link road from the junction of Burton Road and Pearse Road to the junction between Mail Coach Road and Connolly Street.

2.1.8.1 Proposed Pedestrianisation Schemes

Following completion of the Inner Relief Road, it will be an objective to create pedestrian priority areas on Market Street, Castle Street, Grattan Street and O'Connell Street. In order to avoid rat-running on Old Market Street, West Gardens and Harmony Hill a series of environmental improvements are proposed. These could be extended to John Street at a later date and could take the form of a 'Home Zone' or borrow concepts from the 'home zone' - i.e. residential streets in which the road space is shared between drivers of motor vehicles and other road users, with the wider needs of residents (including those who walk and cycle) being accommodated[8]. It is an objective to tackle one street first as a pilot scheme for a 'home zone.'

In the interim, prior to completion of the Inner Relief Road, it is an objective of the local authority to:

- Remove car parking from Market Street, except for loading and emergency vehicles.
- Widen the pavement on O'Connell Street, Castle Street and Grattan Street significantly and remove current on-street car parking.

2.1.8.2 Pedestrian Desire Lines

It is extremely important that the layout of the Wine Street Centre Block Development is conducive to pedestrians arriving by public transport from the west via Lord Edward Street. Research has shown that pedestrians arriving from Lord Edward Street (in the vicinity of the bus and train station), have a strong 'cross-block desire line'. The linkage between the bus and train station and O'Connell Street needs to be maintained and enhanced and pedestrians should be encouraged to continue using the centre block as a thoroughfare.

2.1.9 Transportation Hub (The Railway Station, Bus Station and Civic Square)

The existing railway station in Sligo already functions as transportation node for the north-west combined with provision of interchange between rail and bus. It is important to retain and strengthen the synergy effect of this node. The availability of vacant lands adjacent to the railway terminus and in close proximity of the city centre provides the opportunity to build on its importance as a Transportation Hub for the north-west.

[7] Pedestrian Questionnaire by the NBA May 2002

[8] The 'Home Zone' Concept, called 'woonerf,' was pioneered in the Netherlands in the 1970s, since then it has become increasingly common in Europe. Ideally, the whole street surface is level and usually paved in setts or blocks rather than tarmac to help distinguish it from a normal road. To keep speeds very low, drivers have to pick their way carefully around items of street furniture such as street trees, planters, benches and even tables, in addition to reduced carriageway width, echelon parking, chicanes and coloured paving treatments.

The area in the vicinity of the railway and bus stations is seen as a strategic transportation node, with inter-city and intra-city service. It also has the long term potential of accommodating one of the rail based public transport initiatives (section 2.1.4.2). In order to strengthen and consolidate its role, a redevelopment of the area is proposed, including the provision of a civic square to the east of the railway station with facilities for taxi, local bus services and bicycle parking. Cycle hire for short term use (already available in some European cities) could also be considered. Redevelopment opportunities exist to the rear of the station for bus parking and could accommodate car parking for bus and rail passengers.

2.1.10 Bus Parking Facilities.

It is an objective to provide for bus parking for tour and coach operators in the backlands to the rear of the Railway Station, so that ease of access can be maintained onto the proposed Civic Square and into the heart of the city centre. It is proposed that these lands are accessed from Finisklin Road/Lynns Place, with Union Place/Inner Relief Road confined to pedestrian access.

The proposed civic square will accommodate both public and private bus operators providing drop-off and collection for passengers.

2.1.11 Taxi Ranks.

Sligo Borough Council has licensed 79 taxis and 38 hackneys. Taxi services provide an essential service to cover urban areas, complementing the local rail and bus service. The only taxi stand is at Quay Street opposite Sligo City Hall, where a change to other modes of transport is not readily possible. Two new taxi rank facilities are proposed east and west of the city centre (see Objective T5).

2.1.12 Commute Trip Reduction - Employer Commuter Plans.

In order to support the reduction of trips by private cars the planning authority encourages all major employers in Sligo City and Environs are encouraged to prepare "Employer Commuter Plans". The aim of these commuter plans is to assist employers in influencing employees to change personal behaviour thereby bringing about a modal shift to more energy efficient means of transport to work. Places of employment are strong trip generators, so management of travel demand can play a key role in reducing congestion, particularly in the morning and evening peak periods. This can be achieved through a package of measures to promote the use of public transport, cycling, walking, car sharing, or a combination of these as alternatives to drive-alone journeys (see box below). For this reason, employers can adopt a key role in the development of a coherent transport strategy.

