

Final Report
Executive Summary
Galway Strategic Bus Study

2nd February 2007



**Comhairle Cathrach na Gaillimhe
Galway City Council**



Booz | Allen | Hamilton

In association with:

consulting civil & structural



engineers

EXECUTIVE SUMMARY

Background

Traffic congestion, inadequate public transport and car dependency in Galway City and its environs are related matters of concern for many of the area's citizens, the City Council and the Department of Transport. The 2002 Census recorded that, in the City and County as a whole, only 4% travel to work by public transport. Even at NUIG, only 4% of students travel by bus, according to a survey by the university in 2005. Meanwhile, roads in the urban area, and beyond, become ever more congested. Time after time, experience elsewhere has shown that road improvements are only part of the solution and that it is unsustainable to expect to be able to accommodate all travel by private car. Instead, an effective public transport system is required which gives people a realistic alternative to the private car.

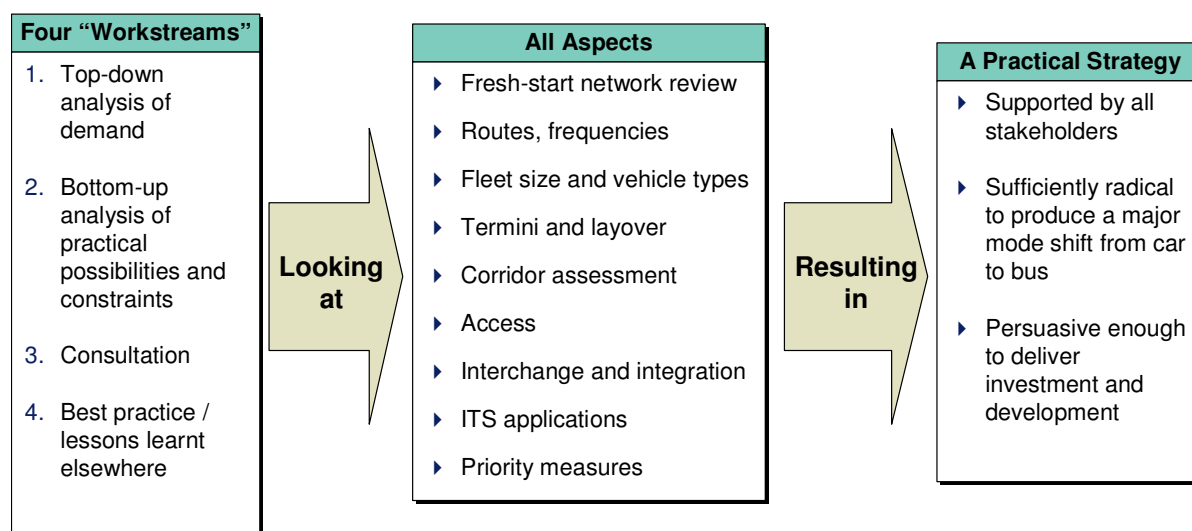
Study Scope

To begin to address matters, the City Council and the Department of Transport came together to commission a study which would identify a framework for the development of a bus network which:

- Is comprehensive enough to address all the ways in which the bus system can be improved to make it more attractive;
- Looks forward to consider the future needs of this rapidly growing area, as well as the future opportunities and constraints; and
- Provides a clear plan which will promote multi-annual investment in priority measures, supporting infrastructure and bus services.

Study Approach

Achieving this aim required a comprehensive approach, as follows:



The Consultants approach was to examine, on the ground, every aspect of the bus journey, from the customers' perspective, right from the beginning of the process when one seeks information about using the bus system to the final stage when one alights from the bus and walks to the destination. The results of this exercise were validated through consultation with local stakeholders including various departments in both local authorities, Bus Éireann,

City Direct, NUIG, An Garda Síochána, the National Roads Authority, the Strategic Policy Committee for Transport and Integrated Transport Group and representatives from the IDA business parks. In response to an advertisement placed in the newspaper in April 2006, written submissions were also received from other interested parties. A further round of consultation took place when a Draft Report for Consultation was issued in November 2006.

