Douglas Land Use & Transport Strategy (DLUTS)

DLUTS Final Report

In Association With Cork County Council

August 2013

mvaconsultancy

Document Control

Project Title:	Douglas Land Use & Transport Strategy (DLUTS)
MVA Project Number:	30004712300047
Document Type:	Draft Final Report Draft Final Report
Directory & File Name:	G:\Projects\300047 Douglas Land Use & Transport Study\30004712\Reports\Final Report

Document Approval

Primary Author:	David Conlon, Ross Palmer (Cork Co.Co.), Darragh O'Suilleabhain (Cork Co.Co.), Martin Ryan (Cork Co.Co.), Sean McLoughlin and Giulia Vallone (Architects Department CorkCo.Co)
Other Author(s):	Ian Byrne, Sinead Canny,
Reviewer(s):	Ian Byrne, Peter O'Donoghue (Cork Co.Co.), Niall O'Callaghan (Cork Co. Co.)
Formatted by:	Sinead Canny, Diarmuid Bailey

Distribution

Issue	Date	Distribution	Comments
1	24/02/2013	Cork County Council Website	Draft Final Report
2	June 2013	Cork County Council	Final Report

Contents

Tables

Figures

Appendices

Foreword

The Douglas Land Use and Transport Strategy (DLUTS) is an integrated land use, urban design and transport strategy that aims to: *"to secure a successful vibrant urban centre with a more efficient transport network for Douglas, that provides an improved public realm, reduces congestion, encourages greater levels of walking & cycling, and improves the quality of life for the community, thereby enabling sustainable future growth."* The DLUTS was first identified in the Carrigaline Electoral Area Local Area Plan in 2011, where it was recognised that in order to ensure balanced land use growth in the future, it was necessary to retrofit a modern transportation network, in particular focusing on a major shift towards other transport modes in line with the national priority of Smarter Travel.

The DLUTS Strategy has been produced through a collaborative effort between the different departments of Cork County Council (namely Planning Policy Unit, Traffic and Transport Division, Architect's Department) and MVA Consultants, who were responsible for the traffic and transportation aspects of the strategy. It also engaged with existing landowners and key stakeholders in the area to build consensus on the type of future development and transport options needed for the metropolitan town on the southern edge of Cork City.

The project was successful in achieving key stakeholder and public consensus on the integrated strategy through a through process of consultation, both targeted (on key stakeholders) and through widespread public exhibitions. As a first project of this kind at the local level in Cork, the project achieved remarkable integration between land use planning, urban design and transportation disciplines. An integrated strategy is no good unless accompanied by a robust set of recommendations that can be easily implemented through existing resources.

The DLUTS achieved an early implementation programme through funding of projects by National Transport Authority (NTA), commencing in 2013. This was achieved through involvement of the key stakeholders in the project preparation process at regular intervals (every month). Not only does the project provide a robust implementation schedule, it is successful in achieving changing the attitudes of local population towards the use of the motor car in travel options and promotes the desired goals of providing sustainable transport options such as walking, cycling and public transport.

Through the introduction of a land use framework for future development decisions in the longer term, new development will be focussed on employment creation in town centre precincts with less emphasis on additional retail provision. This will have the effect of bringing more jobs to the area and reducing the need for people to travel long distances for work. This will, in turn, permit some work trips to be done by walking or cycling and reduce car trips and traffic congestion.

The DLUTS strategy will, for a modest investment in infrastructure, facilitate the transformation of the Douglas into a more vibrant and economically sound business centre, providing jobs and improved public realm. Douglas will be a more pleasant place to visit and do business in and a healthier place to live in. Life in Douglas will be much more sustainable and much less influenced by traffic concerns than it is today.

mvaconsultancy

1 Introduction

1.1 Background to the Douglas Land Use Transport Strategy

1.1.1 MVA Consultancy, in conjunction with Atkins Ireland and Nationwide Data Collection, was appointed by Cork County Council to prepare a Land Use and Transport Strategy for Douglas Village and its hinterlands. This study is referred to as the Douglas Land Use Transportation Strategy (DLUTS) and is a response to resolving the competing demands for more housing and retail development and balancing this with the provision for better transportation, environment and community facilities in the DLUTS Area. DLUTS is being prepared under the guidance of the Carrigaline Electoral Area Local Area Plan (2011).

1.1.2 The Carrigaline Electoral Area Local Area Plan (2011) identified an opportunity for the DLUTS Area "to fully evolve into a fully functioning mixed use higher order centre in terms of its development density and its retail offer with an improved public transport, accessibility and parking demand management system". It is proposed in the Local Area Plan that a land use and transportation study should be prepared for the DLUTS Area as a priority.

1.1.3 DLUTS has also taken full cognisance of recent local, regional and national policy. The National Transport Authority's National Cycle Manual, the Cork County Development Plan, Department of Environment, Community and Local Government (DECLG) Guidelines relating to Spatial Planning and National Roads and the Government's Smarter Travel Policy were particularly relevant to the development of DLUTS. Other policy documents which have been incorporated into the development of this strategy include:

- South West Regional Planning Guidelines 2010 -2022;
- National Spatial Strategy;
- National Development Plan (2007 – 2013); and
- The Cork Area Strategic Plan (CASP).

1.1.4 A common objective to nearly all the local and regional current policy is to promote increasing use of sustainable modes such as walking, cycling and public transport. Sustainability is also common to the objectives of most policy documents, defined with relevance primarily to the economy and also the environment. An integrated approach to land use planning, urban design and transport provision is therefore essential, and this theme has been central in these plans and studies.

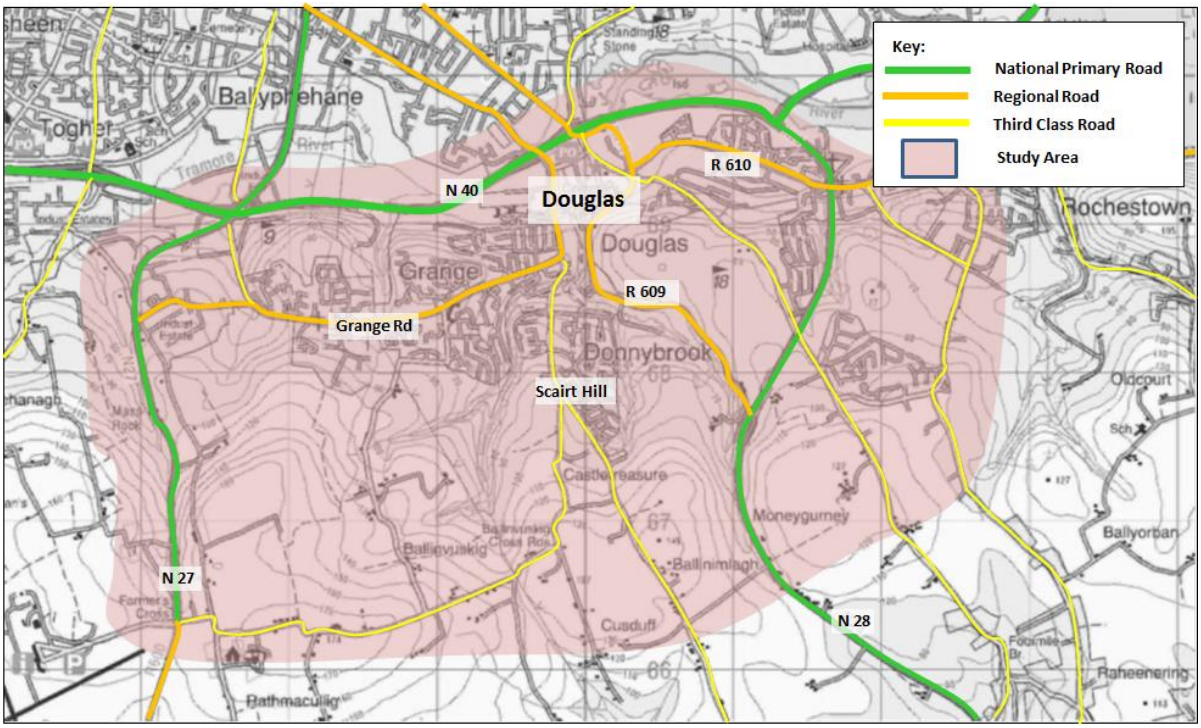
1.1.5 The DLUTS Strategy is not a zoning plan but the recommendations may be incorporated into an amendment to the Carrigaline Electoral Area Local Area Plan.

1.1.6 The overall aim of DLUTS is to ensure that there is an integrated approach to land use planning, urban design and transport planning to enable for the future sustainable development of the DLUTS Area.

1.2 DLUTS Strategy Area

1.2.1 The DLUTS Strategy area consists of Douglas village in the centre and spreads as far as Cork International Airport and the N27 to the west and Maryborough Clarkes Hill to the east. Figure 1.1 below shows the extent of the area under consideration as part of DLUTS.

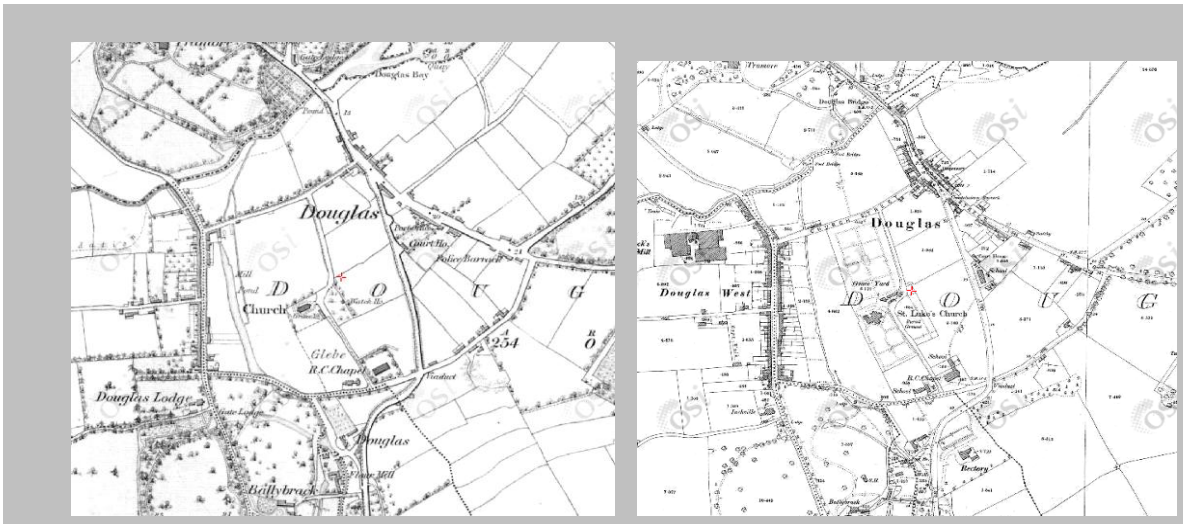
Figure 1-1 DLUTS Strategy Area



1.3 History Evolution

1.3.1 The name Douglas is an anglicisation of the Irish name given to the river that runs through the village: "Dubhghlas" meaning "dark stream". It is a combination of two words "dubh" and "glaise". "Dubh" means "black" and "glaise", "glais" or "glas" means "a little river", and is often used to give names to rivers and subsequently to townlands. The usual anglicised forms are glasha, glash or glush, which often appear in compound Irish place names. Douglas has been described (1845) as "a chapelry and village in the parish of Carrigaline, barony of Cork, 2 1/2 miles south-east of the City of Cork. It presents that singularly beautiful contour and richly embellished dress for which the whole tract along the lower River Lee and especially between Cork and Passage is celebrated, and it possesses a profuse powdering of villas and gemming and embroidery of gardens, shrubberies and villa demesnes". Douglas was first mentioned in the year 1251. In the mid-seventeenth century the area consisted of a small number of large farms or estates. It had a total population of 308 people of which 33 were English.

Figure 1-2 Early maps of Douglas



1.3.2 With the advent of the sail-cloth industry in 1726, flax being the raw material, Douglas began to take shape as a settled village community. The Donnybrook Mills (1726), Lane's Corn and Hemp Mills (1845), O'Brien's Brothers (St Patrick's Woollen Mills, 1882), Conroy's Rope and Twine Mills (1892) provided much needed employment for the people of Douglas and areas beyond. They attracted, in the early days, Huguenots such as the Bernard and Pollock brothers from Belfast, as well as skilled workers from Northern Ireland and Scotland. Douglas ropes and sails were used by the British Navy in the war against Napoleon.

1.3.3 With the passage of time some of the mills ceased production but the two "giants", Donnybrook and St Patrick's, carried on through good times and bad. In the world-wide recession of the nineteen-seventies these two mills were forced to shut down, bringing an end to a tradition that lasted for two hundred and fifty years.

Figure 1-3 Photos of Douglas Village

Douglas between 1880 and 1900

Douglas 2012

1.3.4 A few big houses existed in the greater DLUTS Area – most were owned by wealthy farmers and landlords. Sir Hugh Lane, famous art collector and connoisseur was born in Ballybrack House (still lived in today). He was killed in the torpedoing of the liner the Lusitania off the Old Head of Kinsale on May 7th, 1915. Many other big houses have given their names to the surrounding areas, the best examples being Donnybrook (House), Castletreasure (House) and Grange (House). Although these houses have disappeared today to be replaced by modern dwellings, the folklore connected with them still lives on in the lives of some Douglas people. Many smaller houses, most of them related to the old textile industry, still exist, the most well-known being "Scotchies Terrace" in Donnybrook, built to house the Scottish workers in the mills.

1.3.5 From these humble beginnings Douglas has now become a vibrant village and comes very close to Bishopstown as Cork City's most thriving suburb. Housing estates now spread out from the village centre like strands in a spider's web. The population of Douglas has been estimated at over 20,000 inhabitants. The "village" now possesses two large shopping malls and a five-screen cinema. The Donnybrook and St Patrick's Mills buildings have been renovated and reopened to house a number of different, small business and retail units. The parish of Douglas has grown to the extent that a second Roman Catholic Church was built. St Patrick's Church (1991) on Rochestown Road joins the "old church" of St Columba's (1814). St Luke's Church of Ireland church was finished in 1889. In 1898, the Cork Electric Tramways and Lighting Company built a route from Cork City to Douglas. This service operated until 1932 when it was replaced by a bus service.

1.3.6 In the second half of the twentieth century, Douglas underwent major changes as it became a suburb of Cork. A large amount of new housing was built and the area between Douglas and Cork City became entirely built-up. Schools, shopping centres, cinemas and other amenities developed to serve this new population. Douglas Community School was built in 1968 and the original Douglas Shopping Centre was completed in 1972. This shopping centre recently received a facelift, which transformed the centre of the village. A second shopping centre, Douglas Court Shopping Centre, was built in the late 1980s and a 5-screen multiplex cinema was also built. Several hotels, including the Rochestown Park Hotel and Maryborough House Hotel were also developed. Douglas has two golf courses, the Douglas Golf Club at Maryborough Hill and the Frankfield Golf Club in Frankfield. The Frankfield course also contains a driving range.

1.3.7 The expansion of suburban residential development continued throughout the later part of the twentieth century and continues to the present day. Housing developments (mostly private, although there are some areas of social housing) have been built in Grange, Donnybrook, Frankfield, Maryborough, Rochestown, Mount Oval and along the two main roads connecting Douglas to Cork city, the Douglas Road and the South Douglas Road.

1.4 Douglas Today

1.4.1 In the Carrigaline Local Area Plan Douglas is part of the Cork City South Environs and forms part of the County Metropolitan Strategic Planning Area. The Cork City South Environs refer to the southern suburbs of Cork City, which lie outside the Cork City Council area. These include areas such as Doughcloyne, Togher Frankfield Grange Donnybrook Douglas Maryborough and Rochestown.

1.4.2 The southern periphery of the city is located on the southern edge of the River Lee valley partly on low lying gently undulating land and partly on the more steeply rising slopes of the valley side. In the past, it has tended to be a more popular location for development than the more hilly land on which the northern suburbs of the city are largely built.

1.4.3 Housing in recent years has been provided in the form of large housing estate developments which often suburban in character, have introduced diversity to the housing mix in the town, catering for all age groups and stages in the lifecycle. In the Local Area Plan it is envisaged that Douglas will evolve into a fully functional mixed use higher order urban centre in terms of both its development density and its retail offer with generally enhanced public transport, accessibility and parking demand management. In order to achieve this, a holistic view of Douglas will be required. It is proposed that during the lifetime of the Local Area Plan that priority will be given to the completion of DLUTS.

1.4.4 Douglas is an important urban centre located within Cork City – South Environs, approximately 3.5kms southeast of Cork City Centre. Douglas is identified as a District Centre in the 2008 Retail Strategy and functions as the main services, employment, retail, education and recreational centre for the South Environs. It is proposed that Douglas should develop into "a fully functional mixed use higher order urban centre in terms of both its development density and its retail offer with generally enhanced public transport, accessibility and parking demand management" (Source: Carrigaline Electoral Area Local Area Plan Review Outline Strategy 2010 – 2020). Douglas has seen major investment in recent years in residential and commercial development and in roads infrastructure. The availability of good infrastructure, services and facilities and its proximity to the city means it continues to be an attractive location for development.

1.4.5 Traffic levels in Douglas and its environs have grown steadily over time, which coupled together with increases in population and employment, has resulted in increased levels of traffic congestion particularly during peak periods. The main traffic movements in and around Douglas are generally associated with retail, commercial, health and leisure facilities within Douglas; school runs in the morning and afternoon peaks; and trips to surrounding areas for work, leisure and retail purposes. There are also a large number of trips with origins and destinations outside of the DLUTS Area which pass through Douglas. All of these contribute to traffic congestion levels on the network in and around the DLUTS Area.

Population

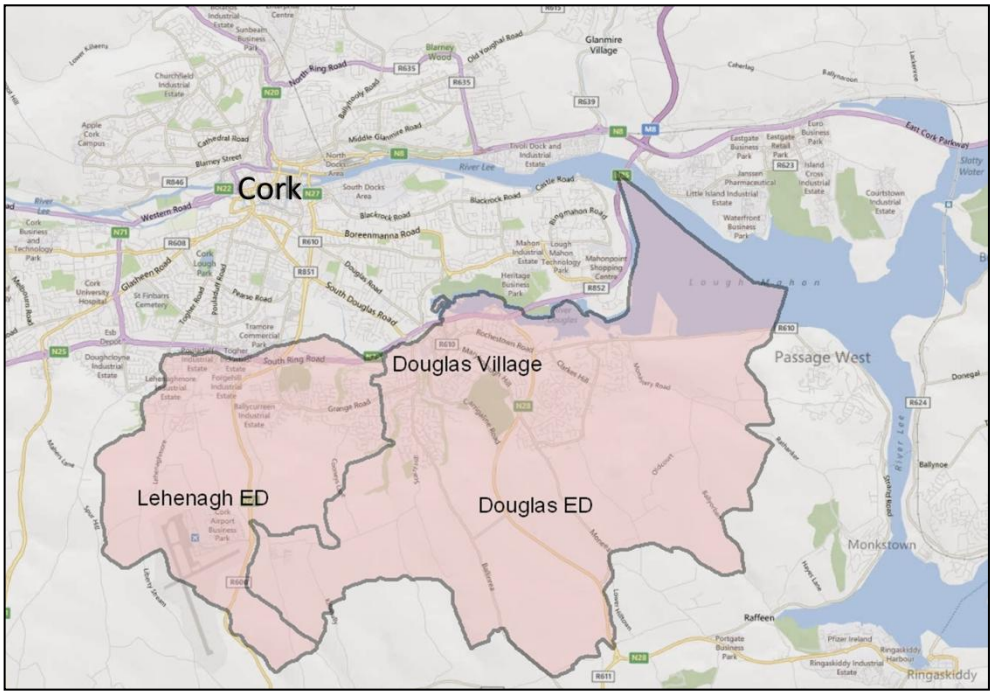
1.4.6 Table 1.1 below shows the population of DLUTS Area, Cork City and Cork County. The two electoral districts which are contained within the DLUTS Area of Douglas (18086 Douglas & 18096 Lehenagh) had a population of 30,295 in 2011. This represents a population increase of 9% (2,579) since 2006 when the population of Douglas was 27,716. The population of Cork City, which borders the DLUTS Area, remained largely constant over the five years from 2006 to 2011. The largest demographic in Douglas is the 20-44 year old age group which accounts for 45% of the population. Those aged 0-19 years account for 29%. 45 to 64 year olds account for 20% and over 65 year olds account for 6% of the total population.

Table 1.1 DLUTS Area Population

Table 1: Population Growth 2006-2011 in Douglas				
	2006	2011	Growth	%Difference
Douglas ED	18,182	20,397	2,215	12.2
Lehenagh ED	9,534	9,898	364	3.8
Cork County	361,877	399,802	37,925	10.5
Cork City	119,418	119,230	-188	-0.1

1.4.7 Figure 1.4 below shows the Douglas and Lehenagh Electoral District Boundaries

Figure 1-4 DLUTS Area ED Boundaries



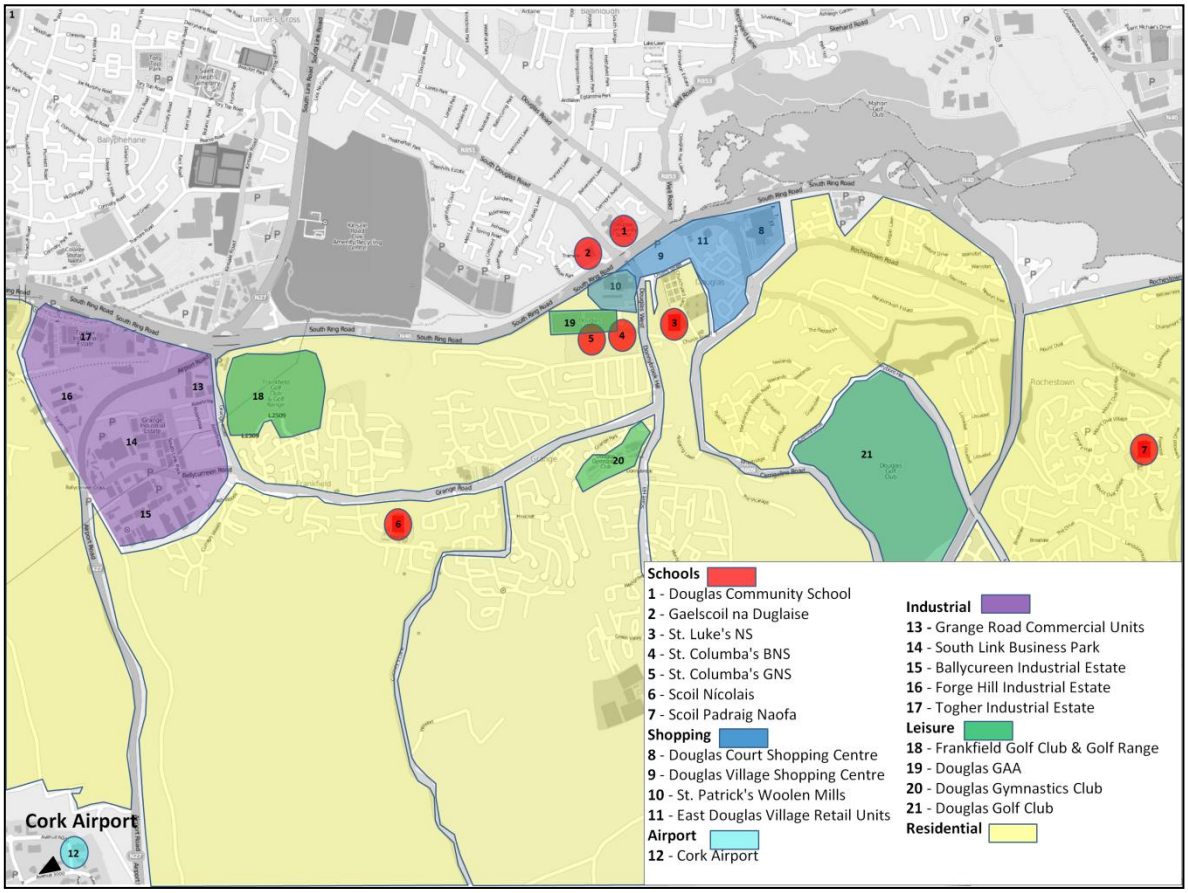
1.4.8 The DLUTS area contains a wide variety of different land uses including, residential, educational, health, industry/employment and retail. The land uses within the DLUTS area which are key destinations for trips include:

- The seven schools located within the DLUTS Area;
- Douglas Court Shopping Centre;
- Douglas Village Shopping Centre;
- St Patrick's Mills;
- East Douglas Village retail units;
- Grange Road commercial units;

- Cork Airport;
- South Link Business Park;
- Ballycurreen Industrial Estate;
- Forge Hill Industrial Estate; and
- Togher Industrial Estate.