Possible Company Initiatives for the Introduction of a Green Commuter Plan

(1)Compressed working week:

- *4 day week (10 hour working days)*
- *Flexi-time (9 day fortnight).*
- *Teleworking - working from home*

(2) Employer Allowances:

- *Green allowances;*
- *mileage allowance for cycle use in excess of car allowance*
- *mixed car/bicycle allowance*


Encourage higher occupancy of vehicles

(3) Interest free loans or direct subsidies to employees for purchasing

- Public transport tickets – due to changes in the Finance Act 1999, employers are now able to negotiate an arrangement with the Revenue commissioners whereby staff can purchase monthly or annual travel passes through incremental deductions from their gross income

- Bicycle – provision of interest free loans paid off in salary deductions

- IT equipment for teleworking (lap-top, moden, etc.)

(4) Bicycle and Car pooling

(5) Green Allowances – cash in form of 'green allowances' and other incentives could be offered by employers to all those who agree to commute by bicycle, public transport, car share, or on foot for all or some days of the week. Benefits could include extra holiday time, and points or vouchers, which can be exchanges for goods and services.

(6) Travel blending – car use reduction combined with other forms of transport, rather than a complete shift from car to other modes – both work and multi-purpose trips.

(7) Car sharing register – the larger the number of employees the greater the scope for its application (Two or more adjoining companies can combine registers with greater scope for application).

(8) Parking management scheme – reserve car share spaces and car pool spaces within existing allocated area

(9) Promotion and marketing of alternative modes of transport

(10) Cycle parking and other cyclist facilities (sheltered bike racks, lockers,showers, etc.)

(11) Health and safety issues relating to teleworking

2.1.13 Park and Ride

An examination of the potential for a Park & Ride System in Sligo reveals that it is not a viable option in the short term. However, as the concept may have some merit in the future, unzoned lands west of the Carrowroe roundabout should be reserved free from development and be considered as a long term objective for such a facility.

2.1.14 Policies

It is the policy of the local authorities to:

- Provide for the future transportation needs of Sligo and Environs in a sustainable manner.

Integration of Land Use and Transportation

It is the policy of the local authorities to:

- Integrate land use planning and transportation planning, in particular by;
  - Consolidating development in areas which are served by public transport and a good road network.
  - Reducing the need to travel (especially by car) by compact development with mixed uses.
  - Concentrating developments which generate large numbers of trips, such as offices, shops, higher residential areas and labour intensive employment along existing transportation corridors (preferable public transport lines), or where good transportation access will be provided as part of this plan.

  - Locating developments that generate large numbers of heavy goods vehicles close to major roads.
- Construct the Inner Relief Route and ensure its integration into the urban area.
- Create a mixed use strategic development corridor with higher than average development densities, along either side of the proposed Inner Relief Route and along the N15, north of the city, focusing on non-retail uses that generate high numbers of trips, such as intensive employment centres, office blocks, major public services and educational centres, in addition to higher density housing.
- Locate uses which will generate large numbers of heavy goods vehicles, such as warehousing, logistics and transportation related uses between the N4 and the Old Dublin Road, lying between Belladrihid roundabout and the Carrowroe Roundabout.

Sustainable Transport/Public Transport

It is the policy of the local authorities to:

- Strengthen Sligo's function as a transportation node in the North-West and create easy interchange between different transportation modes, particularly at the railway station.
- Promote and give priority to environmentally sound modes of transport, such as buses, rail, cycling (including e-bikes) and walking.
- Work with the service providers, such as Iarnrod Eireann and Bus Eireann, so as to reduce the need for car trips by improving the reliability, availability and quality of public transport, on a local, regional and national level.
- Promote and encourage increases in the frequency of bus services on all routes at peak hours (5-8 minutes).
- Extend, re-route and create new bus routes to meet travel demands and reduces trip times within the development boundary of the borough and environs.
- Promote the routing of all new bus services so that they serve the transportation hub at the train station/new urban square.
- Continue to support European Car Free Day/European Mobility Week and other initiates that support and promote sustainable transport initiatives.
- Ensure that the design and layout of new developments enable, facilitate and encourage access by foot, bicycle and public transport.
- Liaise with Bus Eireann and other public transport providers to encourage public transport services concurrent with new housing and development.
- Encourage an extension of the western city bus route to serve arrivals and departures at Sligo Regional Airport.
- Ensure that building densities are adequate to support the provision of a viable public transport system.
- Encourage all major employers in Sligo City and Environs to prepare and implement Employer Commuter Plans.
- Encourage public transport service providers to introduce integrated timetabling and ticketing for buses, trains and any possible future commuter rail/tram in the Sligo area.
- Examine the feasibility of a rail link between Sligo and Derry via Enniskillen or Manorhamilton, including the incorporation of such a rail link with new National Road alignments and designs, especially at the N15 towards Manorhamilton.
- Promote and encourage the full utilisation of the Sligo freight yard, as part of the national freight distribution system.
- Recognise as a major priority, the reopening and development of the Western Rail Corridor to provide a strategic linking corridor (as per NSS report) to the west, mid-west, south and southwest. Furthermore, the retention of the rail freight infrastructure, including the Quay branch line, freight yard at Sligo Quay and Container Gantry is seen as vital to the on-going development of Sligo City.