The Existing Problem

The outcome was a wide ranging perspective on the strengths and weaknesses of the current system, as summarised in Table 1.

Table 1 Summary of Strengths and Weaknesses of Current System

Aspect of Service	Issue
Marketing	Very little marketing of bus services
Information, signage	Network and timetables difficult to understand. Timetables and route information hard to find.
Vehicles	Good to adequate, but lacking bus stops with suitable infrastructure
Interchange and Terminus	Eyre Square/Station area provides good visibility and integration. Poor facilities for terminating at outer end of routes.
Bus stop environment	Poor, except some of the new stops in Eyre Square. Frequent lack of pedestrian facilities
Timetable	Complicated Frequency and hours of operation could be improved
Journey times	Short journey times Journey speeds could be improved.
Punctuality	A particular problem on the cross-city routes
Reliability	Poor - general problem with city services being "dropped"
Coverage	Network coverage within the city reasonably good but let down by complicated routings and timetabling, and low frequency.
Fare	Reasonably priced flat fare in City but high for Commuter Little discount provided for regular use or special promotions

Future Opportunities and Constraints

The proposed Galway City Outer Bypass (GCOB) could be a significant opportunity to improve the bus system. Not only will it reduce traffic within the City area, but the National Roads within that area will be declassified allowing the City Council to determine exactly how they should be used. The City Council should plan now to reallocate spare capacity on the declassified roads to buses, cyclists and pedestrians before it inevitably gets taken up by future demand or existing latent demand. Traffic flows in the Galway area are continuously growing. Buses will become slower, less reliable and less punctual unless priority measures are put in place. This will become particularly acute in the years leading up to the introduction of the GCOB.

Galway is experiencing a wave of major redevelopment proposals. The proposed redevelopment of Ceann Station/CIE Lands and the redevelopment of the Docks area, both of which are at early stages, could represent an enormous intensification of the use of those sites. Consequently, given their City Centre locations, buses should play a critical role in meeting their travel demands. Good provision for buses should therefore be integral to the planning and design of these redevelopments.

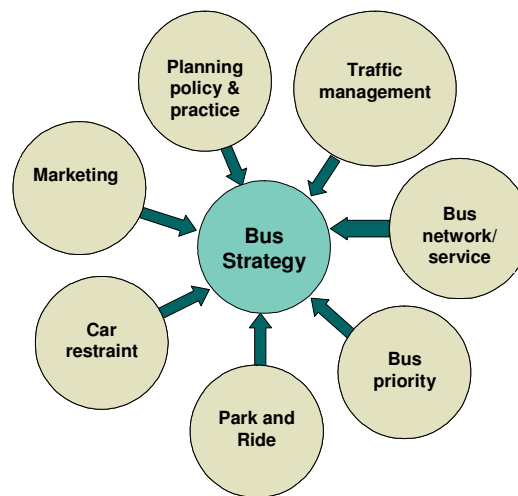
The redevelopment of existing sites is very welcome in terms of promoting sustainable land use and transportation development, compared with sprawling suburban or rural development which is difficult to service by bus. Within the City area, however, there are still some greenfield sites which are yet to be developed, notably to the west of the City.

These present is the opportunity to plan and design high quality bus and pedestrian facilities integrated with the development. The proposed Ardaun development, also on a greenfield site, is based around a bus corridor concept.