1.4.9 Figure 1.5 below shows the different land uses within the DLUTS area.

Figure 1-5 DLUTS Area Land Uses



1.4.10 The majority of residential developments in the DLUTS area are located outside of Douglas Village centre and are largely comprised of medium density developments connected with a cul-de-sac type road network. Some local amenities such as churches, schools, sport grounds and local retail are located within the residential areas, shortening travelling distances and providing the potential for walking and cycling.

1.5 National and Regional Policies that inform DLUTS

Five Year Investment Frameworks (2013-2017) for the Metropolitan Area

1.5.1 The National Transport Authority operates, on behalf of the Department of Transport, Tourism and Sport (DTTAS), a programme of grant assistance to local authorities in regional cities for the development of sustainable transport provision in their administration areas. The grant programme is known as the "Regional Cities Programme". Concurrent with the Douglas LUTS, Cork County and City Councils are finalising their respective Five Year Investment Frameworks (2013-2017) with the National Transport Authority. These investment frameworks will be complementary and focus on limited but targeted transport interventions which aim to achieve the following:

- An increased mode share for walking and cycling: This increase will be mainly related to local trips to work, schools, retail and leisure within the larger urban areas;
- An increased mode share for public transport for work trips to the city centre and other urban centres within the City and its environs. There may be scope to improve public transport mode shares to these centres along the main bus and rail corridors, particularly where this improves access and interchange between bicycle and rail; and
- Enhanced safety for all modes within urban areas, especially for vulnerable road users.

1.5.2 To achieve the objectives, it is intended that there will be a particular focus on delivering the following types of measures:

- Improved walking networks within Cork City and its environs, linking the main residential areas with employment, schools and public transport services. The focus will be on uncluttered footpaths of sufficient width, better crossings and new shortcut links between estates (especially to schools, rail stations, key destinations);
- Provision of priority elements of an agreed cycle network within the City and its environs;
- Improved public transport journey times and reliability – including bus priority measures and traffic signalling; and
- Improved access to and interchange with public transport, with improved bus interchange facilities.

County Development Plan

1.5.3 Cork County Development Plan is a six year plan for the County that attempts to set out Cork County Council's strategy for the proper planning and sustainable development of the County. The plan looks forward to the horizon year of 2020 so that it is aligned with National and Regional planning policies and also so that it can provide an adequate framework for the County's Electoral Area Local Area Plans.

1.5.4 The key aims that underpin the strategy were first developed in the County Development Plan 2003 and this plan seeks to maintain and enhance their implementation into the future in order to achieve:

- Enhanced quality of life for all, based on high quality residential, working and recreational environments and sustainable transportation patterns;

- Sustainable patterns of growth in urban and rural areas, reflecting the need to reduce energy consumption and emissions and taking account of the need to plan for the effects of climate change, that are well balanced throughout the County, together with efficient provision of social and physical infrastructure;
- Sustainable and balanced economic investment, in jobs and services, to sustain the future population of the County together with wise management of the County's environmental, heritage and cultural assets;
- Responsible guardianship of the County so that it can be handed on to future generations in a healthy state.

DECLG Spatial Planning and National Roads

1.5.5 These guidelines have been prepared in the context of the delivery of the National Spatial Strategy and actions identified in Smarter Travel, A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020.

1.5.6 The guidelines set out planning policy considerations relating to development affecting national primary and secondary roads, including motorways and associated junctions, outside the 50-60 km/h speed limit zones for cities, towns and villages. They have been developed by following a number of key principles and aim to facilitate a well-informed, integrated and consistent approach that affords maximum support for the goal of achieving and maintaining a safe and efficient network of national roads in the broader context of sustainable development strategies, thereby facilitating continued economic growth and development throughout the country. Also contained within these guidelines are key steps in undertaking an evidence-based approach for development frameworks and a land use and transport planning checklist.

South West Regional Planning Guidelines

1.5.7 The Planning and Development Act 2000 requires each regional authority to prepare regional planning guidelines. To this end, the South West Regional Authority prepared Regional Planning Guidelines for the South West Region in 2004 to act as a regional tier in the hierarchy of plans and policies that influence local plans such as the development plan.

1.5.8 The task of the Guidelines is to provide a broad canvas to steer the sustainable growth and prosperity of the Region and its people, over the next sixteen years. The Plan contains statements and analysis of key economic objectives, together with a set of planning guidelines to be incorporated within the development plans of the local authorities in the Region.

1.5.9 The strategy covers the South West Region, which incorporates County Cork together with County Kerry. The specific areas that have been identified are divided into four functional areas, namely:

- Greater Cork Area (including Cork Gateway and Mallow Hub);
- Tralee/Killarney Linked Hub;
- Northern Area; and
- Western Area.

1.5.10 Development priorities that have been identified for the Greater Cork Area (including Douglas) in these guidelines were:

- Realignment and reinforcement of spatial planning and land use policies;
- Plan for an increase in the population and employment of the Cork Gateway;
- Refocusing of economic and investment strategy;
- Front-loading of infrastructure and implementation of integrated transport strategy; and
- Priority infrastructure investments for the Cork Docklands.

1.5.11 The Guidelines also prioritise a number of infrastructural provisions and up-grades for the Greater Cork Area and these include:

- Cork Docklands Road and Bridge infrastructure;
- The remaining stages of the Cork Suburban Rail Network;
- Upgrading of N25 Cork-Waterford;
- The N28 servicing the major industrial developments at Ringaskiddy; and
- The N25 flyovers within Cork City.

National Spatial Strategy

1.5.12 The National Spatial Strategy (NSS), 2002-2020 is a twenty year strategic planning framework designed to counterbalance disparities in regional development. Cork is classed as a "Gateway" under the NSS. As a Gateway, Cork has a strategic location, nationally and relative to their surrounding areas, and provides national scale social, economic infrastructure and support services.

1.5.13 According to the NSS, of the regional cities, Cork has the most immediate potential to be developed to the national level scale required to complement Dublin. The Cork Area Strategic Plan (CASP) sets a positive agenda for proceeding in this direction, given the emphasis in it on enhancing Cork's capabilities as a metropolitan, business friendly, public transport based and physically attractive city.

National Development Plan

1.5.14 This Plan sets out the development strategy for the Country over a seven-year period, which is supported by quantified, multi-annual investment proposals in all sectors of the economy. It also seeks to promote social inclusion, gender equality and more balanced regional development. Economic infrastructure has been identified as a top priority within the National Development Plan (NDP), 2007-2013, which includes transport infrastructure. Three broad transport investment priorities have been identified:

- Rail / Public Transport;
- Airports; and
- Ports.

1.5.15 The plan states that Atlantic Gateways such as Cork have the potential through strengthened individual cities, enhanced connectivity and a collaborative approach to planning and promotion, to develop the second major metropolitan corridor on the island of Ireland to complement and counterbalance the strengthening Dublin-Belfast corridor. Investment in key projects such as the Atlantic Corridor, embracing road and rail links under Transport 21, will help unlock the potential of the Atlantic Gateways concept. Further collaboration between the Atlantic Gateways in preparing and implementing joint development strategies will also be supported by this Plan.

1.5.16 The NDP also has a specific transport programme, with a total investment target of €32.9 billion. €17.6 billion of this being allocated to the provision and upgrade of roads and €13.0 billion being provided for the Public transport sub programme. Under the roads sub-programme, of key importance are improvements of road links between the main NSS Gateways, targeted improvements of national secondary routes and the improvement and maintenance of the non-national roads network.

National Transport Authority - National Cycle Strategy

1.5.17 This National Cycle Manual embraces the principles of Sustainable Safety to offer a safe traffic environment for all road users including cyclists. It offers guidance on how to integrate cycling into urban area design and transport networks. It aims to challenge planners and engineers to be more proactive in integrating bicycles into transport networks than before. The overall objective is to plan for and encourage many more people to choose and use the bicycle in Irish towns and cities.

Smarter Travel

1.5.18 Under the Government **Smarter Travel** policies it would be desirable to promote Douglas as a model town with regards to sustainable travel. This study can give Douglas a substantial head start in making progress towards the government targets. This Transport Strategy can act as a clear framework for ensuring this long term objective is realised.

1.5.19 To ensure these long term sustainable travel objectives are met in the long term, it is essential that a town centre environment is created where pedestrian and cyclist activities are accommodated and encouraged.

1.5.20 There are five key goals which form the basis of the policy:

- Improve quality of life and accessibility to Transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport;
- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks;
- Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions;
- Reduce overall travel demand and commuting distances travelled by the private car; and
- Improve security of energy supply by reducing dependency on imported fossil fuels.

Carrigaline Electoral Area Local Area Plan 2011

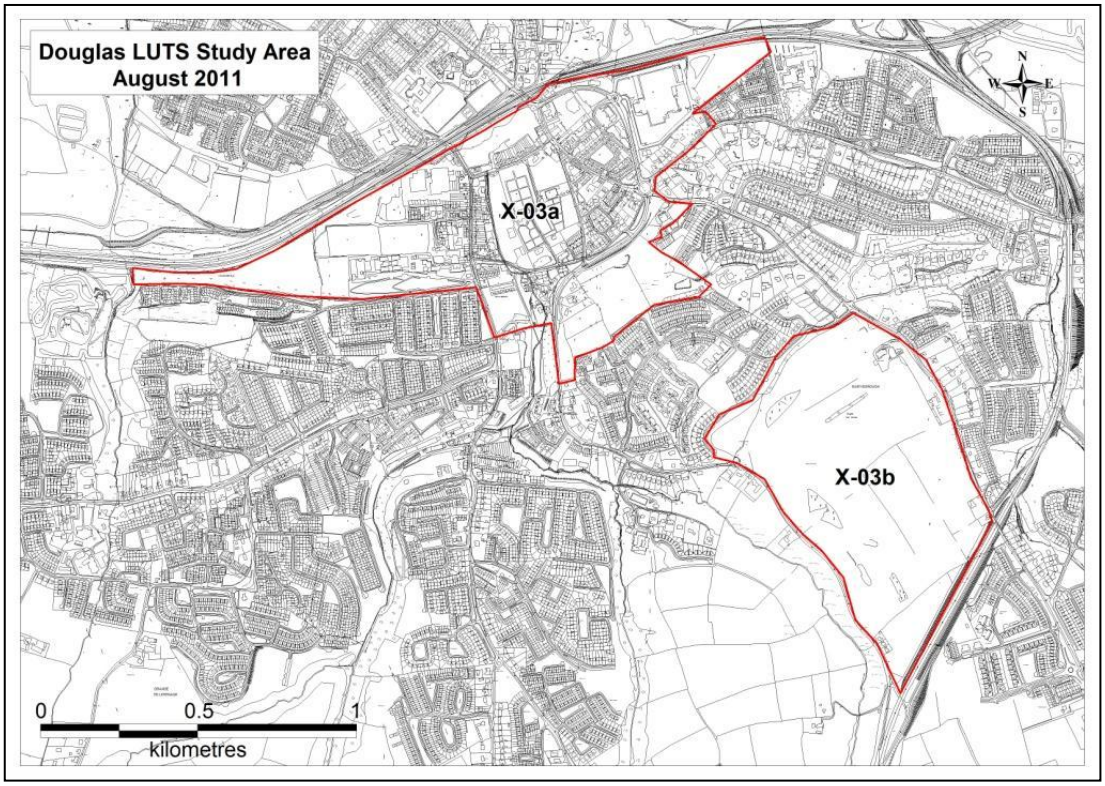
1.5.21 The Carrigaline Electoral Area Local Area Plan (2011) identified an opportunity for the Douglas area "to evolve into a fully functional mixed use higher order centre in terms of its development density and its retail offer with an improved public transport, accessibility and parking demand management system". It proposed in the Local Area Plan that a Land Use and Transportation Study (LUTS) should be prepared for the Douglas area as a priority. The proposed Douglas Land Use and Transport Study (DLUTS) is a response to resolving the competing demands for more housing and retail development and balancing this with the provision for better transportation, environment and community facilities. This LUTS Study will be prepared for Douglas and the Local Area Plan has zoned two Special Policy Areas around the Douglas Town Centre (X-03a) and around the land described as the Douglas Golf Course (X-03b).

1.6 DLUTS Requirements

1.6.1 The DLUTS requirements incorporate Land Use, Urban Design and Transport objectives and can be summarised as follows:

- to provide a framework for future planning decisions;
- to encourage sustainable travel by walking, cycling and public transport;
- the need to reduce the number of short distance car-based trips within the DLUTS Area, particularly those relating to Douglas Village as a destination;
- the need to provide for improved service reliability for bus services operating through Douglas Village;
- to make more efficient use of the transport network;
- to provide a guide to the investment in transport infrastructure;
- to identify the capacity of the town centre for additional retail and other development;
- Public realm improvements and the creation of a stronger commercial focus within Douglas Village;
- to inform the future of two areas zoned 'Special Policy Areas' (Douglas Town Centre X-03a and the lands described as Douglas Golf Course X-03b) in the Carrigaline Electoral Area Local Area Plan (2011), shown in Figure 1.6 below; and
- to make Douglas a more competitive and vibrant urban centre in the metropolitan area of Cork.

Figure 1-6 Douglas Special Policy Areas



1.6.2 DLUTS makes recommendations on the feasibility of augmenting and developing the transport system serving the DLUTS Area in tandem with anticipated growth in land use and changes to the public realm, so it will be capable of catering for the medium (2022) and long term (2032) demands of the area.

1.7 Approach to developing DLUTS

1.7.1 The key elements of the DLUTS methodology make up seven detailed project stages as follows:

- Stage 1: Project Inception;
- Stage 2: Evaluation of Existing Situation;
- Stage 3: Option Development;
- Stage 4: Option Assessment;
- Stage 5: Develop Future Plans;
- Stage 6: Consultative Phase; and
- Stage 7: Final Reporting.

1.7.2 The DLUTS methodology is detailed in Chapter 2 of this report.

1.8 Structure of Report

1.8.1 The remainder of this report is structured as follows:

- **Chapter 2 Methodology for developing DLUTS:-** This chapter provides an outline of the methodology used and steps taken in devising the Douglas Land Use and Transportation Strategy.
- **Chapter 3 Existing Land Use Conditions:-** This chapter provides a summary of the Baseline Land Use Evaluation Report.
- **Chapter 4 Existing Urban Design Conditions:-** This chapter provides a summary of the Baseline Urban Design Report.
- **Chapter 5 Existing Transport Conditions:-** This chapter provides a summary of the Baseline Traffic Evaluation Report and provides an overview of the surveying process undertaken for the DLUTS as well as outlining local issues and a baseline junction evaluation.
- **Chapter 6 Guiding Principles:-** This Chapter outlines the land use, urban design and transport principles which guide the study.
- **Chapter 7 Developing and Evaluating DLUTS:-** This chapter outlines the development and evaluation of the proposed strategy regarding land use, urban design and transport.
- **Chapter 8 DLUTS Land Use Strategy:-** This chapter presents the proposed Land Use Strategy that has been developed to support the Vision and Objectives for Douglas.
- **Chapter 9 DLUTS Urban Design Strategy:-** This chapter presents the proposed Urban Design Strategy that has been developed to support the Vision and Objectives for Douglas.
- **Chapter 10 DLUTS Transport Strategy:-** This chapter presents the proposed strategic and local traffic management recommendations that have been developed to support the Transport Strategy Vision and Objectives. Chapter Eight also presents the Pedestrian and Cycle, Public Transport and Schools Plans.
- **Chapter 11 Implementation of DLUTS:-** This chapter outlines the implementation plan for each proposed measure to ensure the strategy can be fully implemented in the short, medium and long term.
- **Chapter 12 Conclusions and Recommendations:-** Finally, this chapter provides a summary of the key recommendations.
- **Appendices: (these are separate from the Final Report)**
- **Appendix 1 Consultation Reports 1 & 2**
- **Appendix 2 Douglas Traffic Model Validation Report**
- **Appendix 3 Baseline Traffic Report**
- **Appendix 4 Junction Recommendations Details**
- **Appendix 5 Photomontages**
- **Appendix 6 3rd Consultation Report**

2 DLUTS Methodology

2.1 Introduction

2.1.1 The DLUTS methodology is underpinned by best practice approaches to land use, urban design and transport assessment, modelling and evaluation techniques.

2.1.2 The DLUTS methodology also follows the recommended approach outlined in the Department of Environment, Community and Local Government (DECLG) Guidelines relating to Spatial Planning and National Roads. These guidelines set out planning policy considerations relating to development affecting national primary and secondary roads, including motorways and associated junctions, outside the 50-60 kmh speed limit zones for cities, towns and villages. Also contained within these guidelines are key steps in undertaking an evidence-based approach for development frameworks and a land use and transport planning checklist which have greatly informed the development of DLUTS.

2.1.3 The key steps recommended by these guidelines for building an Evidence-Based Approach to plan development are as follows:

- **Step1:** Identifying and consulting with the key stakeholders in developing an integrated approach;
- **Step 2:** Confirmation of the national and/or higher level policy context for the development plan proposals;
- **Step 3:** Developing evidence based tools such as traffic models, including agreement between stakeholders in relation to acceptable data and assumptions;
- **Step 4:** Identification of demand management and mitigation measures to minimise the transport impact of the plan;
- **Step 5:** Identification of any infrastructural enhancements required and phasing; and
- **Step 6**: Agreement between stakeholders on a delivery strategy including funding arrangements.

2.1.4 The DLUTS methodology follows a similar evidence based approach outlined by the DECLG guidelines and has two key phases:

- Project management & stakeholder engagement; and
- Technical methodology for delivering DLUTS.

2.1.5 These phases are discussed below for the remainder of this chapter.

2.2 Project Management & Stakeholder Engagement

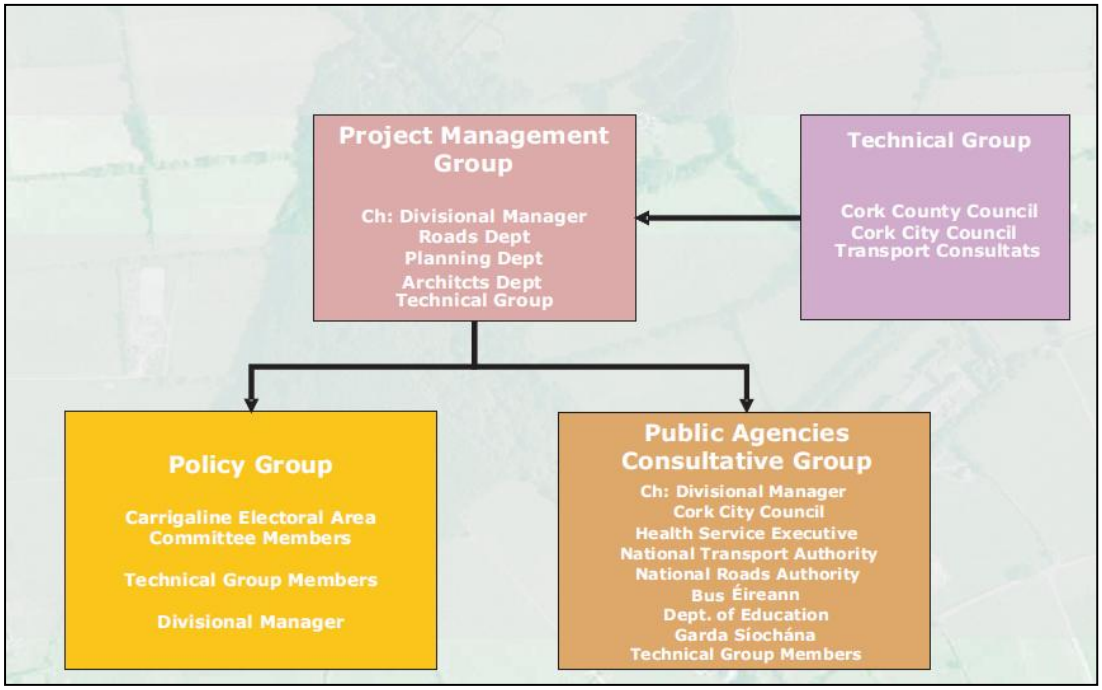
Project Management

2.2.1 Project Management has been a key component of DLUTS strategy development. Figure 2.1 below describes the project organisational structure. The overall project management for the delivery of DLUTS study is the responsibility of the Project Management Group (PMG) who

approve work undertaken by the Technical Group before it is submitted to the Policy Group (PG) and the Public Agencies Consultative Group for sign-off.

2.2.2 All approaches, methodologies, outputs, deliverables (e.g. Baseline, Interim and Final reports) and decisions are, firstly, signed off by the Project Management Group and then, secondly, presented in draft form to the Policy Group (PG) and Public Agencies Consultative Group (PACG) for further feedback. All feedback and comments received from the PG and PACG are incorporated into final versions of all methodologies, outputs and deliverables.

Figure 2-1 DLUTS Project Organisational Structure



Stakeholder Engagement

2.2.3 Stakeholder engagement is a vital component for the development of DLUTS. From the outset, key stakeholders were contacted in writing and encouraged to give written submissions of their views on any land use, urban design and transport issues in the DLUTS Area. A total of 44 stakeholders and local representatives were initially contacted for their views and invited to make submissions. Thirty four submissions were received. Table 2.1 below presents the number and names of the local stakeholders which were contacted, and the number of written submissions received.

Table 2.1 Stakeholders Contacted

Group, organisation or individual consulted	Method of consultation	Number contacted	Response
Local Sport groups	Contacted by letter and invited to respond by letter or email.	6	2 submission received
Local community groups	Contacted by letter and invited to respond by letter or email.	4	2 submission received
Religious stakeholder organisations	Contacted by letter and invited to respond by letter or email.	3	0 submissions received
Local Schools (including primary and secondary and Department of Education)	Contacted by letter and in person and invited to respond by letter or email.	23	16 submissions received
Health Organisations	Contacted by letter and phone call and invited to respond by letter or email.	2	0 submission received
Business representatives (Douglas Chamber of Commerce)	Contacted by letter and phone call and invited to respond by letter or email.	1	1 submission received
Transport stakeholders	Contacted by letter and phone call and invited to respond by letter or email.	5	4 Submissions received
Local Land owners and private individuals	Invited to make submissions at public consultation meeting and in adverts in local media	Open invitation	9 Submissions received
Total		**44**	**34**

2.2.4 Written submissions were received from the following public stakeholders:

- Bus Éireann;
- Cork Taxi Drivers Association;
- Department of Education;
- Douglas Business Association;
- Douglas Community Association;
- Douglas Golf Club;
- Douglas Gymnastics Club;
- Dublin Airport Authority;
- Grange Frankfield Partnership; and
- National Roads Authority.

2.2.5 These responses were collated and analysed and contributed towards developing a fuller understanding of current land use, urban design and transport issues in the DLUTS Area. The consultation process continued throughout the development of DLUTS including the running of three separate public exhibitions (described below in the Technical Methodology Section) at various stages of DLUTS development. This process ensured that the general public and stakeholders were always kept up to date on the progress of DLUTS and of key decisions and recommendations that were made.

2.3 Technical Methodology for Delivering DLUTS

2.3.1 Figure 2.2 below illustrates the seven stages involved in the technical methodology for delivering DLUTS. These stages are as follows:

- Stage 1: Project Inception;
- Stage 2: Evaluation of Existing Situation;
- Stage 3: Option Development;
- Stage 4: Option Assessment;
- Stage 5: Develop Future Plans;
- Stage 6: Consultative Phase; and
- Stage 7: Final Reporting.

Stage 1 - Project Inception

2.3.2 The purpose of the Project Inception stage ensured that a full understanding of the requirements of the brief and study objectives was established. A DLUTS vision statement, specific DLUTS objectives and Key Performance Indicators (KPI's) were also developed for DLUTS at this stage. An Inception meeting was held at the beginning of the project in March 2012 to establish lines of communication and to identify the key stakeholders and the extent of information and data availability.