Traffic Management and Car Parking

It is the policy of the local authorities to:

- Discourage through traffic from penetrating the city centre, by adopting a circulation system that directs cars around the centre, providing multi-storey car parks on the edge of centre, pedestrianising streets within the centre, restricting on-street car parking and undertaking environmental improvements.
- Adopt car parking management standards within the city centre that reduce on-street car parking in favour of off-street car parking and a restriction on long term car parking (i.e, commuter) facilities in favour of short term (business, retail and leisure) car parking use.
- Establish and protect public rights of way, particularly in areas of high amenity (i.e., along the waterfront areas, coastal zones, and sites of high archaeological amenity).

Cycling

It is the policy of the local authorities to:

- Encourage and promote greater use of bicycles for school trips and short journeys.
- Ensure that where environmental improvements, traffic calming or road closures are being introduced to a street, that there is consideration for the movement of bicycles.
- Facilitate a network of safe and convenient cycle routes throughout the city and environs. Design of lanes/tracks to be in accordance with the Dublin Transport Office and DOELG.
- Examine the feasibility of introducing contra-flow cycle lanes on all one-way streets, with the removal of on-street car parking, if necessary.
- Ensure that in all new development areas a cycling network will be incorporated in the initial design stage, establishing links with adjoining development areas. Such facilities can be either segregated from the principal road and footpath network (subject to adequate surveillance being provided from adjoining developments) or provided at grade with the road as part of a clearly marked track.
- Ensure that in all new institutions, employment centres, sports complexes, leisure facilities and industries that adequate cycle facilities are provided, in the form of bike parking, sheltered bike parking, lockers and/or shower facilities. A relaxation of standards may be permitted in urban areas where facilities are already provided or where a contribution is made for the provision of them in the locality.

2.1.15 Objectives:

It is an objective of the local authorities to:

T1 Reserve Strategic Road Corridors for the development of the following routes:

T1.1 The Inner Relief Road from Carrowroe to Hughes Bridge.

T1.2 A Western Distributor Road from the Caltragh Interchange (proposed on the Inner Relief Road) to Ballydoogan and Finisklin.

T1.3 An eastern bridge crossing the Garvogue River, from Riverside to Rathquarter, continuing north and turning west to connect with Ash Lane (Bellanode neighbourhood centre).

T1.4 A realignment of the N16 Enniskillen Road, from Doonally to Teesan, to connect with the N15 (Donegal Road).

T1.5 A long term strategic route option for a Western By-Pass that could link into the proposed route system of the Western Distributor Route for some of its length, crossing Sligo Harbour - with two northern route options, one of which could align with Scotsman's Walk and the other which could align with Objective T1.4, the proposed Enniskillen Road alignment.. Note all lines are indicative and are subject to a route selection study, as appropriate.

T1.6 Upgrade the existing N15, into Sligo, to a dual carriageway.

T1.7 Reserve land for crossing of Garvogue River estuary at Finisklin to connect to the N15 via the north of Cartron.

T1.8 Reserve land for crossing of Garvogue River estuary at Finisklin to connect to the N15 and N16 at Ash Lane along a line south of Cartron.

T1.9 Prepare a Route Selection Study on the proposed Western By-Pass, in order to explore the range of options available and make a recommendation on the optimum route alignment.

T2 *Reserve a number of **intra-urban road links** for the following routes:*

T2.1 A link road from objective T1.3 northwards to connect with the existing N16 at Yeat's Heights.