Planning for Change

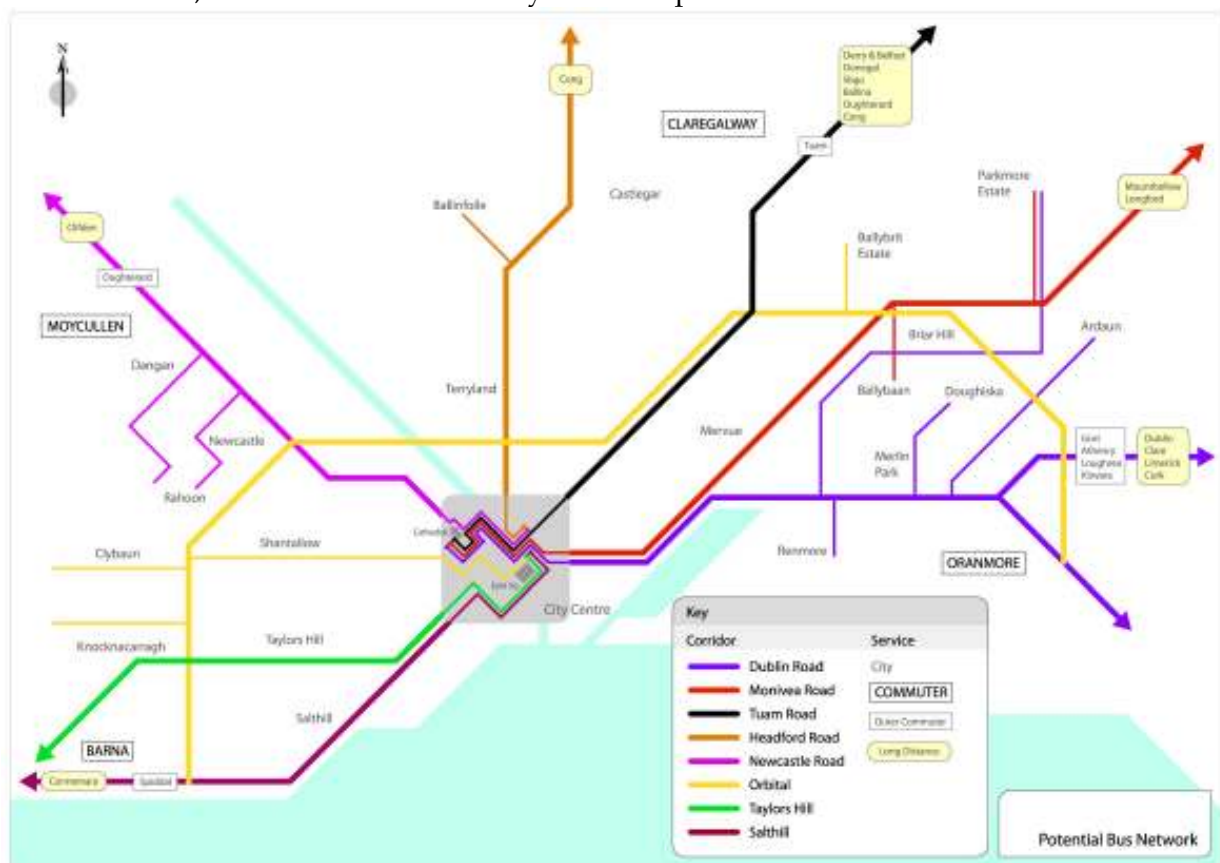
Overcoming the deficiencies in the current system and planning for a more efficient, effective and attractive system in the future requires action across a number of fronts:

- Bus-friendly planning policy and practice
- Improved traffic management allowing better control and enhanced conditions for buses, pedestrians and cyclists
- Bus priority measures
- Measures to restrain the use of the private car
- A clear, easy-to-use bus network with high frequency, fast and reliable services
- Effective marketing, taking the bus system to the people
- Park and ride to assist people from the dispersed hinterlands access the bus system.