2.3.3 Stage 1 contains the following key processes:

- Develop Vision, Objectives & Key Performance Indicators for DLUTS; and
- 1st Public Consultation.

Develop Vision, Objectives & Key Performance Indicators for DLUTS:

2.3.4 A strategic vision for DLUTS was developed along with a set of specific DLUTS objectives and Key Performance Indicators (KPI's). These represented the foundation for which land use, urban design and transport options were measured against and how strategy goals would be quantified and measured through the land use and transport modelling process. Please refer to Chapter Five of this report for a full explanation of the objectives and key performance indicators used.

1st Public Consultation:

2.3.5 Also part of the Inception Stage involved the running of a public exhibition to make people aware of DLUTS and to invite them to make submissions to inform the DLUTS team of any issues or concerns they may have relating to land use and transport.

2.3.6 On the 17th of April the 1st Public Exhibition was held in the Rochestown Park Hotel between the hours of 15:00 and 21:00. Members of the public were invited to attend and the event was advertised in local newspapers and on local radio. The event was hosted by eight members of the DLUTS team from both MVA consultancy and Cork County Council. Visitors who attended were invited to view a number of presentation boards which outlined the vision, aims, objectives, methodology and timeframe for the development of the DLUTS. Some examples of the presentation boards used are shown in Figure 2.3 below. Visitors were encouraged to talk to members of the DLUTS team and discuss any issues or concerns in relation to the study with them. Visitors were also given the Travel Survey questionnaire for DLUTS and asked to complete it before they left. The Travel Survey asked questions about the persons travel patterns which were fed into the model. The exhibition was well attended, with a constant flow of visitors throughout the day. In total over 130 people attended the exhibition and over 50 completed questionnaires were received during the exhibition.

2.3.7 The 1st Public Consultation report is contained in Appendix 1.

Figure 2-2 DLUTS Technical Methodology Flowchart

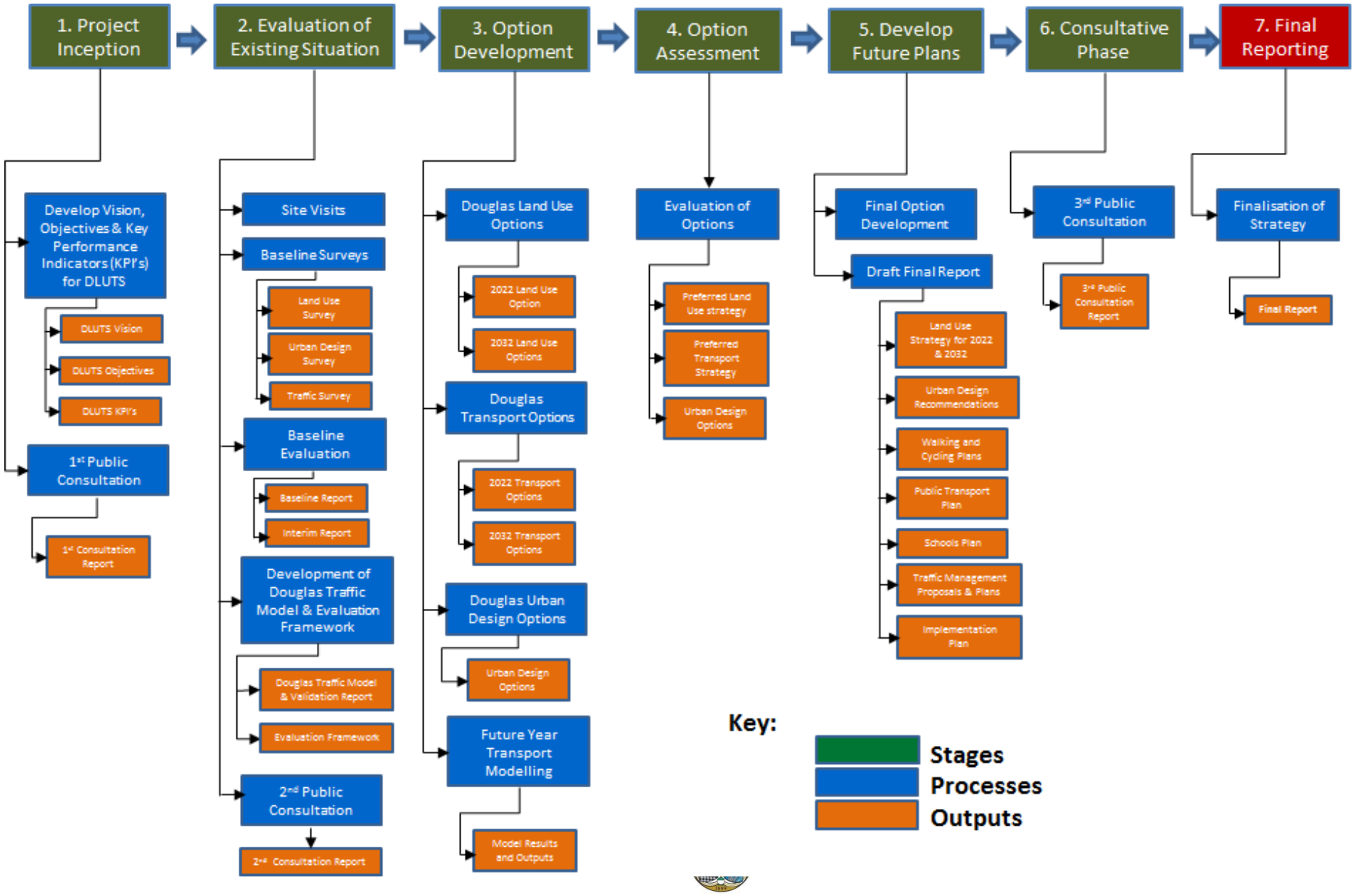
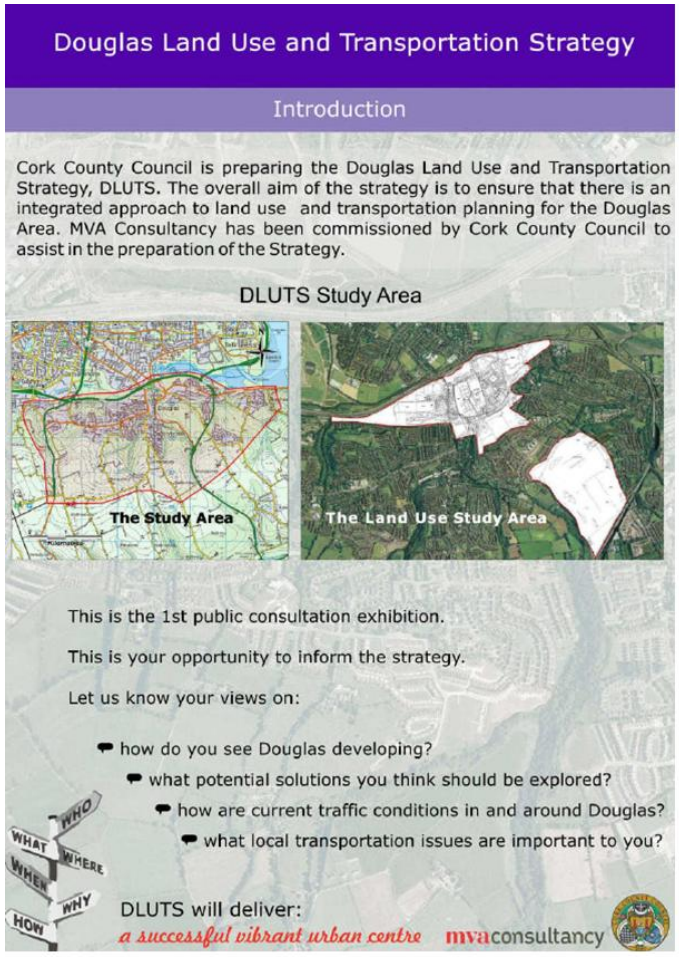
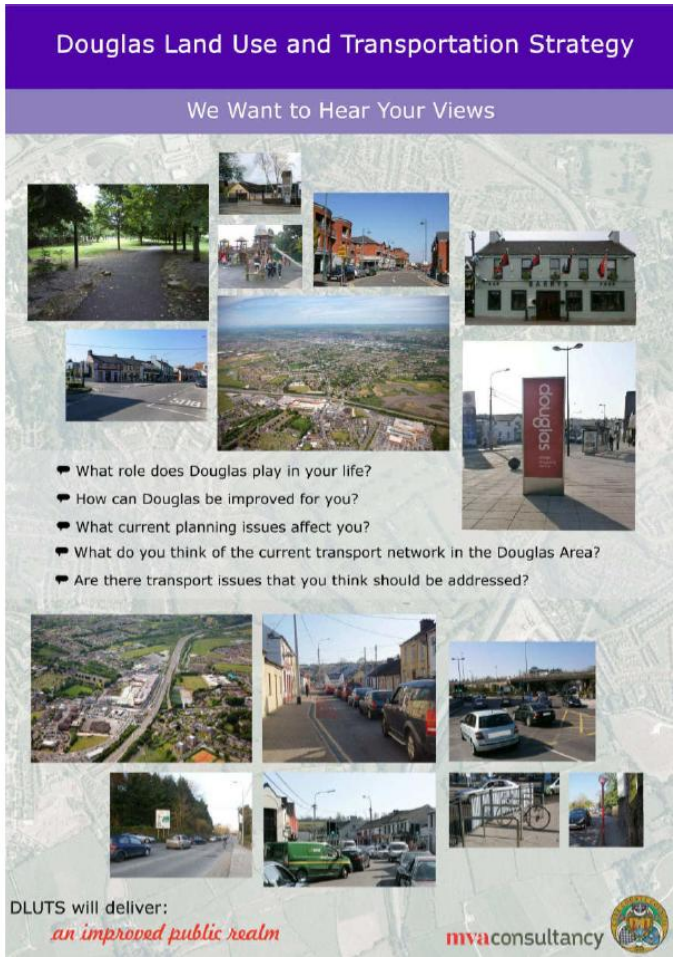


Figure 2-3 Examples of 1st Public Exhibition Posters





Stage 2 - Evaluation of Existing Situation

2.3.8 The purpose of this stage was to facilitate an understanding of the existing land use, urban design and transport environment within the DLUTS area.

2.3.9 This stage contains the following key processes:

- Site visits;
- Baseline Surveys & Evaluation;
- Development of Douglas Traffic Model & Evaluation Framework; and
- 2nd Public Consultation.

Site Visits:

2.3.10 A series of site visits were undertaken in Douglas and its environs during March and April of 2012 to help develop a greater understanding of existing land use, urban design and transport situation and issues.

2.3.11 During the site visits the following actions were undertaken:

- detailed observations were made of current traffic management arrangements and how they affect each mode of transport;
- an examination of the conditions experienced by each road user type (i.e. mobility impaired individuals, pedestrians (including school children), cyclists, cars, taxi's, buses, heavy goods & delivery vehicles and so on);
- an examination of travel behaviours of people travelling around the DLUTS Area and how they respond to the existing transport network arrangements;
- a detailed Retail Survey and Health check was undertaken by the PPU to evaluate the retail conditions and accurately quantify the amount of retail floor space;
- a street scape assessment to evaluate the public realm in Douglas;
- observations of local land uses and their influence of traffic and transport arrangements;
- detailed auditing of junction arrangements including traffic lane definition, traffic signal arrangements, junction type, priority arrangements for public transport, access arrangement for schools and key land uses etc. (this information was required for the traffic model developed specifically for DLUTS to test traffic management and land use options);
- an evaluation of road safety issues; and
- an extensive set of photographic records.

Baseline Surveys & Evaluation:

2.3.12 In addition to site visits, a comprehensive set of traffic surveys were commissioned during April 2012. This data was primarily used to further inform existing traffic and transport issues within the DLUTS Area and to inform the development of the Douglas Transport Model

(DTM). Details of the development and validation of the DTM are contained within Appendix 2.

2.3.13 In summary, the following traffic surveys were undertaken (shown in Figures 2.4 and 2.5 below):

- Classified junction turning count surveys at 21 locations;
- Registration plate surveys at 9 locations;
- Journey time surveys (4 routes, each way);
- Automated Traffic Counters (ATCs) over seven survey days at 15 locations; and
- Link Counts, surveying pedestrian and cyclist flows at 16 locations.

Figure 2-4 Traffic Survey Locations

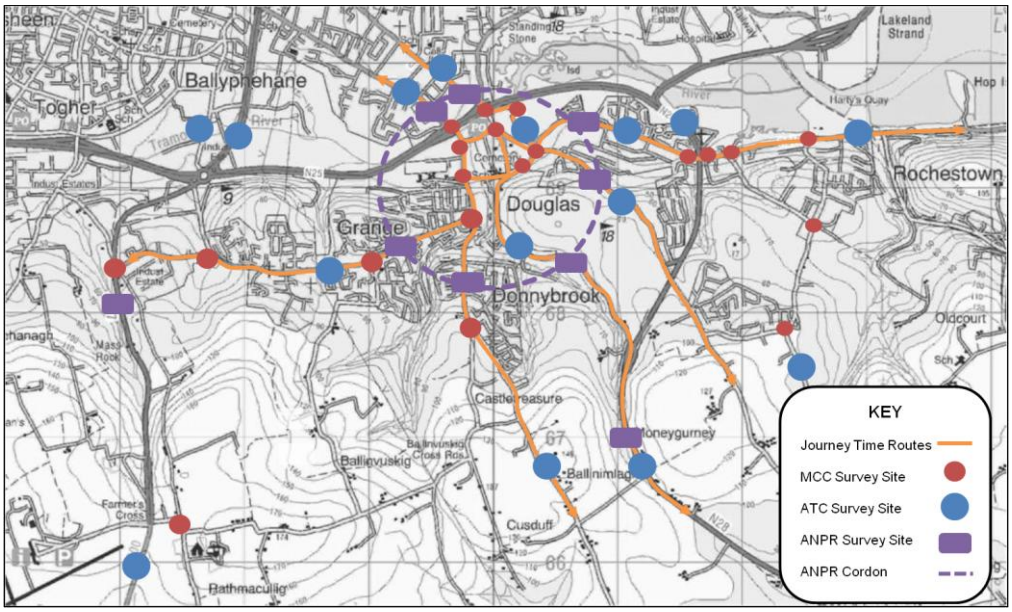


Figure 2-5 Pedestrian and Cycle Survey locations

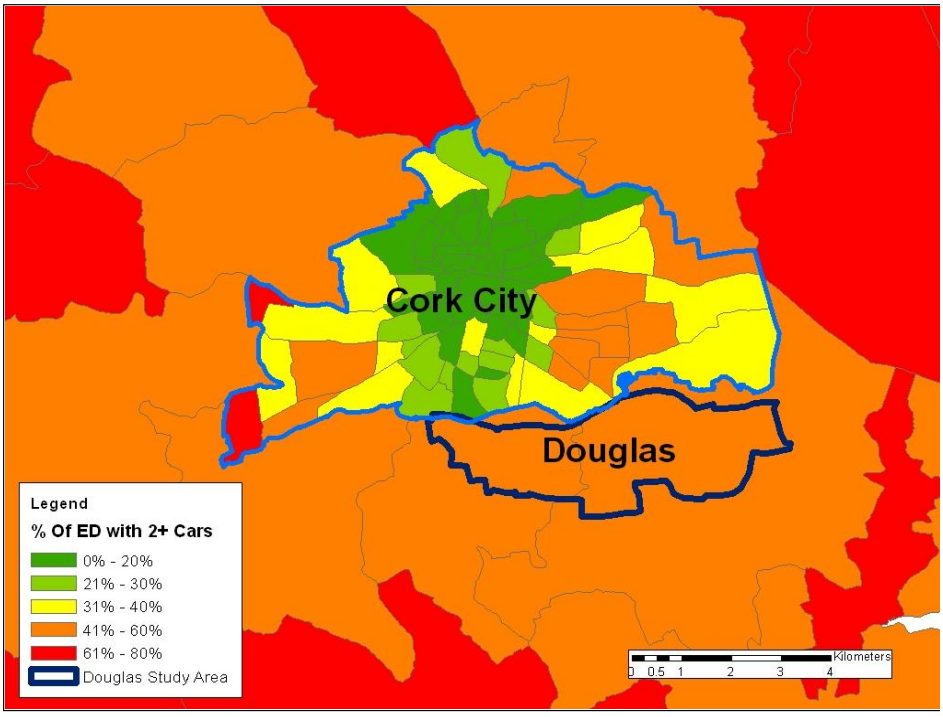
2.3.14 Place of Work Census Anonymised Records (POWCAR[1]) were used to determine work travel patterns for the DLUTS Area. The strength of the POWCAR data is that it provides very important baseline travel information for the AM Peak period (07.00-10.00am) for journeys to work, linking:

- the origin of the journey;
- the destination of the journey;
- by time of departure;
- the estimated time to complete the journey;
- the estimated journey distance in kilometres; and
- the mode taken for the trip travel to work (in terms of car, public transport, walking and cycling etc.).

2.3.15 Small Area Population Statistics (SAPS[2]) were also analysed. These allow key demographic statistics such as population, car ownership, primary means of travel and so on to be analysed at the Local Electoral District Level.

2.3.16 The analysis of POWCAR and SAPS data allowed travel to work patterns and demographic profiles to be established, which in turn enabled an understanding of movement patterns within the DLUTS area and the role of each mode of transport (i.e. car, public transport, walking and cycling) plays in transporting people to places of work and education. Examples of the analysis carried out using the POWCAR and SAPS data are shown below in Figures 2.6 and 2.7 which show car ownership levels and mode share of work trips respectively. Full details of the POWCAR and SAPS analysis are contained within Appendix 3.

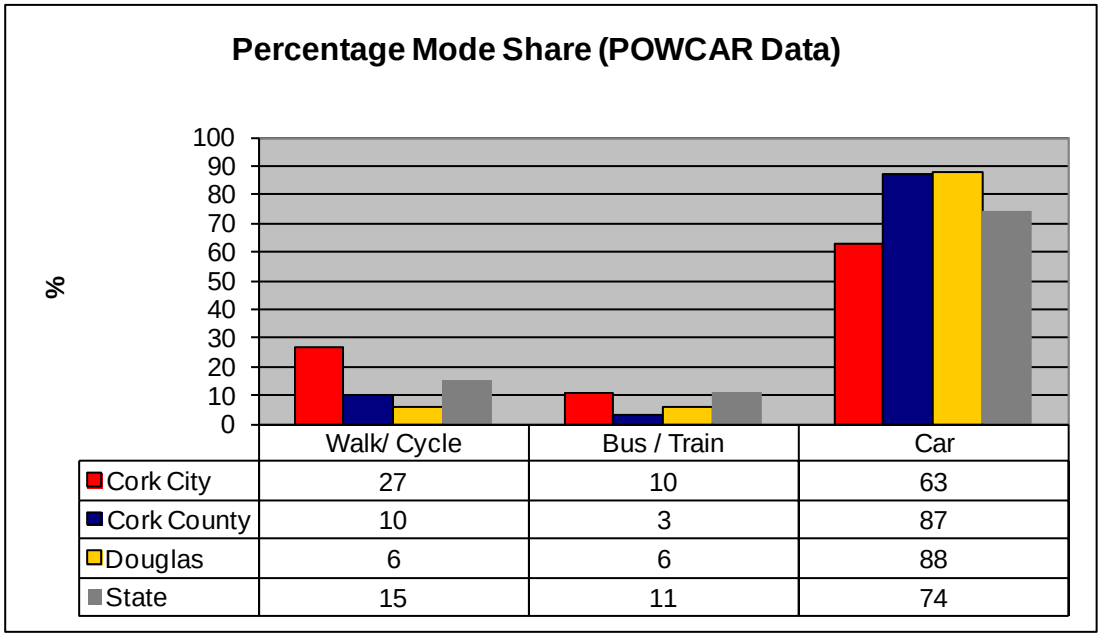
Figure 2-6 CSO Data- Percentage of Households with 2 or more cars



[1] A detailed database containing the demographic and socio-economic characteristics of these workers along with information on the origin and destination of their journeys to work

[2] Small Area Population Statistics are Census 2011 statistics produced for a range of geographical levels from state to small areas

Figure 2-7 POWCAR Data - Travel to Work Mode Share



	Walk/ Cycle	Bus / Train	Car
Cork City	27	10	63
Cork County	10	3	87
Douglas	6	6	88
State	15	11	74

2.3.17 To further supplement the understanding of the existing travel situation in the DLUTS Area an online travel survey was developed in April 2012 to enable the general public to provide information on their existing travel patterns. The main aim of the travel survey was to find out where people travelled to and from, what modes of transport they used and why they travelled. Other questions from the travel survey include:

- Start time and end time for attending work and education;
- Mode most often used;
- Reasons for choice of mode;
- What improvements would encourage you to use public transport; and
- What improvements would encourage you to walk or cycle.

2.3.18 A link to the travel survey was placed on the Cork County Council website and in addition to this, invitations to participate in the survey were sent to a number of key employers within Douglas and to members of the public who attended the 1st Public Consultation (described below in Stage 3).

2.3.19 A baseline Land Use survey and Urban Design survey were also undertaken. The main aim behind the Land Use Survey was to investigate the type, location and extent of land uses within the DLUTS Area; in particular the primary use of the town centre; that of retail and associated activities. The main aim of the Baseline Urban Design Survey was to assess the current quality of Urban Design particularly in Douglas Village and the constraints, opportunities and potential that exists to make improvements to the public realm. The primary purpose of the Interim Report was to document and report on the large volume of work carried out during the first six stages of DLUTS development, described above. The Baseline Traffic Report is contained within Appendix 3 of this report.

2.3.20 This was submitted to the Project Management Group in August 2012 and following a detailed review was presented to the PACG and Policy Groups. Comments from the PACG and Policy Groups were then incorporated into the Interim report which was completed in October 2012. The Interim Report contains the following:

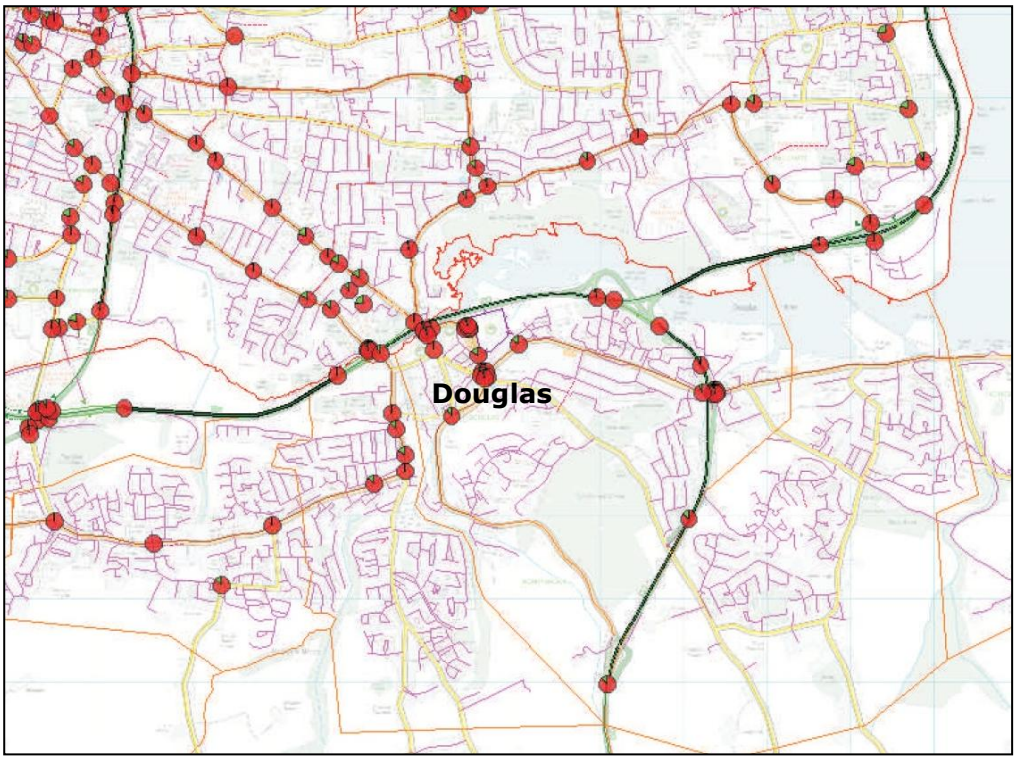
- Baseline Transport Analysis;
- Baseline Land Use Analysis;
- Baseline Urban Design Analysis;
- 1st Public Consultation Report;
- Douglas Model Validation Report;
- Exhibition Boards from 1st and 2nd Public Exhibitions; and
- 2nd Public Consultation Report.