T2.2 A north-south route from Tonafortes (commencing approximately midway between the Carrowroe Roundabout and the Newtownholmes Road) to the Summerhill Roundabout.

T2.3 From Sea View Drive (Cartron Village) to Link Road (Bundoran Road Junction).

T2.4 From IDA/Forfas Estate Road west to Gibraltar Point.

T2.5 From Far (Second) Sea Road to Finisklin Road, taking an alignment approximately mid-way between Gibraltar Road and the shoreline.

T2.6 From the proposed Neighbourhood Centre at Cornageeha (vicinity of Sligo Park Hotel) to Newtownholmes Road.

T2.7 From Cemetery Road through the Sligo Racecourse to Riverside, and connect with Eastern River Crossing (see T1.3).

T2.8 From the Link Road (at Ballytivan) eastwards to connect with the Enniskillen Road, near the east entrance roundabout on N16 to Abbotts.

T2.9 A north-south link road from R287 (Carrowroe to Aghamore) to connect with Road Objective (T2.12).

T2.10 From the eastern entrance of Abbotts, at the new roundabout on N16 at Barroe, to the Enniskillen Road at the Doonally junction.

T2.11 A link road between the existing Dublin Road (N4) across to Cairns Road and from there over to Tonaphubble Road with a connection to Green Road.

T2.12 A link road from the junction of Burton Street/Pearse Road to the junction of Mail Coach Road/Connolly Street.

Note, all routes may be subject to a route selection study where appropriate.

T3 ***Upgrade the following urban roads:***

T3.1 Upgrade/widen Finisklin Road, Ballast Quay and Hughes Bridge.

T3.2 Continue upgrading of First Sea Road (Screens Road) and its junction with Strandhill road.

T3.3 Realign, widen and upgrade Strandhill Road.

T3.4 Realign, widen and upgrade Hazelwood Road.

T3.5 Realign, widen and upgrade Oakfield Road.

T3.6 Realign, widen and upgrade Ballydoogan Road.

T3.7 Realign, widen and upgrade Circular Road.

T3.8 Realign, widen and upgrade Cranmore Road.

T3.9 Realign, widen and upgrade Cairns / Tonaphubble Road.

T3.10 Realign, widen and upgrade Newtownholmes Road.

T3.11 Realign, widen and upgrade St. Columba's Road.

T3.12 Realign, widen and upgrade Cemetery Road.

T4 ***Interchange and Transportation Hub:***

T4.1 Promote the redevelopment of the Railway Station and backlands in the vicinity, in conjunction with a new proposed urban square immediately east of the proposed Inner Relief Road and Wine Street, as a major transportation node in the Northwest with a multi-modal interchange, catering for rail, bus (local and regional), car parking, a bicycle station and other bicycle facilities. As part of this objective, the local bus service would have bus stop provisions at the civic square, which would also cater for taxi users. Possibilities of a ticket kiosk for the railway station will be explored with a pedestrian crossing from the square into the railway station. As part of this objective, the local authority intends to prepare a site development brief for those lands associated with the redevelopment of the railway station and the proposed civic square, which will examine traffic access and circulation.

T4.2 It is an objective to provide for bus parking for tour and coach operators in the backlands to the rear of the Railway Station, so that ease of access can be maintained onto the proposed Civic Square and into the heart of the city centre. It is proposed that these lands are accessed from Finisklin Road/Lynns Place, with pedestrian access being reserved from Union Place/ proposed Inner Relief Road.

T5 ***Taxi:***

T5.1 Provide for taxi rank facilities, east and west of the city centre, including the proposed new civic square (providing easy interchange to other transport modes).

T6 ***Public Transport:***

T6.1 Reserve lands immediately southwest of the Carrowroe Roundabout for a Park and Ride facility, (Long Term Objective).

T6.2 Explore the provision of bus lanes on major access routes to the city centre (long term objective).

T6.3 Promote and facilitate the long term development of either a commuter rail service or local tram service, through exploring means of financing such a service and the reservation of transit stops at intervals along the existing rail line and increased residential densities in the vicinity.

T7 ***Car Parking:***

T7.1 Promote and support the realisation of multi-storey car parks at Wine Street Centre Block, Connaughton Road and at the Buttermarket.