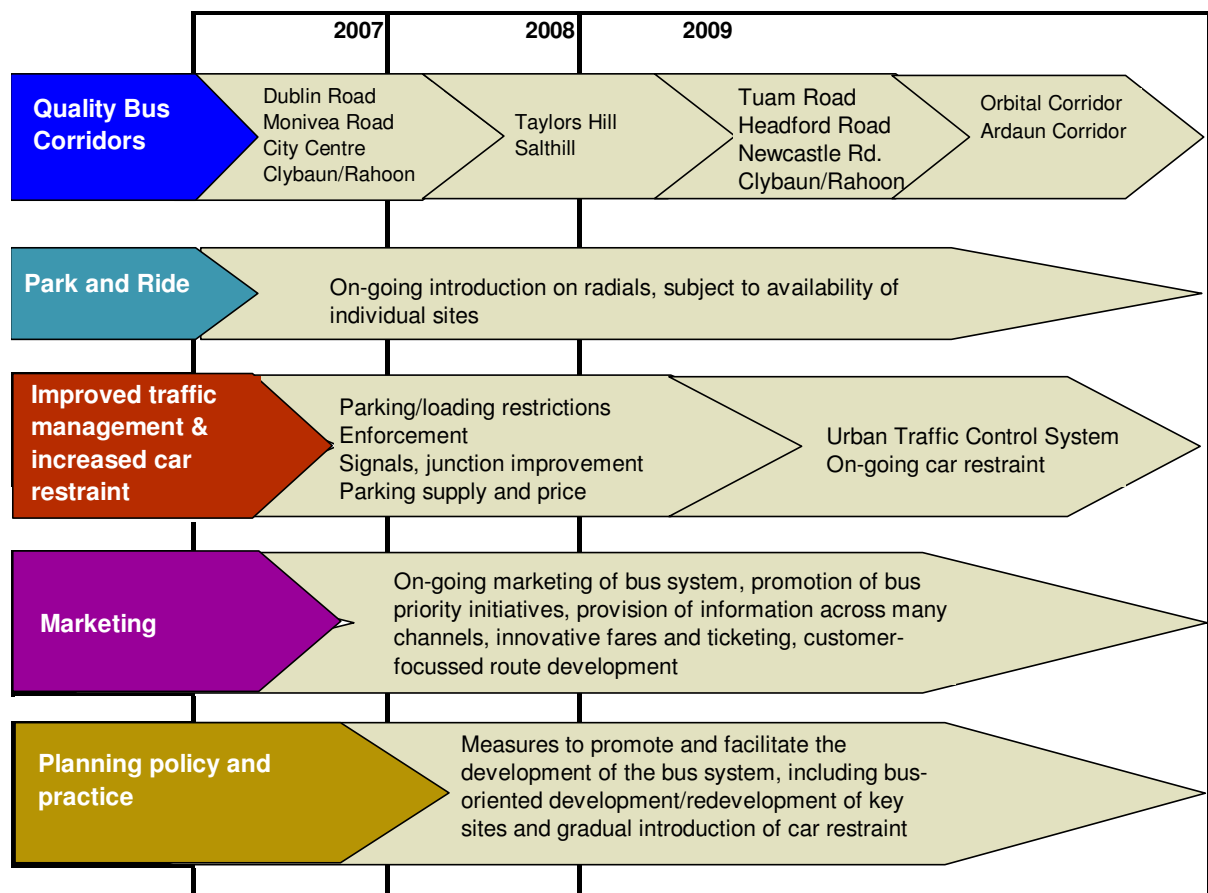


The Proposed Bus Strategy

To achieve this, a new vision of the bus system is required:



The Consultants have devised a 6-year strategy to implement this vision:



The Components of the Strategy

The **Quality Bus Corridors** will involve an integrated programme of increasing bus frequency, rationalising bus routes and introducing priority measures. During the study, a set of bus priority measures for each corridor was examined for the purpose of ascertaining physical feasibility and future budgeting. They comprise measures such as bus lanes, clearways, bus only turns, bus only sections of road, improved bus stops and improved pedestrian facilities. **The total budget required for implementation is estimated at €36.5 million.** Detailed of the budget for each corridor are provided in Table 2.