Development of Douglas Traffic Model & Evaluation Framework:

2.3.21 Stage 2 also involved the development of the Douglas Traffic Model (DTM) and evaluation framework specifically developed to evaluate the transport benefits and impacts of various land use strategies and options and the benefits of mode share changes resulting from improvements to public transport, walking and cycling as well as impacts associated with improvements to the local road network (e.g. junction improvements).

2.3.22 The traffic modelling approach used for DLUTS is based on international best practice and has been developed to take advantage of the key strengths of the available models in the Cork Area (i.e. Cork City Council's Cork Area Strategic Planning (CASP) OmniTRANS and SATURN Model suite). The CASP OmniTRANS and SATURN model incorporates the full road network in the Cork Region and also includes data on land use and future development, which is essential to the strategy development process for Douglas. The model also incorporates the essential ability to assess mode changes between car, public transport, and walking/cycling. The DTM has been developed directly from the CASP Model and represents the DLUTS Area in a higher level of detail. The DTM network covers the full extent of the DLUTS Area and was developed to accurately reflect the current (2012) traffic conditions in Douglas.

Figure 2-8 Example of CASP Model Network



2.3.23 Two micro traffic management models were also developed (in Linsig[3]) to provide a more detailed analysis of specific signal timing and junction proposals at the village centre (extending from Fingerpost Roundabout, incorporating all junctions, as far as the junction of West Douglas Street and the New Link Road) and at the N28 on-ramp and off-ramp junctions with the Rochestown Road at St. Patrick's Roundabout. Appendix 2 of this report contains full details on these models.

2.3.24 A bespoke spreadsheet model based on Census travel statistics was also developed to calculate the total number of trips generated by car, public transport, walking and cycling. This model provided information on the number of trips made by car to be included in the DTM for each future year test. This model was also used to take account of the impact of DLUTS land use and transport recommendations on walking, cycling and schools strategies by predicting the changes in the number of trips made by the various modes of transport.

2.3.25 Finally, an evaluation framework was developed to take outputs from the modelling process, described above, to test various land use and transport options in line with the evaluation objectives and KPI's developed as part of Stage 1 – Project Inception, described above. Please refer to Chapter 5 for further information on the Evaluation Framework.

2nd Public Consultation:

2.3.26 On the 24th July 2012 a second public exhibition was held in the Rochestown Park Hotel between the hours of 15:00 and 21:00. Members of the public were invited to attend and the event was advertised in local newspapers and on local radio. The purpose of this

[3] LINSIG is a software tool which allows traffic engineers to model traffic signals and their effect on traffic capacities and queuing

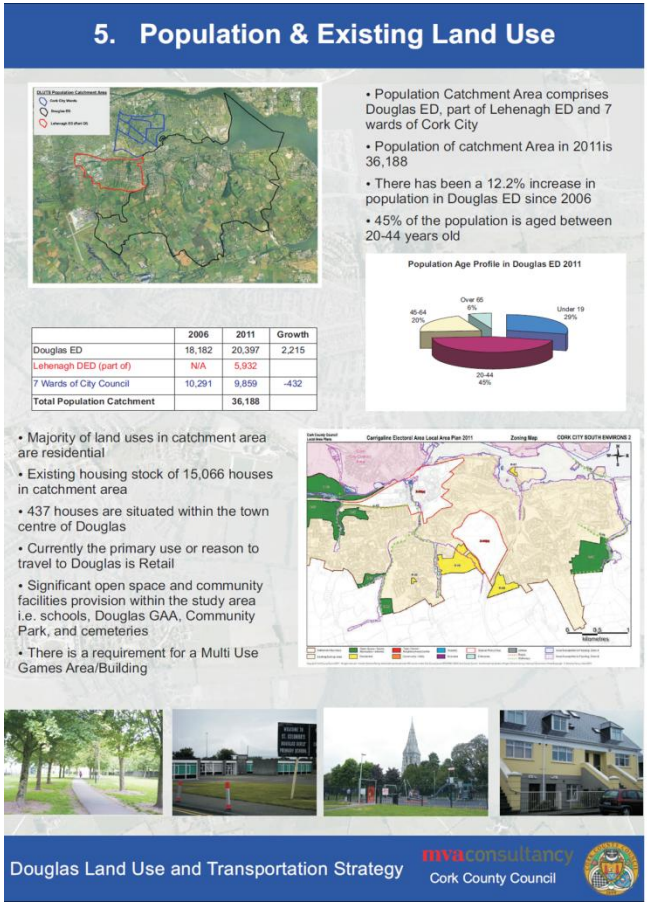
exhibition was to present the findings of the baseline analysis and to give members of the public and stakeholders a further opportunity to give their opinions on DLUTS.

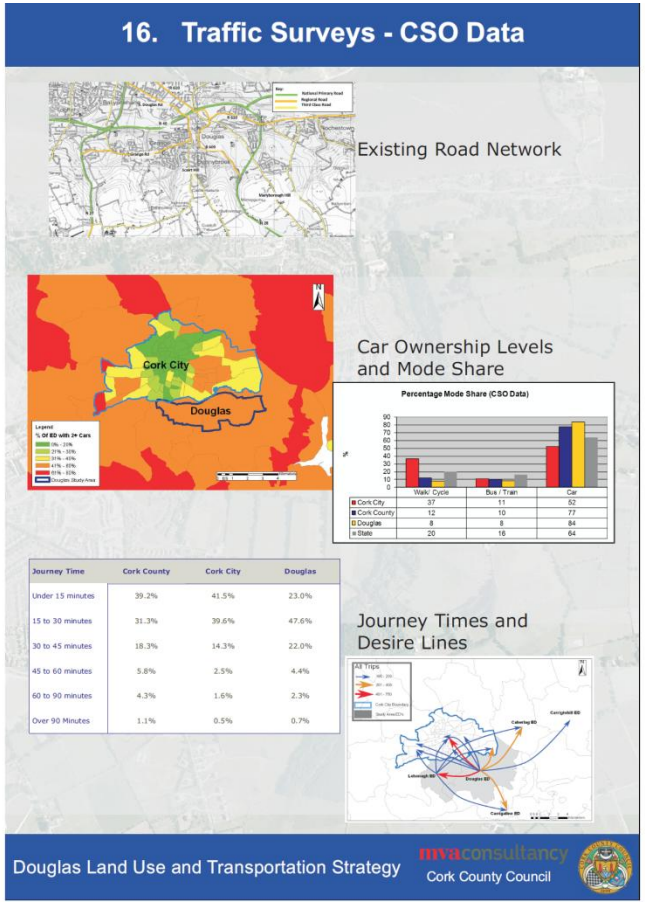
2.3.27 Similar to the 1st Public Exhibition the event was hosted by eight members of the DLUTS team from both Cork County Council and MVA consultancy. Visitors who attended were invited to view a number of presentation boards which outlined the existing Retail, Land Use, Urban Design, Environmental and Traffic Conditions in Douglas as well as Emerging Themes and Next Steps for the project. Figure 2.9, below, shows examples of the posters presented at this exhibition. Visitors were encouraged to talk to members of the DLUTS team and discuss any issues or concerns in relation to the study with them.

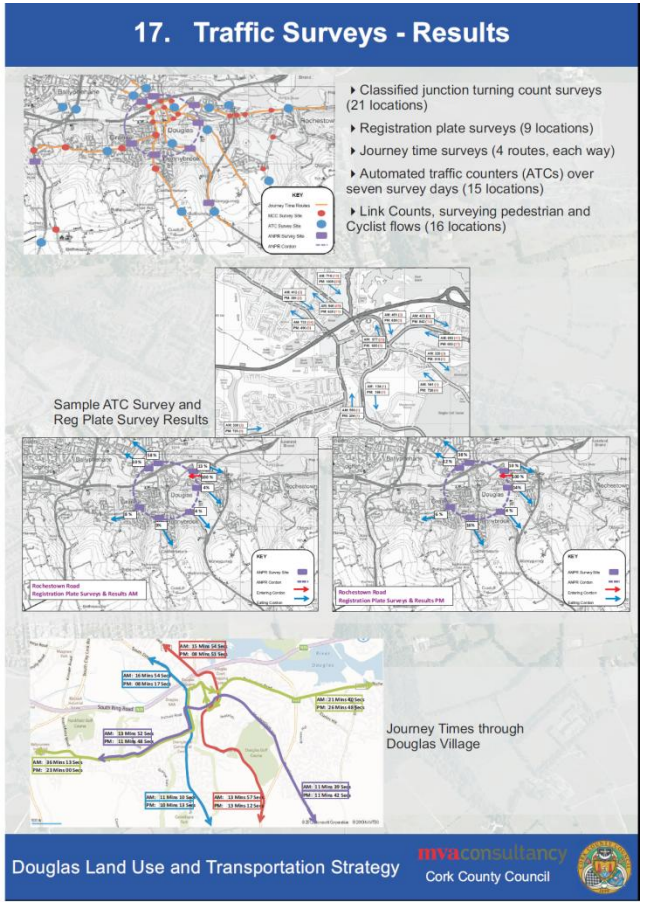
2.3.28 The exhibition was well attended, with a constant flow of visitors throughout the day. In total over 100 people attended the exhibition.

2.3.29 The 2nd public consultation report is contained within Appendix 1.

Figure 2-9 Examples Posters from 2nd Public Exhibition







Stage 3 – Option Development

2.3.30 The purpose of Stage 3 was to begin the option development phase for land use and transport and to develop future year model scenarios for assessment.

2.3.31 This stage contains the following key processes:

- Douglas Land Use Options;
- Douglas Transport Options;
- Douglas Urban Design Options; and
- Future Year Land Use & Transport Modelling Methodology.

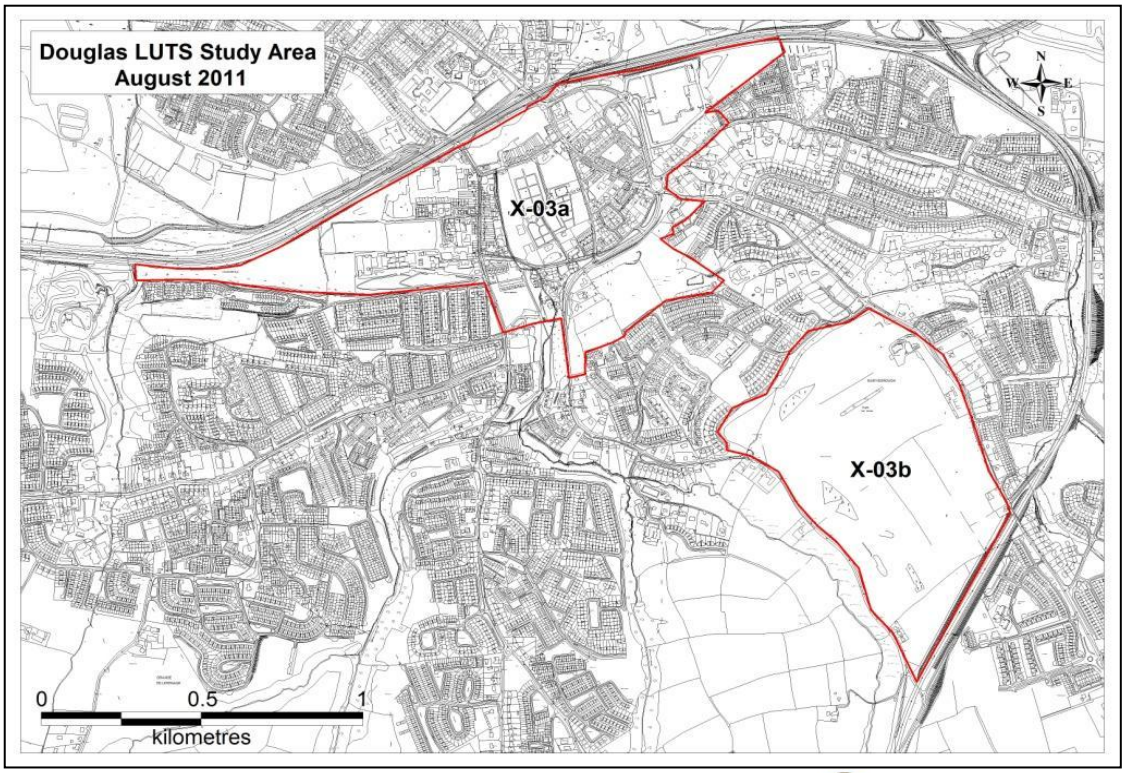
Douglas Land Use Options:

2.3.32 Following an evaluation of the existing land use and transport conditions, alternative Land Use Scenarios for the areas zoned as Special Policy Areas X-03a and X-03b (shown below in Figure 2.10 below) were developed.

2.3.33 The year 2022 was chosen as the medium term horizon year for DLUTS assessment as this is the date that the existing CASP strategy runs to. As, due to the economic climate, only a small amount of development is expected to take place between 2013 and 2022 a further, long term, horizon year of 2032 was chosen for the strategy. The years 2022 – 2032 were therefore used to test various land use development options.

2.3.34 It was decided that all economic targets of statutory plans would be adhered to up to 2022 and that only limited retail development (infilling of vacancy and committed development) would take place between 2013 and 2022.

Figure 2-10 Douglas Special Policy Areas

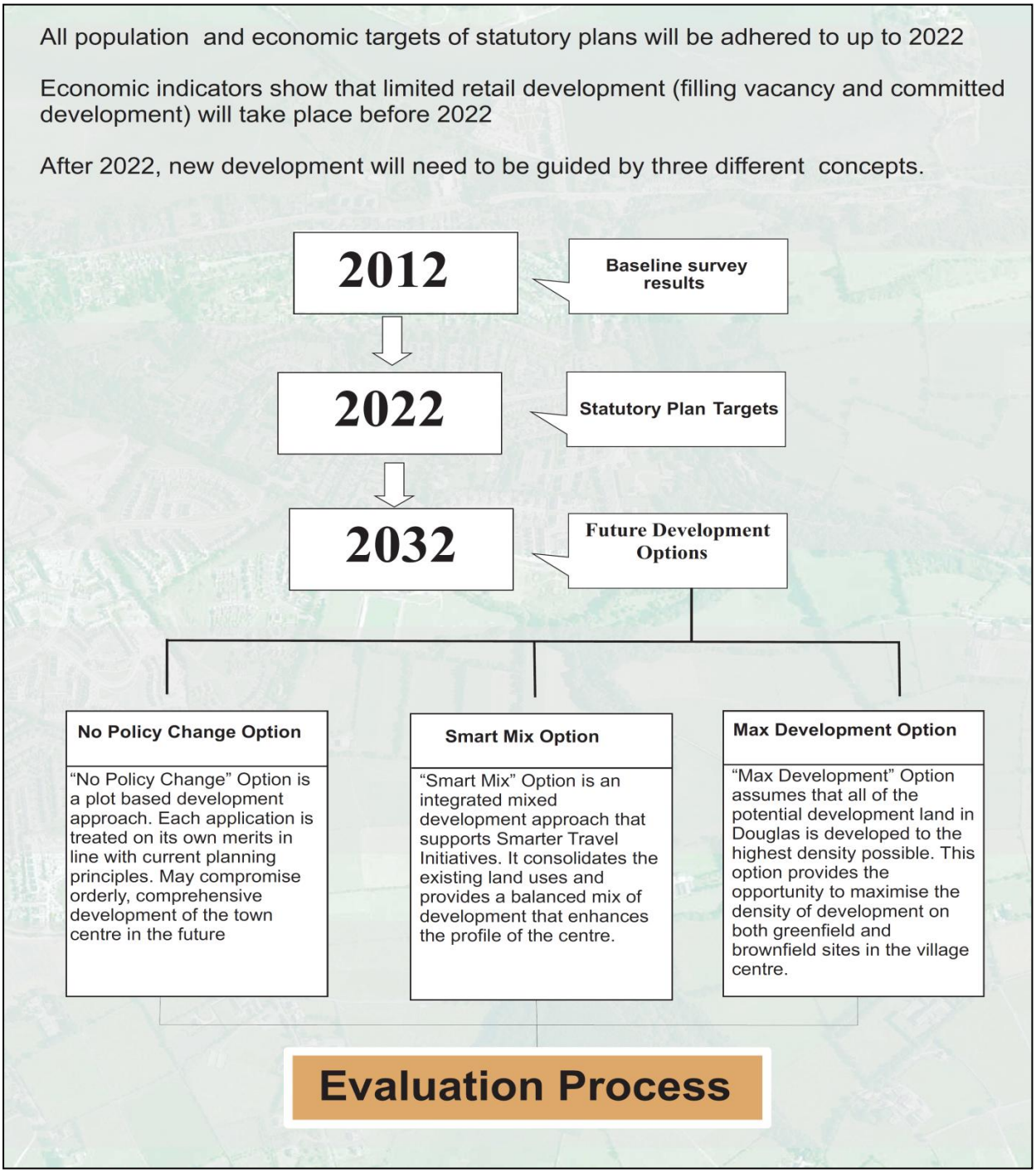


2.3.35 For the years from 2022 to 2032 three different land use development approaches were tested and evaluated. These are:

- No Policy Change (plot based development approach);
- Smart Mix Option (integrated mixed development approach); and
- Max development approach (assumes all development land in Douglas is developed to its maximum potential).

2.3.36 Figure 2.11 below illustrates the land use options process.

Figure 2-11 Land Use Options



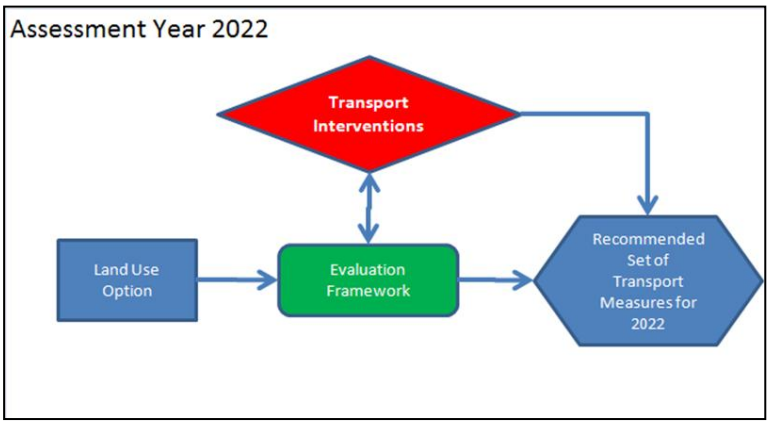
Douglas Urban Design Options:

2.3.37 Following an evaluation of Douglas Village in the streetscape assessment, key areas were identified for public realm interventions and improvements. Please refer to Chapter 9 for more information on the Urban Design Strategy for DLUTS.

Future Year Land Use & Transport Modelling Methodology:

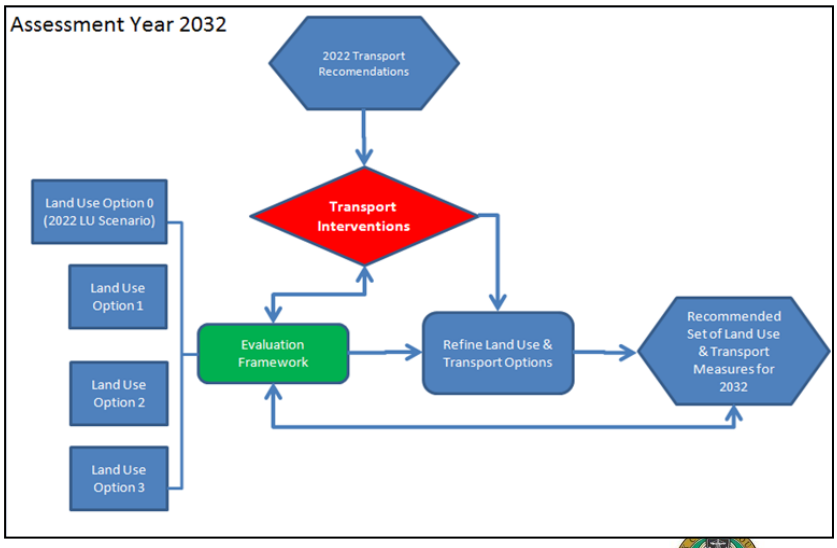
2.3.38 Stage 3 of the process also involved the development of a number of transport proposals and measures aimed at improving the movement of each mode of transport (i.e. walking, cycling, public transport and car) to be tested through the transport modelling process specifically developed for DLUTS. Figures 2.12 and 2.13 below illustrate the modelling assessment methodology for 2022 and 2032 respectively. As outlined above, there was only one land use option for 2022 (i.e. minimal development). This land use scenario was modelled with numerous transport intervention options which were then tested through the evaluation framework. The best performing transport measures through the evaluation framework became the recommended set of "Transport Measures" for 2022.

Figure 2-12 2022 Modelling Assessment Methodology



2.3.39 The 2032 modelling process evaluated three 2032 land use scenarios in conjunction with the transport interventions which were recommended as part of the 2022 evaluation. Chapter Five of this report gives a more detailed account of the development and evaluation of the Strategy.

Figure 2-13 2032 Modelling Assessment Methodology



Stage 4 – Options Assessment

2.3.40 This stage of the process is where various land use and transport options are tested through the DLUTS evaluation framework to identify a preferred option.

2.3.41 This stage contains one key process as follows:

- Evaluation of options.

Evaluation of Options:

2.3.42 Numerous land use and transport options were developed using the DLUTS evaluation framework. The evaluation framework assigned key performance indicators (KPI's) to each of the evaluation objectives of DLUTS (under the headings of Economic, Health and Safety, Environmental and Accessibility & Social Inclusion). These KPI's were then used to measure the performance of the various scenarios under the different evaluation objective headings. More detailed information on the use of KPI's and the Evaluation Framework is contained within Chapter 7 of this report.

2.3.43 The outputs from the options assessment stage includes preferred strategy recommendations for land use, transport and urban design.

Stage 5 – Develop Future Year Plans

2.3.44 This stage of the process is where recommended options for land use, transport and urban design are finalised for each future year 2022 and 2032 and the draft final report is produced.

2.3.45 This stage contains the following key processes:

- Final option development; and
- Draft Final Report.

Final Option Development & Draft Final Report:

2.3.46 DLUTS recommendations for 2022 and 2032 for land use, urban design and transport are finalised. DLUTS is disaggregated into sub-strategies, as listed below:

- Future Land Use Development Strategy;
- Urban Design Strategy;
- Pedestrian and Cycle Strategy;
- Public Transport Strategy;
- School Strategy;
- Parking Strategy;
- HGV and Delivery Management Strategy; and
- Town Centre Circulation Strategy.

2.3.47 The draft final report is made available to the public.

Stage 6 – Consultative Phase

2.3.48 This stage of the process is the consultative phase where the recommended options for land use, transport and urban design are finalised for each future year 2022 and 2032 and are made public and views are sought. The consultative phase lasts for a six week period with a 3rd Public Exhibition held at the start of this phase and the DLUTS Draft Final Report also made available during this phase.

2.3.49 This stage contains one key process:

- 3rd public consultation.

3rd Public Consultation

2.3.50 On the 29th and 30th of January 2013 a third and final public exhibition was held in the Rochestown Park Hotel between the hours of 16:00 and 21:00. Members of the public were invited to attend and the event was advertised in local newspapers and on local radio. The purpose of the exhibition was to present the future strategy for development in Douglas and to give members of the public and stakeholders a further opportunity to give their opinions on the Douglas Land Use and Transportation Strategy.

2.3.51 The event was hosted by eight members of the DLUTS team from both Cork County Council and MVA consultancy. Visitors who attended were invited to view a number of presentation boards which outlined the DLUTS, and included:

- Land Use Strategy;
- Urban Design Strategy;
- Pedestrian and Cycle Strategy;
- Schools Strategy;
- Village Centre Circulation; and
- Traffic Management Measures.