T7.2 Examine the feasibility of providing a southern multi-storey car park in the backlands lying between the Lungy and Market Yard, as part of any redevelopment of this area.

T7.3 Provide adequate advance warning on the approach roads to the city centre to inform motorists about available car parks.

T8 ***Cycle Routes and Paths;*** *Implement, as finances and resources permit, subject to physical constraints , the following proposed schedule:*

T8.1 Along Mail Coach Road (from the junction with Pearse Road) and Temple Street, Adelaide Street, Union Street and Queen Stores Road.

T8.2 Strandhill Road (from junction with Woodville Road)/Knappagh Road/Lord Edward Street/Wine Street/Knox Street/Hyde Bridge/Stephen Street/The Mall/Molloway Hill/ Barroe Road (to the junction with St. Columba's Road).

T8.3 From Hughes Bridge/Markievicz Road/Rosses Point Road to Cartron Village.

T8.4 Maugheraboy Road/Church Hill/Upper John Street/Grattan Street/Castle Street

T8.5 Holborn Street/Holborn Hill/Ballytivan/Old Bundoran Road up to Abbotts

T8.6 Gallows Hill/Newtownholmes Road

T8.7 Cleveragh Road/Back Avenue/Doorly Park/Riverside/JFK Parade.

T8.8 Cranmore Road/Chapel Street

T8.9 A separate route (from roadway) from Ballinode to the proposed Hazelwood Neighbourhood Centre, with a spur to the Calry Road

T8.10 Finisklin Road/Finisklin/Gibraltar Road/Far Sea Road (this may deviate along a new proposed coast road in this area).

T8.11 Provide cycle routes and paths along new strategic roads where appropriate and subject to physical limitations, e.g, Western Distributor road.

It is an objective to provide additional cycle links in linear parks, amenity areas and waterfront redevelopment areas, such as:

T8.12 A waterfront promenade leading from Kempten Promenade (Brewery Lane) along the north bank of the River and running eastwards to connect with River Lane, J. Fallon Footbridge and continuing east to link into Cycle Route 9 (Objective T8.9 above).

T9 ***Bicycle parking:***

T9.1 Working with Irish Rail and Bus Eireann, ensure that public bicycle parking facilities are provided in the immediate vicinity of the station.

T9.2 Encourage the development of a 'Bike Station' at, or in the vicinity of the Railway Station (as part of its development as a transportation hub), to provide services such as bike and e-bike hire, information and advice on cycling and local cycle tours. A courier service could also be incorporated to co-ordinate with express deliveries from buses and trains.

T9.3 *Implement, as finances and resources permit,* ***cycle parking facilities*** *at the following locations:*

- Wine Street (as part of its redevelopment)
- Quay Street.
- Hawkswell Theatre/Tourist Office
- Stephen Street Car Park (as part of the developent of a civic space here)
- O'Connell Street (either end, as part of any environmental improvement scheme or pedestrianisation)
- Market Street and Market Yard.
- J.F.K. Parade
- Sligo Showgrounds.

T10 ***Pedestrian Environments:***

T10.1 Following completion of the Inner Relief Road, pedestrianise O'Connell Street, Castle Street, Grattan Street and Market Street. In the interim, prior to completion of the Inner Relief Road, it is an objective of the local authority to widen the pavement on O'Connell Street, Market Street, Castle Street and Grattan Street significantly and remove current on-street car parking, as a means of enhancing the public realm.

T10.2 Facilitate pedestrian desire lines from the corner of Wine Street and Adelaide Street, through the Wine Street Block to O'Connell Street as part of any development proposals for the site.

T11 *Provide a number of* ***amenity walks*** *in the city and environs, including:*

T11.1 A boardwalk type development along the river at Riverside.

T11.2 A waterfront walk from Kempten Promenade (Brewery Lane) to the J. Fallon Footbridge.

T11.3 A waterfront walk on the river from Hyde Bridge to Hughes Bridge (any redevelopment of existing premises in this vicinity will be required to reserve space for such a walkway).

T11.4 Ensure the provision of a pedestrian link between Connaughton Road area and the Stephen Street/The Mall, as part of any redevelopment of the urban blocks bound by these streets, particularly should a multi-storey car park be constructed.

T11.5 Encourage the provision of an additional pedestrian link between the Mall and the River Garvogue, approximately mid-way between Bridge Street and River Lane.

T11.6 Create a pedestrian plaza enabling through access in the redeveloped Wine Street Centre Block.