Quality Bus Corridors

- ▶ Designated corridors
- ▶ Variety of routes on each
- ▶ High frequency service (every 15 minutes on City routes, every 30 minutes on Commuter routes)
- ▶ Bus priority measures
- ▶ Improved bus stops with timetables and route maps
- ▶ Improved pedestrian facilities generally and at bus stops
- ▶ Improved traffic management, with bus-only measures
- ▶ Parking and loading restrictions, with enforcement
- ▶ Marketing campaigns associated with roll-out

Table 2 Indicative Capital Cost of Measures in Each Quality Bus Corridor

Area/Corridor	Indicative capital cost (€ + VAT)
City Centre	2,500,000
Dublin Road	2,000,000
Monivea Road	3,000,000
Tuam Road1	4,000,000
Headford Road	1,500,000
Newcastle Road	2,000,000
Orbital2	12,000,000
Taylor's Hill	1,500,000
Salthill	500,000
Clybaun/Rahoon Area	3,500,000
Urban Traffic Control System	4,000,000
Total	36,500,000

1Not including the possible urban dual carriageway along Tuam Road

2Including the proposed Seamus Quirke Road/ Bishop O'Donnell Road upgrade (€10 million).

In addition to priority measures on each of the Quality Bus Corridors, a package of measures and new arrangements for the City Centre have been identified (cost included in the €36.5 million budget):

- All City services stopping in **Eyre Square**, including those operated by private operators, but excluding any orbital services
- All services from East and North terminating at a new bus terminus area adjacent to **the Cathedral**, after stopping at Eyre Square
- **Bus lanes** throughout the City, including contra-flow
- **Bus only turns**
- **Clearways** enforced throughout the City
- Improved traffic management – signal control and an **urban traffic control (UTC)** system at a cost of €4 million in addition to the cost of the bus priority measures.

The individual measures suggested for each corridor are not the subject of the current consultation as, should the overall strategy be accepted by the Council and the Department of Transport, funding will be allocated early next year to further develop the measures according to the procedure shown in Table 3.

Table 3 Steps in Implementing Quality Bus Corridors

<ul style="list-style-type: none"> ▶ Preliminary Design Stage (schemes to a scale of 1:500, based on topographical surveys) ▶ Presentation to Councillors ▶ Public Consultation - undertaken under Part 8 or Section 37/38 of the 1994 Roads Traffic Acts ▶ Modified scheme presented to Councillors ▶ Detailed Design Stage (construction detail standard, tender documents etc) ▶ Tender - pre-qualification process is necessary as contractors must have relevant experience ▶ Construction - very different to other roads projects ▶ Statutory Orders - Statutory Requests for the various statutory traffic management measures prepared and agreed with An Garda Síochána

To deliver bus services on the network proposed, at the frequency proposed, it is estimated that **the number of buses operating city services will need to be increased from around 33 to around 60**. The City Council, bus operators and Department of Transport will need to liaise to ensure that the introduction of new and enhanced services is phased in with the rollout of the Quality Bus Corridors.

Park and Ride can play an important role in enabling people in the dispersed hinterland to access the bus system. It is excellent that the City Council is already actively considering opportunities on all the radials into the City. While Park and Ride is an attractive concept which appears to work reasonably in the case of the Cork scheme as well in some UK cities, there are challenges in implementation which should be recognised including the difficulty of acquiring a suitable sites with planning permission, the cost of providing and maintaining a safe and secure car park and the cost of providing the bus service.

General traffic management

The **general traffic management measures** proposed throughout the City area include:

- Improved footpaths and pedestrian crossing facilities on all corridors.
- Improved control of traffic flow through the use of an Urban Traffic Control System which will facilitate priority for buses
- Improved road safety through the implementation of road accident remedial measures as part of all schemes.
- Potentially improved cycle facilities through the use of bus lanes and provision of cycle lanes along each corridor.
- Provision of Bus Shelters at bus stops where possible.