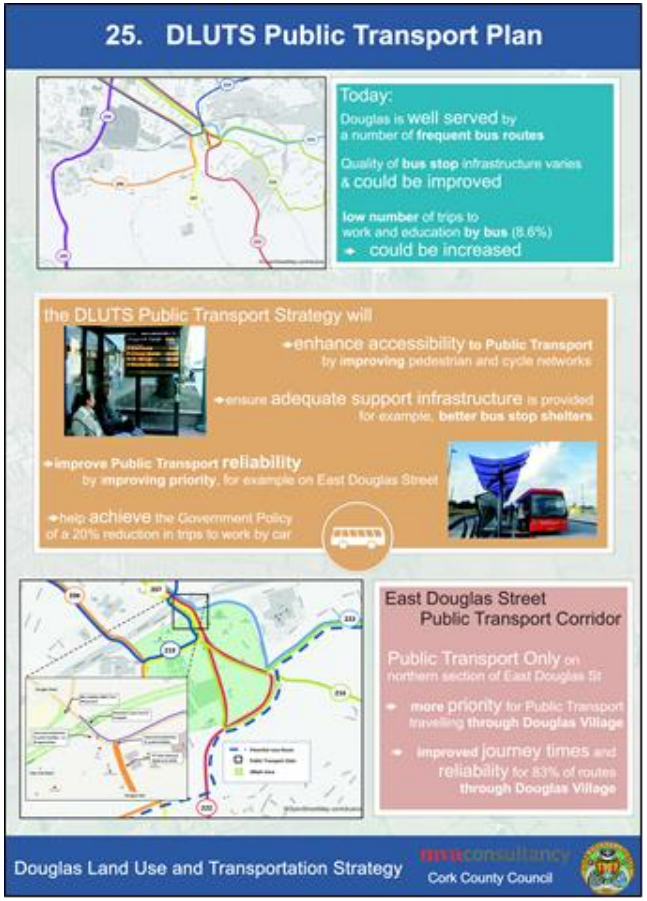
2.3.52 Visitors were encouraged to talk to members of the DLUTS team and discuss any issues or concerns in relation to the proposals with them. Submissions and feedback received during this round of consultation were considered and, where relevant, were taken account of in this Final Report.

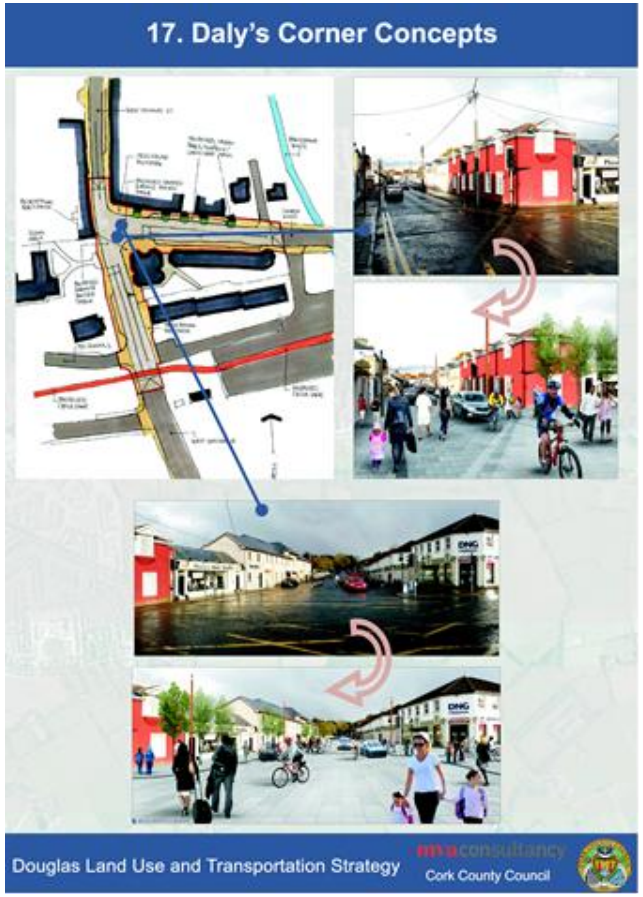
2.3.53 The exhibition was well attended, with a constant flow of visitors throughout the two days. In total over 250 people attended the exhibition. Figure 2.14 below shows examples of some of the posters presented at this exhibition.

Stage 7 – Final Reporting

2.3.54 This stage of the process represents the finalisation of DLUTS with the delivery of the DLUTS Final Report.

Figure 2-14 Examples of Posters from 3rd Public Exhibition





3 Existing Land Use Conditions in Douglas

3.1 Introduction

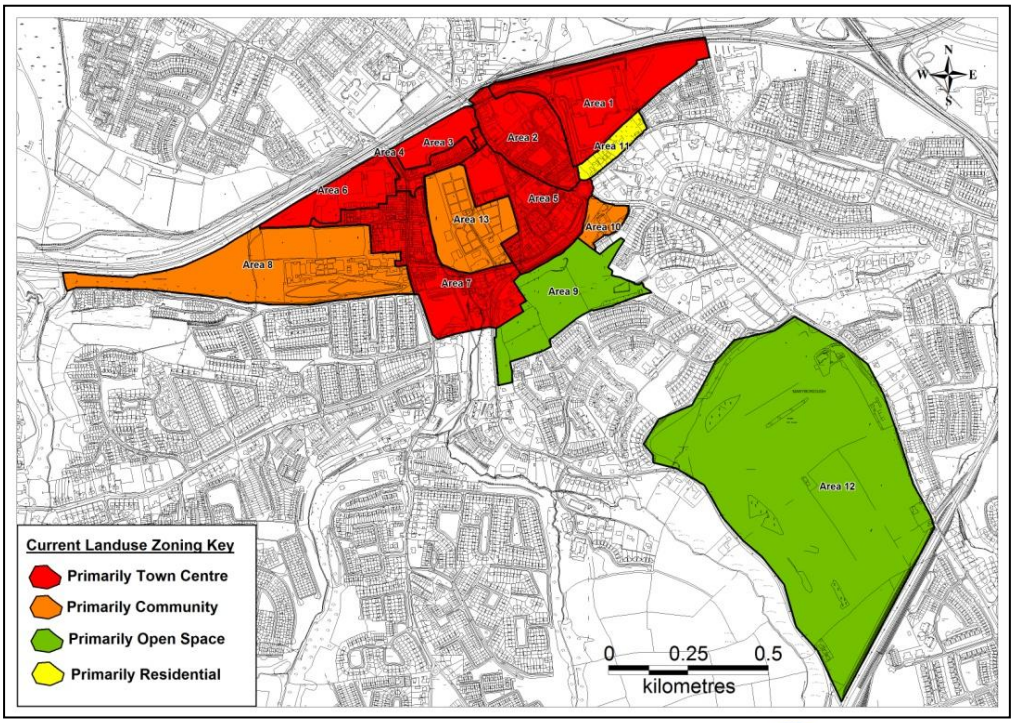
3.1.1 This chapter provides a summary of the key points relating to existing land use conditions within the DLUTS Area. Comprehensive surveys were undertaken for the DLUTS Area, including existing land use surveys; detailed analysis of existing precincts on 5 key sites within the town centre, a full retail floor space survey and overall health check in accordance with the Retail Planning Guidelines 2011.

3.2 Existing Land Use Survey

3.2.1 To help establish the current land use conditions in Douglas a land use analysis survey was carried out in April 2012. The main aim behind the land use analysis survey is to investigate the type, location and extent of land uses within the study area, in particular the primary uses of land in the village centre.

3.2.2 The main destinations in Douglas village centre are the three shopping areas at Douglas Court Shopping Centre, Douglas Village Shopping Centre and St Patricks Woollen Mills, which act as magnets drawing in people from the surrounding environs. Their form and layout dominate the village and act as independent destinations within the suburb. They sit at either end of the town centre leaving, in the middle, the once thriving central area that historically was the village main street. The linkages between the three shopping areas, with wide roads, favour the car rather than the pedestrian. In order to enable a full analysis of the various land uses within the DLUTS study area, it was decided to identify individual character areas. These are areas that exhibit similar characteristics and form land use clusters. The character area analysis below provides a more detailed examination of the land use characteristics of the DLUTS study area.

Figure 3-1 Land Uses in Douglas Village Centre



3.2.3 The DLUTS study area was divided into 13 distinct character areas, reflecting the main land uses. A detailed analysis of the character areas has been undertaken in terms of availability of retail land uses, car parking, open space, residential, community uses, environmental designations and infrastructure services and the results are as follows.

- **Area 1:** Douglas Court Shopping Centre, which includes Dunne's Stores, has a low vacancy level, is a 1980's development on the eastern side of the town centre that needs modernising, consolidation of parking areas, improved pedestrian and cycling connectivity.
- **Area 2:** East Village Area is in the heart of the town centre and has a mix of uses comprising the "East Village Street" together with the cinema site and surrounding retail area south of the filling station. There is poor use of land in the northern part of the cinema site, which is a gateway into Douglas at the filling station. The area is characterised by barriers to permeability through the area, poor junction design, poor pedestrian and cyclist connectivity, high vacancy levels and high noise levels from the N40.
- **Area 3:** Douglas Village Shopping Centre is a new modern shopping centre in the centre of the village with the main magnets of Tesco and Marks and Spencer. It is characterised by high vacancy levels, poor connectivity with surrounding land uses to the east and west and a poor public realm outside of the shopping centre.
- **Area 4:** Douglas Central Area A along Douglas West Road and Church Street is a small area behind the Douglas Village Shopping Area that is characterised by poor permeability, poor pedestrian crossing safety and poor public realm.
- **Area 5:** Douglas Central Area B – Carrigaline Road and Barry's Corner are central to the village centre which has great potential for redevelopment and public realm improvement along East Douglas Street outside Barry's. There is also opportunity for a mixed urban development on the vacant land in Barry's Field.
- **Area 6:** St Patricks Woollen Mills has very high vacancy levels and the area is ripe for redevelopment of mixed use urban development to complement the other land uses in the town centre. Improvements to the integration of the area to surrounding land uses through pedestrian safety, accessibility and junction control are some of the potentials.
- **Area 7:** West Douglas Street is characterised by high vacancy, potential dereliction on a heavily trafficked road and unsafe pedestrian and cycleway. Any future development would need to consider the architectural heritage of the streetscape.
- **Area 8:** The Western Community Facilities area is characterised by three primary schools and the GAA playing fields and club. It is a focal point for the traffic congestion in morning and afternoon peak times with problems at the junctions. Land to the west is landlocked but has a local habitat value and has potential for improved pedestrian and cycling accessibility to the City's Tramore Valley Park landfill.
- **Area 9:** is the elevated undeveloped land that forms the backdrop to the town centre and is wedged between the Garda station and Maryborough Ridge residential area.
- **Area 10:** is the Douglas Garda Station and ancillary uses
- **Area 11:** is a strip of residential land fronting onto Douglas Court Shopping Centre.
- **Area 12:** is the Douglas Golf Course, comprising 55ha of high quality private recreational facilities. In the longer term, given certain traffic improvements and

economic considerations, there is a potential for the construction of a mixed use urban development that would complement other land uses in Douglas town centre.

- **Area 13:** is the centrally located community park and cemetery associated with St Luke's Church. There is potential for improvements to the connectivity to the other land uses in the town centre and increased permeability through this area to improve its function as a central recreational hub.

3.3 Town Centre Precincts

3.3.1 There are 5 key precincts with development potential within the DLUTS area. The baseline analysis of these precincts examines the existing land uses, heritage, transport and infrastructure characteristics as well as identifying emerging issues within each precinct. The following sections of this chapter contain a detailed baseline analysis of each precinct.

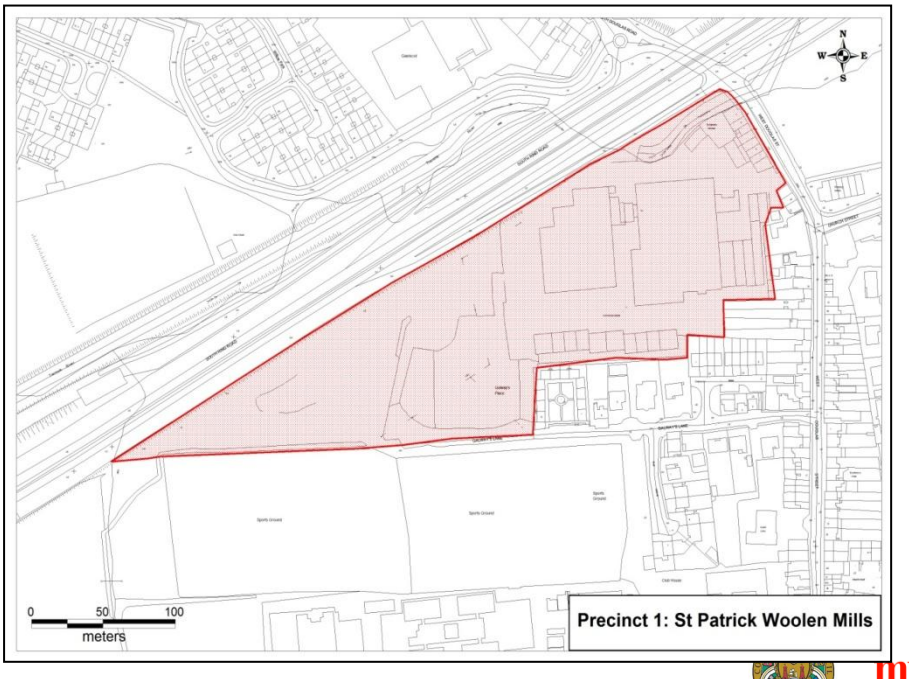
3.4 Precinct 1 - St Patricks Woollen Mills

Description

3.4.1 At the western area of Douglas to the south of the N40 are the Woollen Mills which are now a private industrial estate with a mix of retail and commercial units. The area has its origins in the milling of yarn and two of the main mill buildings are listed for preservation in the Record of Protected Structures in the County Development Plan 2009. The site is listed on the Record of Protected Structures in the 2009 County Development Plan ID number 01243 and the Sites and Monuments record Co 074 095.

3.4.2 A number of extensions and additions to the mill buildings have been added over the years, giving it a total of 6,810m2 in about 75 different sized retail premises. However, there are over 2,000m2 of comparison retail in the area providing mostly home furnishings. It is acknowledged that the site and public space at this location is unattractive and in need of investment and improvement.

Figure 3-2 Precinct 1: St Patrick's Woollen Mills



3.4.3 In spite of its appearance with undefined space and high levels of vehicular and pedestrian conflict, St Patrick's Mills is a location of high vitality and a large mix of retail uses and services provided on site, from a convenience supermarket to bespoke kitchen makers with a restaurant in between. While the appearance of the woollen mills may not be the most attractive it provides an important service centre for not only Douglas village but the wider Cork area.

3.4.4 The Woollen Mills entrance is not appealing being cluttered with bollards, barriers, road markings and signage. For the pedestrian it is easier to walk into the complex on the road. The landmark buildings are covered with signs which do not improve the visual appearance. Recently Cork County Council has acquired a site to the rear of the woollen mills for a new long stay car park which will inevitably increase further pedestrian traffic within the complex.

3.4.5 There is a small row of buildings to the front of the Mills which are on Douglas West Street, these contain a mix of offices, residential units and a takeaway. Continuing south along the street there are further takeaways and bars. The footpaths are in good condition at this location with clear pedestrian crossing points. Bollards are erected along the footpath edge to prevent car parking. The road at this location is narrow, hence the need for bollards along the route.

St Patricks Mills has a direct access onto Douglas West Road opposite Tesco's and provides a total of 160 open air car parking bays for employees and customers. In pure land use terms there is no open space which is deemed appropriate for passive or active functions, yet the site is very large and is not dominated by building footprints, there may be an opportunity to maximise or coordinate this space. Given the wealth of historic buildings at this location there is an opportunity to redevelop and enhance this site and promote its heritage amenity.

3.4.6 Cork County Council has recently (May 2012) introduced pay parking in Douglas and made available a site west of the Mills with approximately 150 parking bays. In addition, with an access from Galway's Lane, this will inevitably increase further pedestrian traffic.

3.4.7 Beyond the Council car park is a green field site that has not been developed. It is triangular in shape and is bounded by the N40 to the north and residential development on the elevated lands to the south.

Transportation and Road Network

3.4.8 St. Patrick Woollen Mills is currently accessed off of West Douglas Street (R851) which suffers from peak hour congestion. This problem is most acutely felt in the PM peak hour times. The adequacy of the entrance to the Mills site to accommodate traffic generated by further development will need further assessment as part of any overall traffic assessment for the site.

3.4.9 In Relation to Galway's Lane (L6450), at present there is no vehicular access to the Woollen mills but there is pedestrian access to and from County Councils temporary public Car park. Currently there are issues with the existing junction between Galway's Lane and West Douglas Street and carefull consideration should be given to the operation of this junction prior to allowing any future consideration to further traffic generating development at this location.

Pedestrian Access

3.4.10 The current development at the Woollen mills is generally car based and cars dominated with very poor pedestrian permeability and safety. The pedestrian connectivity from this site to the rest of Douglas village is severed by West Douglas Street which acts as a major transport artery through Douglas village serving Donnybrook and Grange in the South and Cork City to the North. In its present condition West Douglas Street acts as a major obstacle to safe pedestrian access to the St. Patricks Woollen Mills from both the existing main entrance and from the newly created pedestrian access to rear of Galway's lane.

Waste Water Treatment and Water Supply

3.4.11 There are no issues with water supply at this site as it is serviced by a private watermain which connects to the public watermain in West Douglas Street.

3.4.12 In relation to wastewater disposal issues there is a public combined sewer in the R851 (West Douglas St.) to the east of the site and this serves the existing development. There is also public combined sewer in the L6450 (Galway's Lane) to the southeast of the site. The available spare capacity of the public combined sewers to cater for increased development in this area needs further assessment as does the condition of the existing sewers. These issues can be addressed as part of an overall development brief assessment.

Stormwater & Flooding

3.4.13 There is no public storm sewer at this location and therefore any future stormwater disposal will be a matter for the developer and will be dependent on attenuation being provided by a developer in accordance with the Dublin Sustainable Drainage Systems (SuDS) model. For a developed site it is required that any flows in excess of those from the original Greenfield site

must be attenuated. This also depends on the capacity of the receiving waters to be able to carry excess flow especially in locations subject to flooding. Any future redevelopment of the site will require proposals for attenuation and disposal of stormwater.

3.4.14 The north eastern boundaries of the site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of the Carrigaline Electoral Area Local Area Plan 2011

Natural Environment

3.4.15 The land to the west of St. Patricks Mills, adjacent to the N40, is a former floodplain of the Tramore Valley. Part of this area has been developed into a temporary car park while the second part of this site comprises disturbed ground and is of low ecological value.

3.4.16 The site is of negligible biodiversity importance and there is no issue with development of this site although the removal of the Japanese Knotweed is recommended prior to any new development or redevelopment.

Architectural & Archaeological Heritage

3.4.17 The site contains four buildings which are on the National Inventory of Architectural Heritage which reflects the historic significance of the site. This also includes the Woollen Mills which are also recorded on the Record of Protected Structures and on the Record of Monuments and Places. Therefore the Woollen Mills buildings are awarded protection under national legislation and policies contained in the Cork County Development Plan 2009. All of the Recorded Monuments are subject to statutory protection in the Record of Monuments and Places, established under section 12 of the National Monuments (Amendments) Act 1994. Any potential archaeological sites and their setting within the development boundary shall be protected in line with the objectives for the protection of archaeological heritage listed in the Cork County Development Plan 2009.

Existing Land Use Analysis

3.4.18 The table below outlines the current land use activities for the St. Patrick Woollen Mills.

Table 3.1 St Patrick's Woollen Mills Existing Land Use Analysis Table

Indicator	Quantity	Assessment
Estimated Population	0	
Number of businesses	40	
Comparison Floor space	2081sqm	Douglas Glass, Bettys Furniture
Retail Services Floor Space	1442sqm	Village Vet, Paint, Cleaning Services
Convenience Floor Space	425sqm	Celtic Interiors, Super Max

Vacant Floor Space	2862sqm	36 units
Car parking	310	150 private off-street parking spaces & 150 public long term car park spaces
Dwelling Units	0	
Open Space	No	
Community Facilities	Yes	Grace Christian Fellowship
Protected Structures	Yes	RPS 01243 Douglas Woollen Mills
Architectural Conservation Areas	No	Site is located to the south of the West Douglas Street Conservation Area
Special Conservation Area	No	
Area of flood risk	No	
Waste Water Infrastructure	Main trunk sewer	
Bus routes and stops	2	Bus Routes 207 & 206 (Southward & Northward) four times or more per hour service. 2 unsheltered bus stops
Road access	Yes	West Douglas Street
Pedestrian/cycle access	Yes	Pedestrian walkway through the site.
Connectivity with town centre	Yes	Yes
Public realm	Poor	Currently car dominated environment, but with great potentially to become a pedestrian friendly town centre.
Vacant land	1.0ha	Disused vacant land adjacent to the N40 which can currently accessed through the St. Patrick Woollen Mills entrance(Douglas West Street)

Emerging Issues

3.4.19 The emerging Issues for St. Patricks Woollen Mills are:

- High levels of vacancy and units in disrepair;
- Poor pedestrian safety as a result of car priority;
- Car dominated with a large surface car park;
- Great potential for improved mixed use brownfield development, however, large investment would be required to regenerate the area;

- Busy junction at the entrance to the Woollen Mills and this could dictate development potential of the site; and
- This site has a unique history directly linked to the development of Douglas. Any future development would have to have consideration for this history and architectural heritage.

3.5 Precinct 2: Douglas Village Shopping Centre

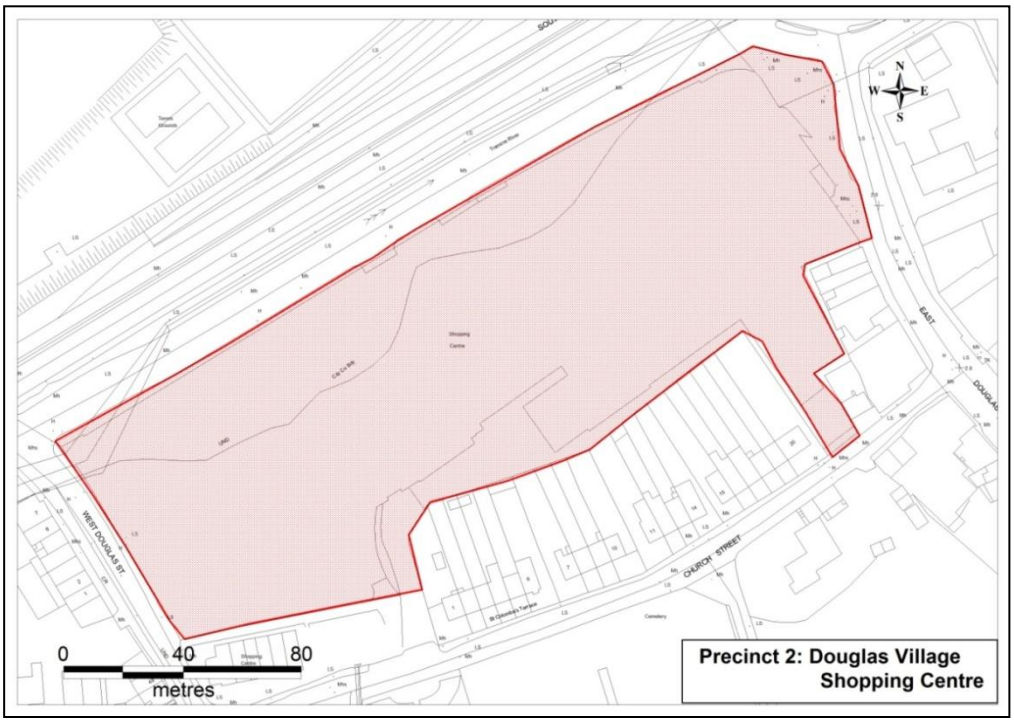
Description

3.5.1 The Douglas Village Shopping Centre has been recently constructed (2009) and commands a central position in the Douglas Village town centre with Tesco's as their major tenant and anchor store. The shopping centre provides a central pedestrian mall through the shopping centre and this provides linkage from east to west. On the eastern end, Mark and Spencer has a small shop. The whole site has been developed as a mall shopping centre and although there is high vacancy rate, there is no other use for the centre.

Transportation and Road Network

3.5.2 The current access to the shopping centre is from four sides; along the East Douglas Street, along the R610 (relief road), along West Douglas Road and Church Street. The shopping centre has only one road entrance into the car park from the relief road but has a number of pedestrian accesses.

Figure 3-3 Precinct 2- Douglas Village Shopping Centre Site



3.5.3 Trips to the Douglas Village Shopping Centre are generally car based which is supported by a multi-storey car park which is incorporated into the overall development. Pedestrian permeability, safety and access is generally good. The shopping centre is served by three pedestrian entrances, namely, the East, North and Southern entrances.

3.5.4 The main entrance to the shopping centre is located on the eastern side of the development and leads to an internal street which provides an opportunity to draw the public in from East Douglas Street to the Southern entrance on Church Street. The southern entrance to the shopping centre is located opposite the community park and offers the opportunity for improved desire lines which will enhance safe pedestrian connectivity to the southern parts of Douglas. This recessed entrance in its current design is cluttered with steps, ramps, bollards and flag poles and its current connection to the community park is not good.

3.5.5 There is a recessed public entrance on the northern elevation of the development however its primary function is for the entrance and exit to the multi storey car park and entrance to the centres loading bay. This entrance is adjacent to the newly constructed heavily trafficked relief road and hence is very unattractive from both a noisy and safety perspective for pedestrians.

3.5.6 There is an opportunity on the western side of the shopping centre to provide an improved entrance that will provided a good link to the St. Patrick's Woollen Mills across the road. This entrance will also provide better connectivity for pedestrians travelling south bound from the South Douglas Road.

Waste Water and Water supply

3.5.7 There are no issues with waste water or water supply at this site.

Stormwater and Flooding

3.5.8 Part of the site falls into the area that is at risk of flooding as shown on the Carrigaline Electoral Area Local Area Plan. Significant infrastructure works have been incorporated into the construction of the shopping centre and mitigation against flooding of the Ballybrack Stream has been put in place.

Natural Environment

3.5.9 The site is fully developed and is therefore of negligible biodiversity importance

Architectural & Archaeological Heritage

3.5.10 The site is fully developed and there are no architectural & archaeological Heritage issues with this town centre precinct.

Existing Land Use Analysis

Table 3.2: Douglas Village Shopping Centre Land Use Analysis

Indicators	Quantity	Assessment
Estimated Population	0	
Number of businesses	39	
Comparison Floor space	4355sqm	Tesco, Marks and Spencer and others

Retail Services Floor Space	1607sqm	Post Office, Cafe's and restaurants
Convenience Floor Space	4357sqm	Marks and Spencer, Tesco, Butchers
Vacant Floor Space	1447sqm	26 units
Car parking	1060	Private Multi storey Car park
Dwelling Units		To the rear of the shopping centre there is a terrace of houses on church street, St Columbas Terrace
Open Space	None	
Community Facilities	Yes	Branch of City Library
Protected Structures	None	
Architectural Conservation Areas	No	No
Special Conservation Area	No	
Area of flood risk	CFRAMS	History of flood events in 2012.
Waste Water Infrastructure	Main trunk sewer	Serves Douglas and connects with outfall into estuary
Bus routes and stops	2	Bus Routes 207 & 206 (Southward & Northward) four times or more per hour service 1 sheltered stop & 2 unsheltered bus stop
Road access	New relief road, west Douglas street, Church street and east Douglas street	Barrier to connectivity
Pedestrian/cycle access	Yes	Does not follow desire lines and often peripheral and marginalised
Connectivity with town centre	Yes	Part of the main street
Public realm	Poor	Car dominated entrances, poor desire lines.
Vacant land	0.2ha	Small area of vacant land in front of the eastern entrance and a small area of vacant land adjacent to the south western entrance. Both sites maybe considered for small incubator unit development and public realm improvement.

Emerging Issues

3.5.11 The Emerging issues for this area are:

- The site is fully developed and there is no capacity for extension;
- The shopping centre is central located to the whole of Douglas and it provides a focal point to shoppers;
- The provision of free car parking in the multi storey car park is attractive to visitors to Douglas and local residents;
- There is an opportunity to improve connectivity to other sites in Douglas, particularly to Woollen Mills and Cinema Site and Community Park;
- The western façade onto West Douglas Street is unpleasant to the eye and un-functional to the use of the shopping centre;
- High levels of vacancy at the shopping centre are affecting the footfall in the mall; and
- It is well served by infrastructure services.

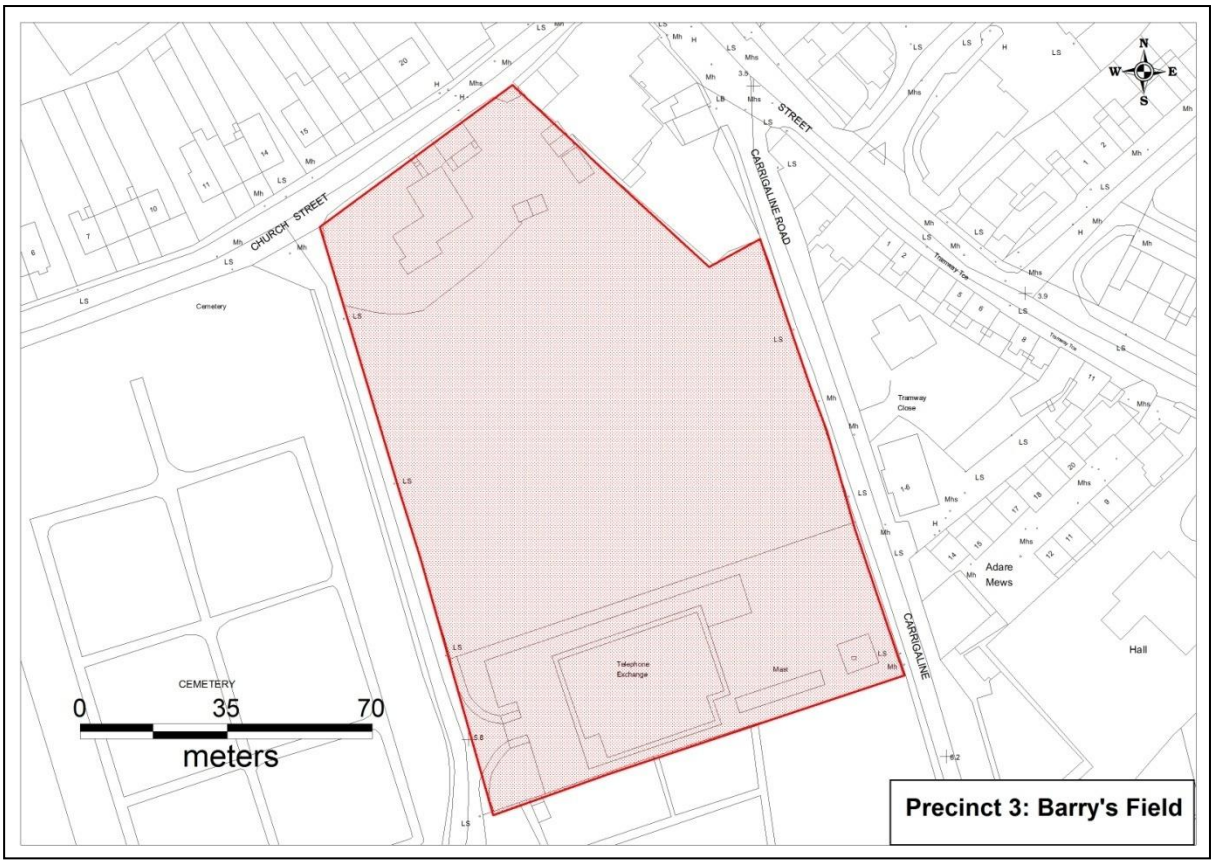
3.6 Precinct 3: Barrys Field

Description

3.6.1 This is a very important site in Douglas Village that has remained undeveloped. Adjacent to the cemetery and behind Barry's pub is an unused piece of land (approx 1.1ha) which has development potential (Barry's Field). The site is bounded on three sides by roads and streets and if development is to be considered at this location it should incorporate the Eircom exchange building to the south of the site. The site fronts the Carrigaline Road, Church Street and Churchyard Lane.

3.6.2 There is a preference for this site to be developed in its entirety as a single ownership proposal which would allow sufficient scope for proper planning and development rather than a piecemeal approach. In the 2009 County Development Plan, this site is shown in an Architectural Conservation Area. In the 2005 Carrigaline Electoral Area Local Area Plan, the site was zoned for medium density residential and open space.

Figure 3-4: Precinct 3 - Barry's Field



Transportation and Road Network

3.6.3 This site is well served by three roads namely; Church street, Churchyard lane and the old Carrigaline Road. An adequate access to the site from any of these roads will need careful consideration because of the existing junctions and site sensitivity.

Church Street

3.6.4 There is an existing dwelling on the site which fronts this street, this would be demolished and an entrance/exit would be constructed at this location. The existing boundary should be set back and a footpath constructed. Any building on the site should have a frontage in close proximity to this street rather than it being set back into the site with a car park between the road and the building.

Churchyard Lane

3.6.5 This lane bisects part of the Architectural Conservation Area. The site fronting Churchyard Lane is a sod and stone ditch and there is a vehicular entrance into the Eircom Exchange. Given the restricted width of this lane it would not be permissible to have a vehicular entrance from this side but pedestrian access should be encouraged.

The Old Carrigaline Road

3.6.6 There is limited access from this road without compromising or interfering with the stone wall (part of the ACA) boundary. Any redevelopment should try to incorporate the private car park for Barry's public house which at the moment has a very restricted car park. Given that the Carrigaline Road is one way, an entry in should be constructed along this boundary possibly sharing the access to Barry's pub car park. Again it is important to have a pedestrian access from the Carrigaline Road.

Pedestrian Access

3.6.7 This site is currently inaccessible to pedestrians.

Wastewater Treatment and Water Supply

3.6.8 There are no constraints to the connection to the existing water supply and public sewers.

Stormwater and Flooding

3.6.9 The flood risk extents shown on the Carrigaline Electoral Area Local Area Plan 2011 for this location do not indicate a risk of flooding.

Natural Environment

3.6.10 The site comprises of semi-improved agricultural grassland and the last remaining undeveloped green space in the village centre. Boundaries have biodiversity value and include Privet, Sycamore, Poplar, Blackthorn, Hawthorn and Holly.

3.6.11 The site is of Moderate Local Biodiversity Importance. Boundaries have biodiversity value and should be retained. Site has potential to be developed as public open space in town centre, connecting to existing park. Linkage to other open spaces including graveyards and park enhance the biodiversity potential of this area.

Architectural & Archaeological Heritage

3.6.12 There are no significant architectural & archaeological Heritage issues associated with this site.

Existing Land Use Analysis

3.6.13 This site is agricultural grassland under private ownership and is the last undeveloped green space in Douglas village. It should be noted that there is no public access to these lands.

Emerging Issues

3.6.14 The Emerging issues for this area are:

- Potential opportunity site at "Barry's field";
- Narrow footpaths need upgrading and widening which would allow for outside dining in an already vibrant restaurant area;

- The existing Taxi rank outside of Barry's public house acts as a pedestrian barrier and represents a poor use of road space;
- Offers great potential for the development of a proper town centre with good public realm, pedestrian priority and day & night time activity; and
- As a Greenfield site, there is opportunity for significant mixed use development to take place on the site that will enhance the future viability and vitality of the town centre.

3.7 Precinct 4 – Cinema Site

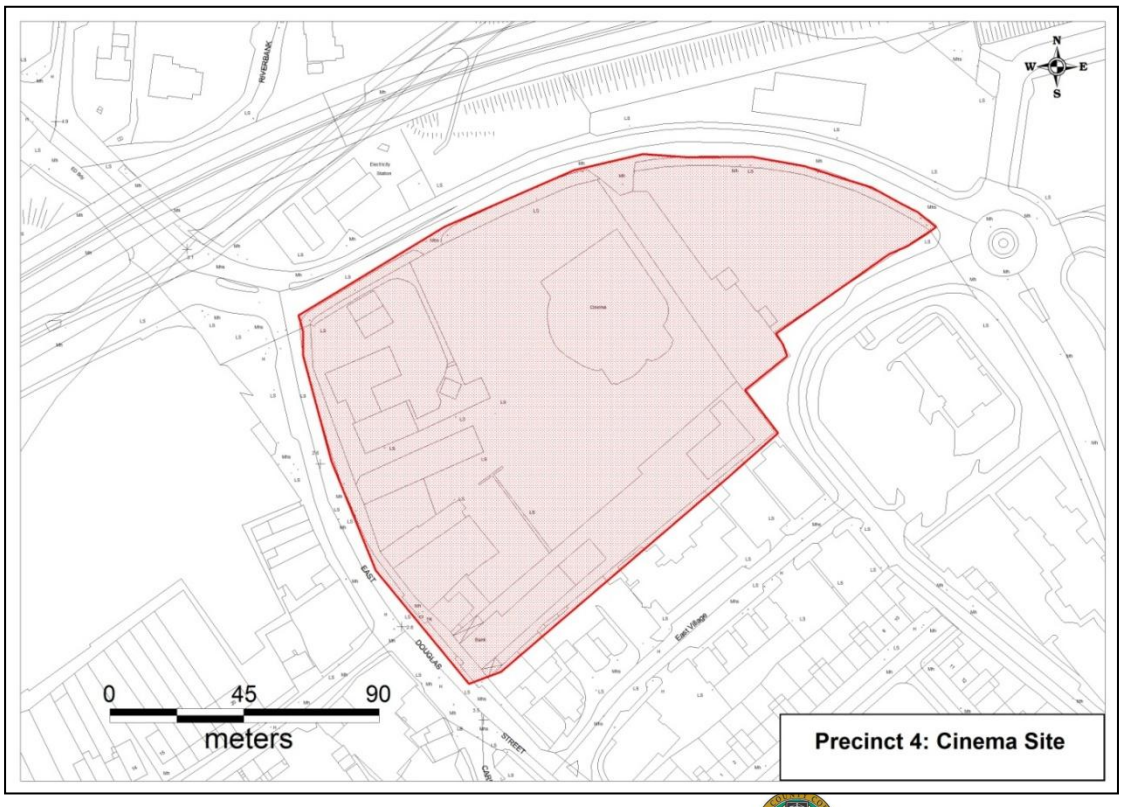
Description

3.7.1 The Cinema Site (as shown on the diagram below) is bounded by the filling station on the north western corner and the East Village Street on the south-eastern corner. It has road frontage onto the East Douglas Street and the relief road (R610). It has a number of existing buildings, namely; the Cinema building, the TSB building which is vacant, the filling station, and the buildings on the East Douglas Street comprising numerous high street convenience and comparison retail. There is a vacant undeveloped portion of land at the rear of the cinema site opposite the McDonalds drive in restaurant.

3.7.2 There are approximately 2.2ha of brownfield land on which the former cinema is located and is probably the most strategically located part of the Douglas Village. A lot of the land is used for car parking and is the focal point of a new development proposal for the construction of convenience retail and other shops on the footprint of the former cinema.

3.7.3 Opportunity exists for a redevelopment of the site to allow for a village plaza surrounded by a new mixed use urban form in line with the needs for more shopping space in Douglas.

Figure 3-5: Precinct 4 - Cinema Site



Transportation and Road Network

3.7.4 The current access to the site is from three sides; along the East Douglas Street, along the R610 and along the McDonalds link road. As there is traffic congestion on this road during peak periods, there is a need to make sure that future access points are carefully considered. Vehicular and pedestrian access is prohibited from the south (East Village) due to high walls.

Pedestrian Access

3.7.5 Currently, Pedestrian access to the exiting Cinema site, is from a pedestrian lane form East Douglas Street (to the rear of the existing filling station) and from the northern side of the site from the heavily trafficked Relief Road, R610. A large portion of the site is dominated by a large surface car park. There are a number of internal boundary walls spread throughout the site which act as an obstacle to internal connectivity and permeability to the rest of the East Village.

Waste Water Treatment and Water Supply

3.7.6 The site is well served by water mains (300mm) and it has a public sewage pumping station and rising main with way leaves in favour of Cork County Council, that need to be established/maintained. Although connection to the public foul sewer could be made to service this site, the capacity of the existing pumps and rising main in the sewage pump station may need to be assessed.

Stormwater and Flooding

3.7.7 There is a public storm sewer running through the site and way leaves in favour of Cork County Council that need to be established and maintained. Proposals for attenuation and disposal of stormwater are required. In relation to flooding issues, the site has been recently flooded in July 2012.

Natural Environment

3.7.8 The site is of negligible biodiversity importance and therefore there is no issue with redevelopment of built land in this site.

Architectural & Archaeological Heritage

3.7.9 The site is fully developed and there are no architectural & archaeological heritage issues with this town centre precinct.

Existing Land Use Analysis

3.7.10 The cinema site forms part of a larger East Douglas Village Area which, when fully developed, will provide for an entirely permeable environment for both pedestrians and cyclists. The land use analysis shown in the table below is of the entire East Village Character Area.

3.7.11 The recent planning permission from An Bord Pleanála is for the change of use from a cinema to a discount food store and ancillary retail facilities.

Table 3.3: East Village Land Use Analysis Table

Indicators	Quantity	Assessment
Estimated Population	270	
Number of businesses	49	A very broad mix underlying its prominence as the main street.
Comparison Floor space	729sqm	Xtravision
Retail Services Floor Space	6458sqm	Ulster Bank, Hotel, McDonalds
Convenience Floor Space	771sqm	Centra
Vacant Floor Space	1447sqm	7 units
Car parking	297	281 Private Spaces (11 on-street spaces) & 16 on-street Public Spaces
Dwelling Units	100	Includes Gartan Park, Douglas Close the apartments in east village and individual houses on Douglas street
Open Space	Yes	Green area in Gartan Park and the open space/car park in front of the cinema.
Community Facilities	Yes	Legion of Mary Hall
Protected Structures	Yes	RPS 00684 former Garda Station
Architectural Conservation Areas	No	
Special Conservation Area	Adjacent Douglas Estuary	Cork Harbour SPA 4030
Area of flood risk	None	
Waste Water Infrastructure	Main trunk sewer	Serves Douglas and connects with outfall into Estuary
Bus routes and stops	4	Bus Routes 207,216,222,223 (Southward & Northward) Hourly or more service 1 sheltered stop & 1 unsheltered stop
Road access	Relief Road r610	Barrier to connectivity
Pedestrian/cycle access	2	Does not follow desire lines
Connectivity with town centre	yes	Part of the main street

Public realm	Poor to fair	Cinema site is in a poor state of repair, poor connectivity and permeability.
Vacant Land	0.3ha	Unused Greenfield site under private ownership

Emerging Issues

3.7.12 The emerging issues for this area are:

- Poor use of land at the Northern part of this site;
- This is a gateway into Douglas and is currently dominated by a petrol station and forecourt as well as a neglected five screen cinema which is surrounded by underutilised and unattractive surface car parking;
- Potentially one of the most important sites in Douglas. Increased noise pollution from the N40;
- Poor junction design/operation at the petrol station/Douglas village shopping Centre;
- Poor pedestrian and cyclist connectivity and permeability;
- Barriers to preferred pedestrian desire lines;
- Narrow footpaths need upgrading and widening which would allow for outside dining in an already vibrant restaurant area; and
- High levels of vacancy at important locations on East Douglas Street (eg the old TSB Bank site). Could lead to very prominent dereliction which will further detract from the environment and surroundings of the area.

3.8 Precinct 5: Douglas Court Shopping Area

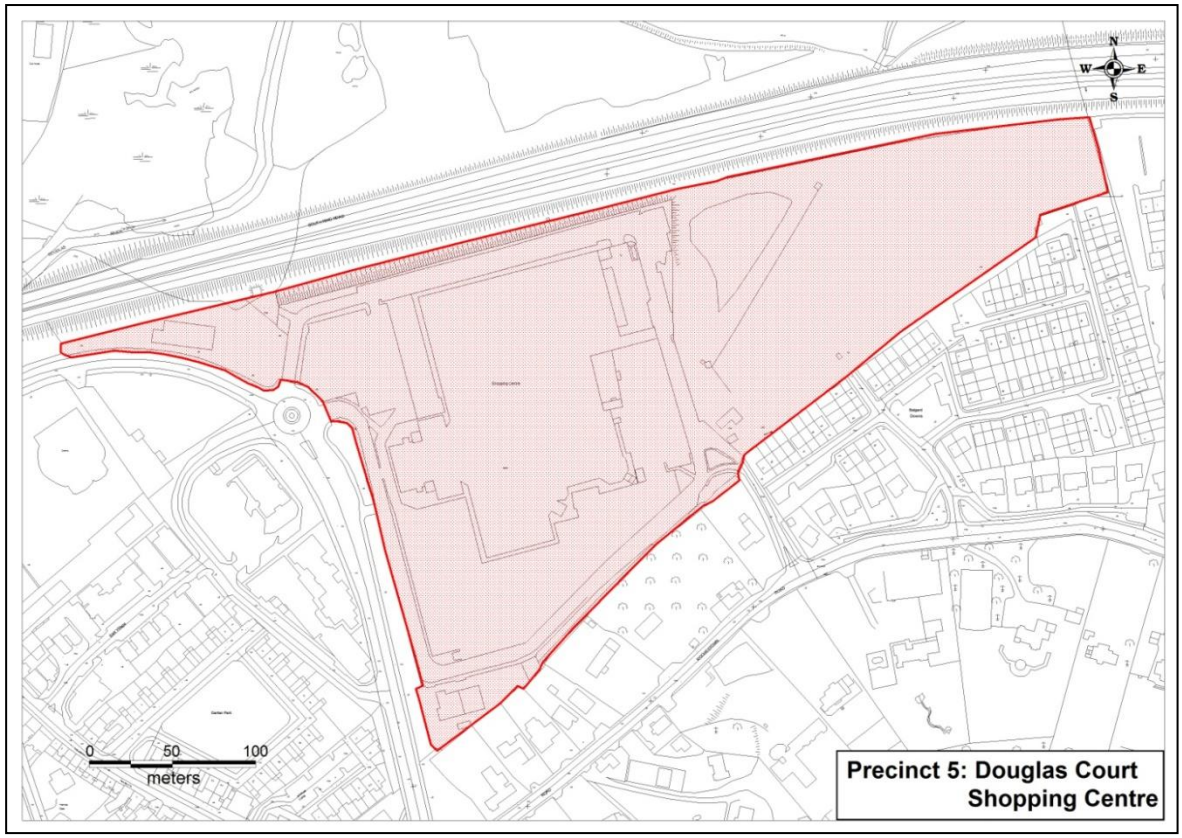
Description

3.8.1 This precinct is located to the south of the N40 road which separates the city and county administration areas and is located to the east of the Study Area on the relief road R610. This precinct consists of a single story building surrounded by a number of large car parks. The western portion of the site contains a number of portacabins that have had various uses over the years including a branch of the city library, a school of dance and a Christian fellowship church. The Douglas Court Shopping centre is anchored by Dunne's Stores, comprising a total of 4752m2 of convenience and comparison goods. An internal shopping mall consists of two central walkways with a mixture of shop types. There are three car parks on the site with a total of 1096 bays, the car parks surround the shopping centre and provide ease of access. Douglas Court Shopping Centre is served by two entrances, one off the roundabout on the R610 and the second is from the Rochestown Road. There is an internal one way traffic system in operation throughout the site.

3.8.2 Part of the precinct has open space at the eastern end of the site which is located to the north of Belgard Downs residential estate. The table below shows the breakdown of retail floor space and other land uses in the precinct. There are a total of 27 comparison shops containing a range of independent and high street chain shops together with a number of

retail services specialising in health, beauty, financial, mobile telephone operators and restaurants. There is a low level of vacancy in the shopping centre (135m2).

Figure 3-6 Precinct 5 - Douglas Court Shopping Centre



3.8.3 Planning permission has been granted for an extension to the building to the east and a recent planning application for the westward extension of the building by an additional 4000m2 has been refused. In addition, the local authority has granted a recent planning application for a drive in restaurant within the car park of the character area.

3.8.4 The urban design assessment of the site views the western boundary interface with the public road as unattractive with no definition of car and pedestrian space. It has a visually weak landscape and architectural urban edge. Any future development scenarios at this location would seek to improve this. In addition the pedestrian links and desire lines are poor from the village to the shopping centre with one having to cross a three lane road to the site boundary and a further circulation road within. Any re-evaluation of the site should seek to improve this and make it safer and easier for pedestrian access.