Marketing

Marketing of the bus system, which is predominantly a task for the operators with the support and encouragement of the City Council, should start immediately, be intensified with the introduction of the Quality Bus Corridors, and encompass the following:

- Raising of awareness
- Branding of bus corridors
- Timetables and route maps at all bus stops and widely distributed
- Telephone, internet and mobile phone information services
- Marketing campaigns in targeted areas
- Easy to understand network
- Easy to understand timetable
- Regular timetables
- Attractive ticket products

Planning policy and practice

Finally, the City Council needs to plan for a more bus-friendly future. This entails:

- Developing a **strategy for the function of the National Roads** after they are declassified following the proposed GCOB opening which can guide development/ redevelopment proposals along the routes and determine how the roads themselves should be used by each different type of road user
- Implementing the **GTPS settlement strategy, including the proposed Ardaun development**

- Following **best practice development control** in the case of all proposals, particularly the redevelopment of Ceannt Station/CIE Lands redevelopment, the Docks redevelopment and whatever proposals may emerge for other key sites:
 - Manage the provision of associated parking
 - Design so that people can easily walk to/from bus corridor
 - Ensure large developments can be directly served by bus where possible without diversions or delays and that they include a range of local services to minimise unnecessary use of the car
 - Ensure developments supported by adequate infrastructure outside immediate site e.g. footpaths and crossings
 - Restrain unnecessary car use from outset, not an as after thought

- Building a **transport planning and traffic engineering team** capable of:
 - Integrated transport and land use planning
 - Devising a strategy for the future use of roads
 - Effective bus-supportive development control
 - Roll-out of improved traffic management, including introduction of UTC
 - Liaison with public transport stakeholders (operators and Department of Transport)
 - Establishing and overseeing a project office to construct the quality bus corridors
 - On-going maintenance of quality bus corridors
 - Progressing Park and Ride
 - Dealing with other transport planning and traffic engineering issues

The Impact of the Strategy

The analysis of the impact of the preferred strategy forecasts that:

- The number of trips by bus would double (103% increase)
- The factors which would have the greatest impact in attracting new patronage are improved reliability and increased service frequency
- Other factors which would also play a significant role in making the bus system more attractive include reduced walk time to access the bus network (through a combination of network changes and improvements to the pedestrian environment) and reduced travel time (through a combination of more direct routing and priority measures).

The role of marketing, in its widest sense, has not been directly assessed, but it will play a crucial part in ensuring that the change happens, and that maximum benefit is gained from investment in infrastructure and operations.

Implementation

Successful implementation of the overall strategy depends on the bus operators and the Department of Transport taking action, as well as the City Council. The responsibilities of each of the stakeholders is shown in Table 4. It should be noted that funding of priority measures is not purely the responsibility of the Department of Transport, the Department of Environment, Health and Local Government and local authorities will also have a role.

Table 4 Implementation Responsibilities

Galway City Council	Bus Operators	Department of Transport
<ul style="list-style-type: none"> • Infrastructure – provision and maintenance • Traffic management • Pedestrian environment (inc. shelters) • Park and ride • Policies and practices to support development of a “bus culture” 	<ul style="list-style-type: none"> • Route and service planning • Service operation • Provision and maintenance of buses • Service marketing • Provision of information 	<ul style="list-style-type: none"> • Funding to the City Council for priority measures and other bus-related technology and infrastructure • Public Service Obligation (PSO) grant to Bus Éireann • Route licensing • Policy in relation to bus regulation

The City Council has sought funding to establish a dedicated Transport Unit which would have responsibility for:

- Integrated transport and land use planning
- Devising a strategy for the future use of roads in the City area
- Effective bus-supportive development control
- Roll-out of improved traffic management, including introduction of UTC
- Liaising with public transport stakeholders (operators and Department of Transport)
- Establishing and overseeing a project office to construct the quality bus corridors
- On-going maintenance of quality bus corridors
- Progressing Park and Ride
- Dealing with other transport planning and traffic engineering issues.