Transportation and Road Network

3.8.5 Douglas Court is currently accessed from two entrances. The main entrance is on the western side of the site and is located off the Douglas Court Roundabout on the R610.The Second entrance is located on the southern side off the site on to the R610 (Rochestown Road). The main entrance to Douglas Court suffers from heavy peak hour congestion mainly due to its location on the Douglas village relief road (R610) which as a number of pinch points, namely, The Fingerpost Roundabout, the Douglas Court Roundabout itself and the East Douglas Street Junction (Topaz filling station).The adequacy of the entrance to the

Douglas Court site to accommodate traffic generated by any future development will need further assessment as part of any overall traffic assessment for the site.

Pedestrian Access

3.8.6 The current development at Douglas Court is generally car based and cars dominate with very poor pedestrian permeability and safety. The pedestrian connectivity from this site to the rest of Douglas village is severed by Relief Road (R610) which acts as a major transport artery around Douglas village serving Rochestown and Maryborough Hill in the South and Cork City to the North. The relief road (R610) in its present condition, acts as a major obstacle to safe pedestrian and cyclist access to the Douglas Court Site. The R610 will remain a heavily trafficked route; however, improvements could be made to existing infrastructure that will make it a more attractive environment for non-vehicular users.

Waste Water Treatment and Water Supply

3.8.7 There are no issues with water supply at this site as it is serviced by a public trunk watermain running in an west-east direction through the southern part of the site. There is a 30 metre wide wayleave associated with this and therefore no structures will be permitted within the wayleave of this trunk watermain (and also no structures within the wayleave associated Tramore Valley Trunk Sewer and storm overflow pipe which also run through this site). This will restrict the amount of land available for structures within the site.

3.8.8 There is also a public water supply available to service this site from the Douglas Court eastern exit road and from the public watermain within the Belgard Downs Estate.

3.8.9 In relation to wastewater disposal issues the public Tramore Valley Trunk Sewer runs through the southern part of the site. There is a 30 metre wide wayleave associated with this. There are manholes on this sewer within the site and any wastewater disposal can be accommodated through a connection to this trunk sewer.

Stormwater & Flooding

3.8.10 In relation to stormwater, there is a public stormwater flow pipe from the Tramore Valley Trunk Sewer running in a south-north direction through the site. There is a 30 metre wide wayleave associated with this. There is also a major public stormwater pumping station at the northwest corner of the site adjacent to the Ballet School building. Future disposal of stormwater is dependent on attenuation being provided by a Developer in accordance with the Dublin Sustainable Drainage Systems (SuDS) model.

3.8.11 The flood risk extents Map shown on the Carrigaline Electoral Area Local Area Plan 2011 for this location indicate that the north western boundary of the site (near the Ballet School) are at risk of flooding. A part of this site is at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of the Carrigaline Electoral Area Local Area Plan 2011.

Natural Environment

3.8.12 This site includes a stand of Common Reed and large sedge swamp habitat adjacent to the shopping centre complex separated by a large drain from an area of wet grassland which lies between the Belgard Downs Estate and the South Ring Road. Species recorded in the area of wet grassland include rush clumps, Marsh Foxtail and Timothy, with Lady Smock, Silverweed, Broadleaved Dock and tufted Dock. The grassland becomes wetter as you move closer to the reedbed. Historic maps show that this site was subject to tidal inundation before the construction of the south link road and formed part of the Douglas estuary. Planning permission has been granted for the extension to the Douglas Court Shopping Centre over most of the reedbed. There is a small area of scrub in the south west of the site which includes birch and willow species.

3.8.13 The small wetland area, formerly part of the Douglas estuary, is of local biodiversity value. The site is of moderate to high local biodiversity importance. As a general recommendation, it is desirable to retain wetland habitats where possible, however, given the fragmented nature and size of this site and taking into consideration that permission has already been granted for development over most of the reedbed habitat, this site could have development potential. As the site is over 2ha, EIA would be mandatory for development over entire area. Proposals for development over smaller area (>01.ha) would require screening for EIA, to fully determine environmental impacts.

Architectural & Archaeological Heritage

3.8.14 The site is fully developed and there are no architectural & archaeological Heritage issues with this town centre precinct.

Existing Land Use Analysis

Table 3.4: Douglas Court Shopping Area Land use Analysis Table

Indicators	Quantity	Assessment
Estimated Population	Nil	No residential areas
Number of businesses	50	
Comparison Floor space	5380sqm	Dunnes Stores, Art & Hobby, Next Clothing
Retail Services Floor space	1058sqm	Chemist, Hairdressers
Convenience Floor Space	3160sqm	Dunnes Store, Butchers, Health Store
Vacant Floor Space	135sqm	3 units
Car parking	1096	All spaces are open air off-street parking spaces with poor pedestrian priority

Dwelling Units	None	Adjoins Belgard Downs Estate to the south
Open Space	None	All shopping centre and car parks
Community Facilities	No	Community Centre
Protected Structures	No	
Architectural Conservation Areas	No	
Special Conservation Area	Adjacent to Douglas Estuary	Cork Harbour SPA 4030
Area of flood risk	No	
Waste Water Infrastructure	Main trunk sewer	Serves Douglas and connects with outfall into Estuary
Bus Routes and stops	1	Bus Routes 223 (Southward & Northward). Hourly service, Sheltered Bus Stop
Road access	R610 Relief Road	Barrier to connectivity for pedestrians
Pedestrian/cycle access	2 Pedestrian crossings and a bus stop	Does not follow desire lines
Connectivity with town centre	2 pedestrian crossings	Very much peripheral and for the pedestrian the centre is isolated and car dependent
Public realm	Poor to fair	Externally the public realm is poor but internally the public realm is fair with a number of seating areas spread throughout the centre.
Vacant Land	2.5ha	Land to the east of the shopping centre, partly wetlands, used for informal recreation accessed from Belgard Downs.

Emerging Issues

3.8.15 The Emerging issues for Douglas Court are:

- Douglas Court Shopping Centre is a 1980's development which is in need updating and modernising;
- Ad hoc approach to planning proposals for extensions rather than an overall plan for the future development potential for the entire site;

- The Shopping Centre is dominated by surface car parking which is not pedestrian friendly;
- Poor pedestrian and cyclist access as well as poor cycling facilities e.g. small number of bicycle stands, lack of lockers etc;
- Poor connectivity to the rest of Douglas town centre. This is primarily due to the R610 road act as a barrier to pedestrians and giving priority to vehicles;
- Poor pedestrian and cyclist desire lines (movement) thereby increasing the car dependency problem;
- Low vacancy levels; and
- This Shopping Centre is currently in receivership.

3.9 Retail Survey and Retail Health Check

3.9.1 As part of the Land use survey a detailed retail survey and retail health check was carried out for the Douglas Village area. The key results of the surveys are as follows:

Retail Survey

3.9.2 The retail land use survey involved a desk top study of the An Post Geo-directory (2012) database and the 2007 retail survey, as well as on-site surveys of every building that had retail activity within the study area (X-03a and b). For ease of analysis, the study area was divided into 13 Character Areas (as described earlier in this chapter) as shown in the land use table and elaborated below. The retail survey focuses on the seven character areas (see fig 3.7 below) that contain a retail element.

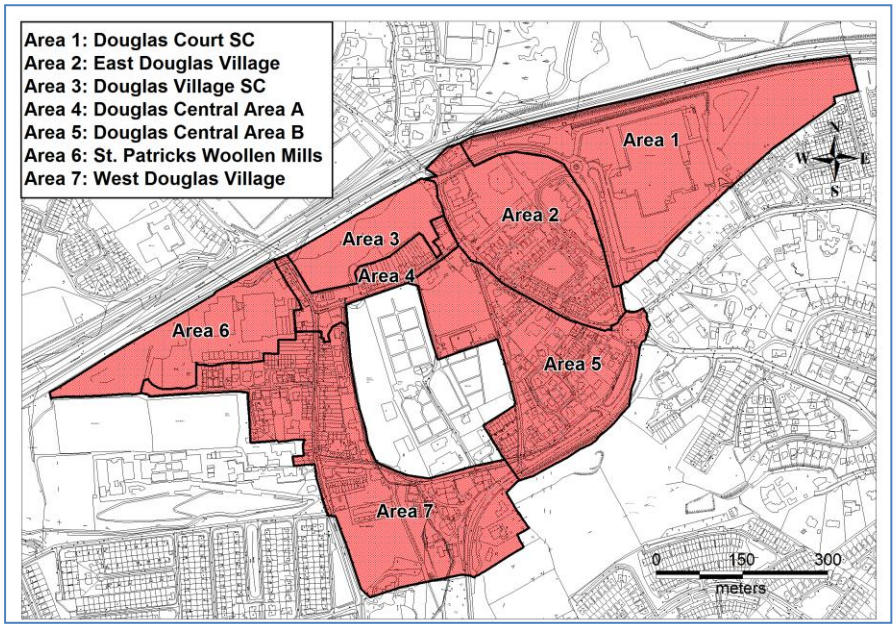
3.9.3 Each site was classified according to a set of four retail classes; namely comparison, convenience, retail services and vacant based on the categories classified by the GOAD Experian Ltd report done by Scottish Government in December 2007. The table below identifies the GOAD Classifications.

Table 3.5 GOAD Classification

GOAD Classification – General:	
GOAD Class	**GOAD Sub-class**
Retail	• Comparison • Convenience • Retail Service • Other Retail
Services	• Leisure Services • Financial & Business Services • Health & Medical Services • Public Service • Religious Service
Vacant	• Vacant Retail

3.9.4 For the purposes of calculating the vacancy rate, a vacant property was defined as any floor retail/commercial unit which is available and suitable for use but is unoccupied, i.e. the survey does not include any retail/commercial units which are currently under construction or any units which are derelict. Best practice guidance recommends that vacancy rates should be where possible expressed as a percentage of total floor space as well as a percentage of vacant units.

Figure 3-7 Retail Survey Areas



3.9.5 The general assumption was made that each convenience retail used has a gross/net ratio of 65% while all other uses categories have an 80% ratio (recommended by the Retail Planning Guidelines 2011).

3.9.6 In some cases, field work showed that some buildings were fully used for retail so ratios of between 80-100% were used. Where additional floors were identified during the field work, they were added into the calculated gross floor area. As a result of the survey and the calculation of gross to net floor area, each character area has a breakdown of categories and a comparison can be made between character areas in net floor area.

Table 3.6 Land Use Analysis of Douglas Study Area (2012)

Land Use Analysis of Douglas Study Area (2012)					
Character Area	Comparison	Convenience	Retail Services	Vacant	TOTAL (net m2)
Area 1- Douglas Court	5,380	3,160	1,058	135	9,733
Area 2 – East Village	729	771	6,458	1,447	9,405
Area 3 – Douglas Village	4,355	4,357	1,607	4,097	14,416
Area 4- Douglas Central A	193	0	3,526	197	3,916
Area 5- Douglas Central B	184	30	3,541	206	3,960
Area 6 – St Patrick's Woollen Mills	1,991	425	1,533	3,129	7,077
Area 7- Douglas West	668	233	2,056	160	3,117
TOTAL	13,500	8,975	19,779	9,371	51,625

Note: The category "Retail Services" covers land uses such as financial services, leisure, hospitality, medical, hairdressers as well as dry cleaners, computer repairs etc.

3.9.7 The land use survey of the 7 character areas has been analysed and there is a total floor area of 51,625sqm (net), of which 18% of premises were vacant at the time of the survey (April 2012). The predominant land use is retail services (19,779sqm - 38%) and comparison (13,500sqm - 27%) and approximately (8,975sqm - 17%) of convenience floor space. The majority of the convenience floor space is located in Tesco's, Dunnes Stores and Centra. There are no discount convenience stores in Douglas Town Centre.

3.9.8 Whilst the land use survey results show that the Retail Services category does dominate the retail offering in Douglas, a further examination of the 19,779sqm of floor space shows that 50% is currently involved in leisure services (pubs, hotels, restaurants), 22% in finance

services (accountants, banking), 16% in general services (repairs and maintenance), 7% in the health services (doctors, dentists and other health professionals), public services (1%) and others (4%). This illustrates the diversity of retail services provided in Douglas, but also shows that the provision of public service could be improved in Douglas.

Table 3.7 Retail Services by Character Area

GOAD Category	Finance	Health	Leisure	Public	General	Other	TOTAL
Character Area							
Area 1- Douglas Court	146	0	486	0	146	280	**1,058**
Area 2 – East Village	2,365	390	3,167	0	470	66	**6,458**
Area 3 – Douglas Village	367	0	839	0	292	109	**1,607**
Area 4- Douglas Central A	375	92	2,718	50	182	109	**3,526**
Area 5- Douglas Central B	304	408	2,104	0	743	0	**3,541**
Area 6 – St Patrick's Woollen Mills	146	28	268	97	763	231	**1,533**
Area 7- Douglas West	591	528	310	0	627	0	**2,056**
Total	**4,294**	**1,446**	**9,892**	**147**	**3,223**	**795**	**19,779**

3.9.9 In comparison with the 3 other District Centres in Metropolitan Cork (Mahon, Wilton and Blackpool), in 2007 Retail Study, Douglas had the second largest retail footprint and the largest convenience retail share (4,585sqm) indicating a service provided to large residential catchments in the southern suburbs of Cork (both the City and County side of the N40 motorway). There is no reliable data for the current floor space in the other district centres and this will be decided once the 2012 Retail Survey is completed. However, all centres have had a number of new developments built (adding to the retail floor space since 2007) and also have received planning permission for additional floor space that is yet to be constructed. It will be important for the Cork Metropolitan Area in the future that Douglas continues to compete adequately with the other centres and the City Centre in providing an effective service to its residents.

3.9.10 The present configuration of the retail areas in Douglas is fragmented and areas of pedestrian severance are obvious between Douglas Court Shopping Centre and Douglas Village Shopping Centre. Equally, accessibility to the shopping centres by means other than vehicular is constrained. These problems affect the accessibility, safety, amenity levels and commercial vitality of the area as a whole and there is a need to create a stronger, single commercial focus with high public realm at its core, which is accessible on foot from within its local walking catchment and facilitates the use of public transport and cycle facilities.

Retail Health Check

3.9.11 The Retail Planning Guidelines of 2011 suggest that a retail health check of the town centre should be undertaken when preparing a land use survey in order to estimate the degree of vitality and vibrancy in the town centre. It allows the local authority to estimate how much space is in use for different functions and where a consistent approach to the survey work is in place allows them to make an informed estimation as to how that balance has been changing.

3.9.12 The Guidelines note that identifying specifically the footprint of retail uses is very helpful in identifying the core retail areas of a city or town, the primary and secondary shopping streets, and useful in distinguishing between town centre and edge-of-centre areas.

3.9.13 The Retail Planning Guidelines emphasise the major role shopping plays in attracting people to town centres and the importance of such centres retaining retailing as a core function, providing diversity of choice and quality in their shopping and service facilities, and supporting their role as the social and economic focus for their communities and rural hinterlands alike.

3.9.14 Some of the other indicators used to estimate the health of the town centre are; diversity of use, pedestrian footfall, rental structure and vacancy levels.

Diversity of Use

3.9.15 The health check survey recorded uses within the town centre retail core in various categories to examine the diversity of uses present. Type of uses measured include comparison retail, convenience retail, retail and leisure services, financial and business services, health and medical services, public and religious services and general office use.

3.9.16 Diversity of use in a town centre is an indicator of vitality and vibrancy. The following table shows the summary of uses in Douglas taken from the land use survey in April 2012.

Table 3.8 Diversity of Uses

Summary of Douglas Diversity of Uses Survey		
Type of Use	**No. of Outlets**	**Percentage (%)**
Comparison	86	24
Convenience	26	7
Retail Service	44	12
Leisure Service	48	13
Other Retail Service	-	-
Financial & Business Service	39	11
Health & Medical	30	8
Public Service	14	4
Religious Service	2	1
General Office Use	-	-
Overall Vacancy	74	20

Total	**363**	**100**

3.9.17 It is clear from the above table that the Douglas town centre has a random but diverse mix of uses within the different shopping centres. The majority of use is comparison retail and there is no general office use in Douglas. Overall, there is a high level of vacancy of 20% (this figure refers to vacant units and therefore is slightly different to the vacancy figure of 18% when dealing with floor area vacancy).

Table 3.9 Ownership of Uses

Types of Ownership of Uses		
Ownership Type	**Quantity**	**Percentage(%)**
Independent Units	190	70
Regional Multiples	9	3
National Multiples	5	2
Irish/UK Multiples	63	23
International Multiples	6	2

3.9.18 From the above table it is clear that the predominant ownership is independent units and large number Irish/UK multiples. A high level of independent owners shows the history of the town centre has been largely independent operators and there has not been much investment in international operators.

Pedestrian Footfall

3.9.19 Footfall is a standard measure of vitality in shopping centres and in Town Centre's. In order to provide a comparative analysis of the footfall in Douglas, there have been a number of surveys being carried out by the survey teams.

3.9.20 Surveys of footfall in Douglas during 2012 indicated a low level of daytime activity. The predominant footfall was within the Douglas Village Shopping Centre and Douglas Court Shopping Centre, attributed to the existence of anchor stores (Tescos and Dunnes) in both centres. Higher footfalls were recorded on Thursday, Friday and Saturdays.

Rentals

3.9.21 Rental values are a good indicator of prosperity and if compared with other similar centres in a city or town can provide comparison between them to indicate how the town centre is prospering. In the past during the boom period, the 2007 retail survey said that the rental values were varied between €750/sqm and €1300/sqm in Douglas Village. This value derived in the 2007 Retail Survey compares favourably with Wilton (€1200/sqm) but not with Mahon (€2000/sqm) and the City Centre average (€1700-2200/sqm). However, it was higher than Blackpool average of €645/sqm.

3.9.22 In the light of the economic downturn facing the country, the rental structure in Douglas and elsewhere has changed. In some cases rental agreements are negotiated individually by the

tenant and landlord and although some of the rents have been maintained from the 2007 period, generally rental values have fallen since 2007.

Vacancy

3.9.23 Figures released by Experian, a global information services company in 2010 show that County Cork's overall average retail vacancy rate was estimated to be 17.3%. Ireland's County Average was 14.7%. Balbriggan Town Centre Health Check prepared in 2010 estimated that an average pre-recession national vacancy rate would be in the 10-12% region

3.9.24 According to a 2010 study in Scotland (Moray Town Centre Health Check Assessment) the Scottish average vacancy in 2010 was 10%. Of 5 towns studied in the Moray Study, which was considered somewhat comparable based on the size and scale of its towns to those of Cork, the best town centres had a rate of vacancy no lower than 6%. It is suggested therefore that a rate of 10% or lower could be considered to be a very reasonable rate of vacancy given current economic conditions. Even in the most favourable economic circumstances National Prime High Streets often only have a level rarely lower than around 4 or 5%.

3.9.25 In the current context it could therefore be assumed that towns with an overall vacancy in the region of 8-13% can be considered to be performing relatively well. Those towns in the 14-19% category should be closely monitored to ensure there is no further deterioration. Towns with an overall vacancy level over 20% may have reached a critical point where careful consideration needs to be given in relation to any future retail development.

3.9.26 The retail vacancy in Douglas varies considerably from the high levels in Douglas Village Shopping Centre and St Patrick's Woollen Mills to the low values in Douglas Court Shopping Centre. Overall the average of 20% is higher than the national average of 15%. The total vacancy represents approximately 9,500sqm of floor space and this figure is considered to be too high for vibrancy and vitality in the centre. The need to fill vacancy must be a priority and must be addressed by the strategy (see chapter 8).

Issues Emerging

3.9.27 The following issues arose as a result of the Retail Land Use & Health check analysis

- As a District Shopping Centre in the Cork Metropolitan Area, Douglas has a number of fragmented retail shopping centres (Douglas Court, Douglas Village Shopping Centre, East Village and St Patrick' Woollen Mills) that exhibit pedestrian severance issues affecting its overall accessibility, safety, amenity levels and commercial vitality.
- In 2012, there is an overall retail floor area of 51,625sqm (net), of which 27% is comparison and 17% is convenience retail. Douglas has the largest convenience retail floor space in comparison with the other district centres in Metropolitan Cork, with three large supermarkets and no discount store.
- The diversity of land uses in Douglas show that the village is well served by leisure, finance, health and retail services, but could be improved in the provision of public services.

- Although there is a diversity of retail mix in each of the retail character areas, there is a high overall vacancy rate (20%), which is higher than the national average. Each retail areas have different vacancy rates with St Patrick's Woollen Mills and Douglas Village Shopping centre showing the highest rates (42% and 28% respectively).
- The predominant reason for travel to Douglas is the convenience and comparison shopping in Douglas Court and Douglas Village Shopping Centres.
- Good diversity of retail floor space with three major supermarkets. Each retail character area has a different mix of retail floor space.
- The majority of retail outlets are owned and run by small independent businesses (70%).
- There is no general office floor space in Douglas resulting in a lack of day time population and contributing to a lack of vibrancy.
- Vibrancy and vitality in Douglas has declined in line with the downturn of the economy with lower footfalls, higher vacancy rates and lower rentals.

3.10 Community, Open Space and Recreation Facilities

3.10.1 In 2009, Cork County Council commissioned Colin Buchanan's to prepare an audit of the Social, Recreation and Community Infrastructure in Cork City South Environs, including Douglas. The report did an area by area analysis of all infrastructure covering sports and recreation facilities, education, health, community and social facilities and identified a number of gaps in the provision, based on demographic analysis, future growth patterns, standards used and best practice elsewhere. The finding of the report indicated the following:

- In considering the current provision of sports facilities in Garryduff, Douglas GAA, College Corinthians, Douglas Hall AFC and the community park, there is a deficit of sports and recreation facilities.
- The developed ancillary open space within the residential areas of Douglas comprise 48 hectares and using the Council's standard of 12-18%, this shows a deficit in provision of between 20-54ha of residential open space. However, no qualitative analysis of the open space has been done and there are other large non-residential areas of undeveloped open space around Vernon Mount in the close proximity to the former landfill in the Cork City over the North Ring Road (N25).
- This former landfill will be developed into a regional park for the residents of south environs of the city and it will be important that pedestrian/cycle way connectivity be improved to the proposed Regional Park at the former landfill in the city, from Douglas.

3.10.2 Other private open spaces in the Douglas area are the Douglas Golf Course, comprising a prestigious 18 hole golf course and clubhouse on a strategic location on 54 hectares; Douglas GAA, comprising two playing fields and a clubhouse, ancillary uses in a strategic location off Douglas West Road; Frankfield Golf Course comprising an 18 holes golf course and substantial driving range and practice area and club house and Vernon Mount, comprising a period house and 7.7ha of steeply sloping land covered with trees and currently used as a bike track with dedicated access off South Ring Road at Kinsale Road Roundabout.

3.10.3 Organized public open space in Douglas are available at the public park comprising a community hall, playground and treed walks linking the Lions Club with the Douglas Village Shopping Centre. There are also a number of informal open spaces along the river valleys. The community park and other informal open spaces along the river valleys have on-going public order and anti-social order issues that have come to the notice of the Gardai. The predominantly young teenage offenders frequenting these green areas are engaged in illegal alcohol and drug abuse as well as criminal activities such as damage to property/vehicles, theft, assaults and public disorder. This anti-social behaviour has a detrimental effect on the use of the green areas, which have huge potential for recreation and pedestrian/cycle connectivity within Douglas.

3.10.4 In terms of organised leisure facilities, Douglas has no community based leisure/health centre and an opportunity exists for the provision of an accessible leisure facility in close proximity to the existing schools and sporting facilities. In addition, an opportunity exists for the construction of a primary health care centre, where the Health Service Executive co-ordinate the provision of health services in one building that is accessible to all, preferably in a town centre location, to benefit from public transport access and pedestrian/cycle access. Facilities provided in this multi-purpose building could include doctors, physiotherapy, a pharmacy and a mixture of other similar health professionals.

3.10.5 Although the provision of open space and recreational facilities is inadequate at the moment in Douglas, when compared with the population and facilities available in the adjacent City Council area, the provision of open space deficit is somewhat reduced. However, any new development would be required to provide new open space and recreational facilities and it is also very important to improve connectivity/accessibility to the different open spaces throughout the area. Other sporting facilities in close proximity or adjacent to the study area include Douglas Tennis Club, Nemo Rangers GAA Club, Tramore Athletic Soccer Club, Ceanntar na Cathrach GAA pitches in Ballinlough, Gus Healy Swimming Pool and Cork Con Rugby Club.

Issues Emerging

- The existing recreational facilities are not easily accessed and there is a need to improve connectivity between them;
- Many of the existing open spaces and river valleys, which have potential for improved connectivity, have anti-social behaviour problems;
- Any new development would be required to provide additional open space and recreation facilities;
- Whilst previous surveys undertaken about community facilities in Douglas have shown that there is no shortage, this study has identified the need for a multi-purpose building which will allow for both leisure and community facilities; and
- Whilst there are numerous sporting facilities in Douglas, there is a need for additional playing pitches to be provided to serve the growing demand in the area.

3.11 Environmental Considerations

3.11.1 In terms of built heritage, Douglas has two streets designated as Architectural Conservation Areas (West Douglas Street and East Douglas Street) and there are a number of buildings

that are Protected Structures and listed in the National Inventory of Architectural Heritage (NIAH) and areas of archaeological significance, showing that heritage value of its origins.

3.11.2 The Habitats survey of the Douglas area showed that there a number of ecological corridors along the river valleys linking valuable habitats in the area. Douglas is in close proximity to the Special Protection Area of the Cork Harbour and any new development would need to take cognisance of the need to protect this habitat.

3.11.3 The Flood Risk Assessment Report for the Douglas area of the Carrigaline Electoral Area Local Area Plan 2011 shows an area along the Ballybrack Stream south of Tramore River that is considered subject to flood risk. Any development proposals to be carried out in this area would have to be subject to detailed flood risk assessment in terms of the Guidelines. The Land Use and Transportation Strategy will therefore take this into consideration in preparing any future land use development strategy.

3.11.4 An Environmental Report, prepared under the Strategic Environmental Assessment Regulations (2004), accompanies this final report and contains a detailed environmental baseline survey. In addition, this final report is also accompanied by a Screening Report for the Habitats Directive Assessment (HDA).

4 Existing Public Realm Conditions in Douglas

4.1 Introduction

4.1.1 To establish the current public realm conditions in Douglas Village a public realm assessment of the urban environment was carried out. The main aim of this survey was to identify deficiencies in the streetscape which would be remedied through best practice urban design interventions and methodology. Urban Design is the process of shaping the public realm for life in our cities, towns and villages. One of the key issues which the DLUTS will seek to address and deliver on is how the public realm works together with the built form and transportation issues. It is acknowledged that the public realm in Douglas is poor and with the successful implementation of DLUTS, opportunities will present themselves where streets and junctions can be visually and physically improved and pedestrian movement can be prioritised. It is the intention of this report to increase the permeability of access to Douglas village and within the village.

4.2 Site Assessment

4.2.1 There are two access points from the city to Douglas along the Douglas Road and the South Douglas Road. Both of these access roads pass under the N40. These create very restrictive entrances and act as pinch points from the village to the city vice versa. These pinch points restrict the options for improving the permeability to the north of Douglas Village and for devising improvements to the vehicular movement along those roads. The established built form of Douglas is dominated by the two shopping centres and the Mill retail complex, the hierarchy of roads that serve them and the elevated N40 road. Their form and layout dominate the village and act as independent isolated destinations within the Cork suburb that act as magnets drawing in customers from the environs. The shopping malls sit at either end of the village and are completely self-contained and car dependant which functionally ignores the existing historic village centre, once thriving with activity. The resultant feature is that these major roads act as barriers to movement across them, creating severance and fragmenting urban areas. Movement between the fragments becomes a purely mechanical experience rather than a sensory and social experience.

4.2.2 The approach into Douglas from the city under the N40 is unattractive as it is dominated by car junctions. Figure 4.1 demonstrates how Douglas Village is hemmed in by roads with the N40 and the Douglas relief road. The link between the two shopping centres favours the car rather than the pedestrian with wide roads and visually unattractive and potentially unsafe pedestrian ways. The formal route is to walk along the footpath on the relief road leaving one open to the noise and the dangers of vehicles. There is an informal walking route to the rear of the filling station and through the surface level car park at the cinema. However the option here is to either climb over a wall or continue on the footpath. Other pedestrian linkages involve walking through the east village crossing through the McDonalds forecourt and using the pedestrian crossing on the relief road into Douglas Court Shopping Centre.

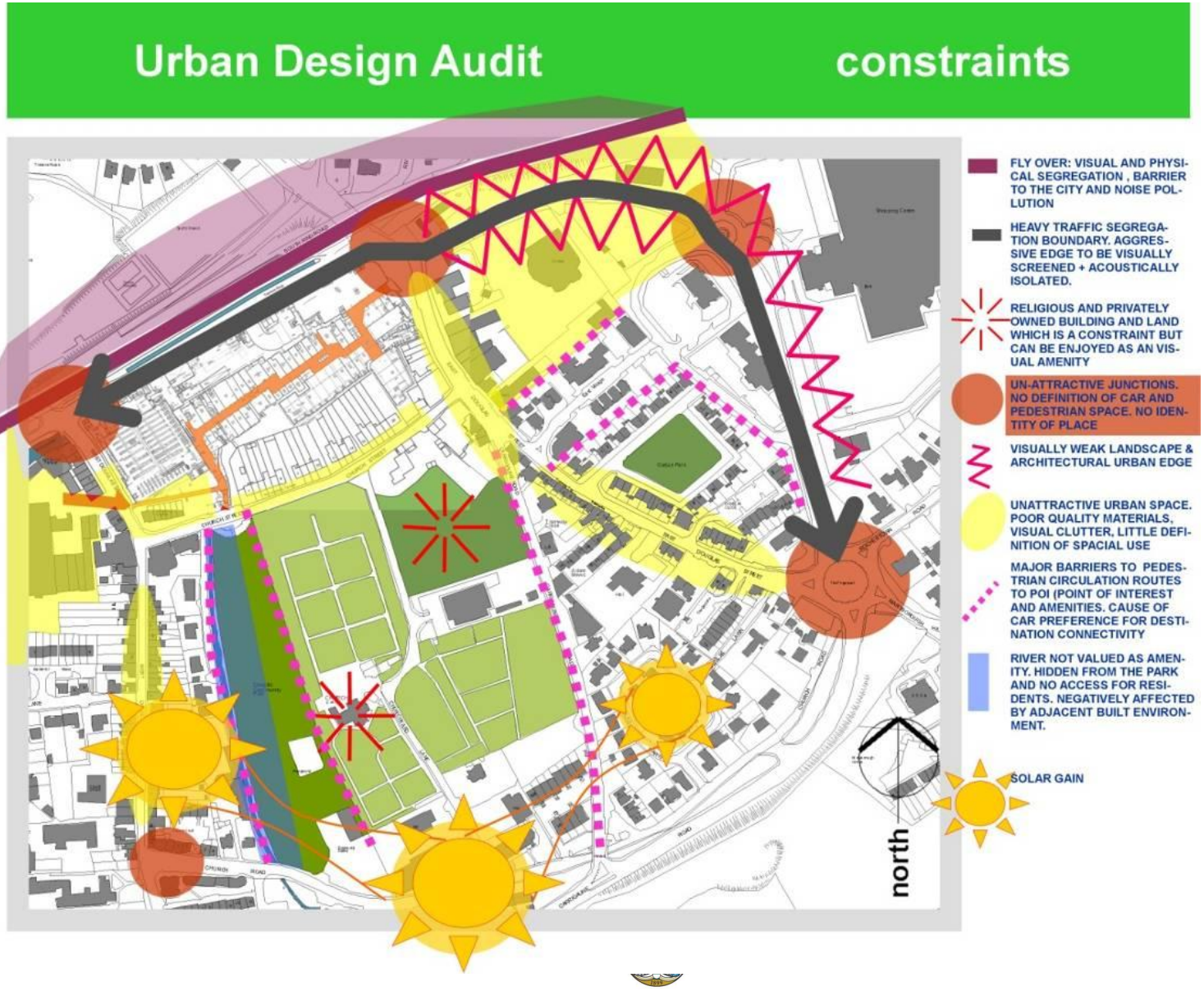
4.2.3 The pedestrian crossings in Douglas, particularly over the relief road, put the onus on the vehicle driver to stop to let the pedestrian cross thus the action of the pedestrian is sub servant to the car. The solution is to make the car driver subservient to the pedestrian at crossing points by the provision of wide, raised and well landscaped pedestrian crossings with the floorscape, lights and other devices used to define the crossing area. Pedestrian

priority becomes obvious once the change of material is encountered. Rather than the relief road being viewed as a distributor road its visual appearance could be changed to be that of an urban avenue. The road can become a street to promote social and commercial activity once the traffic is slowed to a safer pace. The best way to achieve this is to design the streets that encourage drivers to drive with caution. In any future development scenario the arrangement of buildings, spaces and activities can act as a natural traffic calmer which has the double advantage of being visually less intrusive and far more pleasant for pedestrians and cyclists.

4.3 Constraints

4.3.1 The constraints to public realm improvement and development can be summarised as follows. The South Ring Road creates a physical and visual barrier between Douglas village and the greater Douglas residential area and the city to the North of that road. It is also a generator of noise pollution. The R610 that was built to by-pass Douglas Village creates heavy traffic and visual segregation between the Douglas Court shopping Centre and the 'village'. The edge is visually aggressive and deters pedestrian movement across the site, thereby encouraging the use of motor cars on short trips.

Figure 4-1 Constraints



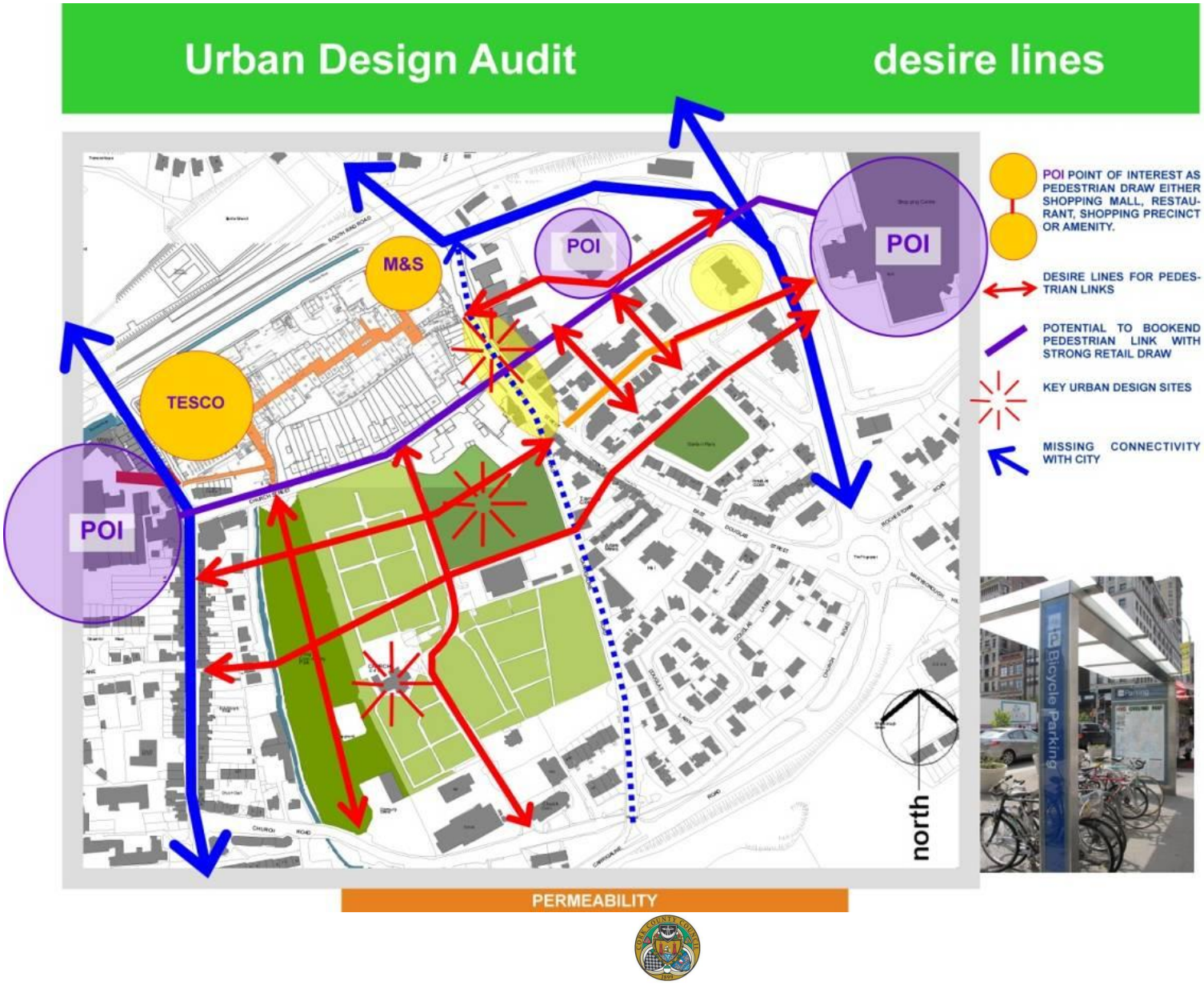
4.3.2 Examples of constraints within Douglas include:

- The Churches and the graveyards as well as the privately owned vacant land are constraints in that they prevent future development and further enhancement as well as easy access across the village. There are also opportunities associated with these sites in that they can provide for historical reference, solitude of place, rural atmosphere, etc.
- Each junction at the entry points to Douglas Village and the major Junction on the R610 do not define 'gateway' points to the village in that they are unattractive aesthetically and have no definitive signature. There is also little definition of space as regards the pedestrian and car interface.
- The entire route of the R610 is visually weak in terms of defining edge and landscape. It is particularly weak from the Intersection at Douglas East Road to the Roundabout entrance at the Douglas Court Shopping Centre.
- Almost the entire streetscape of Douglas Village retail area is unattractive visually due to poor quality of materials, visual clutter, and little to no definition of spatial use. The pedestrian routes through the back lands between the Douglas East Road and the Douglas Village shopping Centre is particularly bad as there is dereliction and undefined car parking and delivery.
- There are major physical barriers to pedestrian movements within the village, particularly from east to west. These are due to the walled graveyards, the privately owned undeveloped land, the cul-de-sac housing estate developments, the barrier along the west edge of the river and the long developed lots of land facing on to the Douglas East Road.
- The lack of easy access to the community park makes it less useable for residents and visitors other than as a thoroughfare. The river in the park is not valued as an amenity and the park facilities are minimal and of a low quality.

4.4 Desire Lines

4.4.1 Desire lines in this instance are indicated as desired pedestrian movement patterns between points of interest (POI). Points of interest can be shopping precincts, amenity facilities, historic and religious facilities, residential areas etc.

Figure 4-2 Desire Lines



4.4.2 The potential for the strongest desire line must be an east west route between the Douglas Court Shopping Centre and the Woollen Mills Retail Park, a leisurely walk of just eight minutes. Along this route are the strong draws of the Douglas Village Shopping Centre, the cinema the heart of Douglas along the Douglas East Road and the retail units on Church Road.

4.4.3 Strong desire lines run north south along the Douglas East and Douglas West Streets as well as the Carrigaline Road. There is a potential for desire lines to run east west and north south to and through the park from residential areas to amenity and retail areas.

4.4.4 Desire lines are strong from the city beyond the South Link Road, however the connectivity from these existing desire lines to Douglas village is poor and generally lack appropriate safety.

4.4.5 Any development to the back lands of the buildings to the east of East Douglas Street will create desire lines to run north south from the new POI to the existing commercial developments and housing estates.

4.5 Streetscape Assessment

4.5.1 The review of the public realm in Douglas Village was by way of a streetscape assessment where the central streets of the village were audited in terms of appearance and contextual perception. The main consideration in the street review are the condition and size of footpaths, the presence and condition of street furniture, trees and vegetation, the use of space between buildings, the cleanliness and overall physical appearance of buildings and the provision of car parking and public transport facilities. This report is a product of a walking survey undertaken in April 2012. The streetscape review has included the key streets in Douglas. Arising out of the public realm and streetscape assessment, there are a number of general issues that need attention:

- Narrow and uneven footpaths;
- Poorly designed kerbside parking;
- Pedestrian crossing points are limited and poorly delineated;
- Priority seems to be given to the movement of vehicles rather than pedestrians;
- Unsightly overhead wires;
- Lack of adequate street furniture;
- Cluttered steps, ramps and flagpoles;
- Poor location of the taxi rank;
- Poor inconsistent street signage;
- Differing quality of shop frontage;
- High boundary walls fronting streets;
- Limited permeability through the study area;
- Limited accessibility between points of interest; and
- The relief road acts as a major barrier to connectivity.

4.6 Implications for Douglas

4.6.1 A comfortable and stimulating public realm that encourages social interaction requires detailed attention to the structure of space and the elements it contains, in particular the following issues:

- **Gateways:** The most important transport interchanges or nodes serve as gateways to a town or city centre. Main junctions, roundabouts footpaths car parks are all arrival points. Four gateways have been identified in Douglas, the most important two are at the two bridging points over the N25. Others include the finger post roundabout when coming in from the Rochestown road and the crossing over the dry bridge on the Carrigaline road.
- **Connectivity:** Pedestrian connectivity is currently restricted as obstructions to the preferred desire lines are present throughout Douglas.
- **Points of Interest:** The analysis of Douglas identifies a number of points of Interest (POI) which would allow for potential key development based on their location and uniqueness.
- **Signage:** It is evident from walking through Douglas that signage is a clutter problem and can often be misleading. Not, infrequently, the only signage provided is for vehicles, so that the stranger on foot can find himself circulating around one way systems. The answer lies in:
  - Consistent and coordinated design of these elements over a wide area;
  - Making the structure of the place legible so as to minimise the need for signs, especially those concerned with traffic direction and control;
  - Concentrating pedestrian signage in a designed locality at specific nodal points;
  - Implicit routing defined by the paving type; installing art in the floorscape; and introducing other imaginative means of easing orientation.
- **Street Furniture:** Douglas currently has a public realm frequently characterised by clutter. Roads and streets are often dominated by ugly and incorrectly applied white and yellow paint and littered with railings, lighting, bollards signposts, CCTV and substations cycle stands and phone boxes.

5 Existing Transport Conditions in Douglas

5.1 Introduction

5.1.1 This chapter summarises the Baseline Traffic Evaluation Report which is contained within Appendix 3.

5.1.2 The Baseline Traffic Evaluation Report examined existing travel behaviour, demographic trends and travel demand in the DLUTS area to enable an understanding of travel patterns and the profile of trips made. In addition to examining travel demand, operational and capacity constraints on the transport network were identified through consultation and extensive site observation. From these early assessments a thorough picture of the current transport situation in the DLUTS area was identified and used to inform the development of transport strategy measures.

5.1.3 The remainder of this chapter summarises existing transport and travel characteristics in the DLUTS area and is structured as follows:

- Pedestrian Facilities and Conditions;
- Cycle Facilities and Conditions;
- Bus operating arrangements and conditions;
- Baseline Traffic Evaluation;
- Goods vehicle arrangements; and
- Implications and the way forward.

5.2 Pedestrian Facilities and Conditions

5.2.1 In general, relatively high levels of pedestrian activity were observed in Douglas village centre with lower levels of pedestrian activity outside the village area. This is a result of the spatially dispersed nature of development in the village, where local amenities are located outside the distance at which most people consider acceptable to walk.

5.2.2 Pedestrian facilities (such as footpaths, adequate crossing points, etc), which play a large part in determining the levels of pedestrian activity, are also mixed within the DLUTS Area. Other factors which determine pedestrian activity are traffic speeds and volumes and the presence of heavy goods vehicles as these can adversely affect the pedestrian environment.

5.2.3 The following key points were noted for pedestrian related facilities/ activity in Douglas:

- In general the provision of footpaths are quite good within the DLUTS Area;
- Footpath provision and widths outside of the village centre is disjointed in places which can lead to pedestrians walking on the live carriageway at times which in turn leads to a slowing down of traffic; and
- In general the level of pedestrian activity within the DLUTS Area was low to moderate with the highest level of pedestrian activity recorded in the vicinity of schools in the

AM peak period and outside Douglas Village Shopping Centre during the PM peak period.

5.3 Cycle Facilities and Conditions

5.3.1 Levels of cycling are low in the DLUTS Area, particularly amongst schoolchildren and commuters. The road network presents a poor cycling environment acting as an impediment for those wishing to cycle. The following observations were made in the DLUTS Area which deters people from cycling:

- no cycle network;
- restricted effective carriageway widths along a lot of roads in the town due to the presence of on-street parking;
- extensive car pick-up and drop-off activities in the vicinity of schools;
- lack of cycle lanes to protect cyclists from the effects of the above;
- lack of connectivity with the City;
- barrier created by the road network (e.g. N40);
- absence of on-street cycle parking in the DLUTS Area; and
- the radial road network, which impacts on the permeability of the town from a cyclists perspective, and restricts direct movement between various districts in the town.

5.3.2 The above factors represent a major barrier to cycle use in the DLUTS Area. The low level of cycling activity was proven in the traffic survey results, where cyclists accounted for a very small proportion of travel to work and education.

5.3.3 Generally the cycle network in Douglas is very fragmented and there are only a few stretches of road that have cycle lanes, these are:

- Maryborough Hill; and
- N27 /Airport Road;

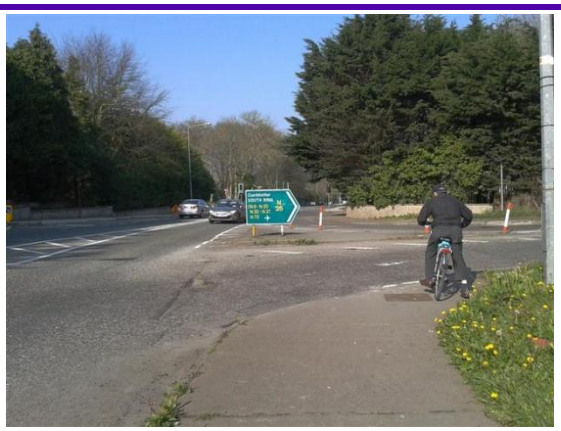
5.3.4 It is evident that one of the main restrictions on dedicated cycle lane provision is the level of on-street parking within the village, which is not ideal for accommodating cycle priority. There are opportunities to enhance the level of cycle lanes through the rationalisation of some on-street parking and the utilisation of some parallel routes to form a basic network. Figure 5.1 below illustrates some of the cycling facilities and issues in the DLUTS Area.

Figure 5-1 Example of cycling facilities and issues in Douglas

Picture 1: Poorly marked cycle lane on the N27

Picture 2: Cycle Lane on the N27 towards Kinsale Roundabout

Picture 3: Advanced Stopping area for cyclists on Donnybrook Hill at Grange Road Junction.



Picture 4: Cyclist attempting to negotiate Rochestown Road at N28 Slip Road

5.4 Bus Operating Arrangements and Conditions

Overview

5.4.1 At present, the DLUTS Area is served by four Bus Éireann City Bus routes (206, 207, 216 and 219) and three Bus Éireann Regional Routes (222, 223 and 249). These routes are shown in Figure 5.2 below.

5.4.2 Despite this reasonably high level of coverage public transport use in Douglas remains low (8% of all trips) when compared to Cork County (10%) and the state averages (16%).

Facilities and Conditions

5.4.3 Local bus services are limited to the Bus Éireann routes mentioned above with no private operators operating in the strategy area. Of the four City routes serving Douglas the 206, operating from Grange Road to Cork City via Douglas Village, has the highest frequency with one bus every 10 minutes throughout the day. The 207 (every 25 minutes during peak

times), the 216 (every 30 minutes during peak times) and the 219 (every 60 minutes during peak times) all operate with much lower headways. The two regional routes which pass through Douglas Village (222 and 223) both have headways of 25 minutes during peak periods. Regional Route 249, which connects Kinsale and Cork City via the N27, has a headway of 40 minutes during peak periods.

5.4.4 The provision of bus facilities is generally mixed in the strategy area. Some areas, particularly in the village centre, have sheltered bus stops with bus lay-bys. However some of the stops outside of the village centre have no shelters or lay-bys. Examples of Bus facilities in Douglas are shown in Figure 5.3 below.

5.4.5 The provision of bus lanes in the strategy area is limited. At present only two roads have dedicated bus lanes in place, these are on the Grange Road and a short section of Donnybrook Hill northbound.

Figure 5-2 Bus Éireann Routes Serving the DLUTS Area

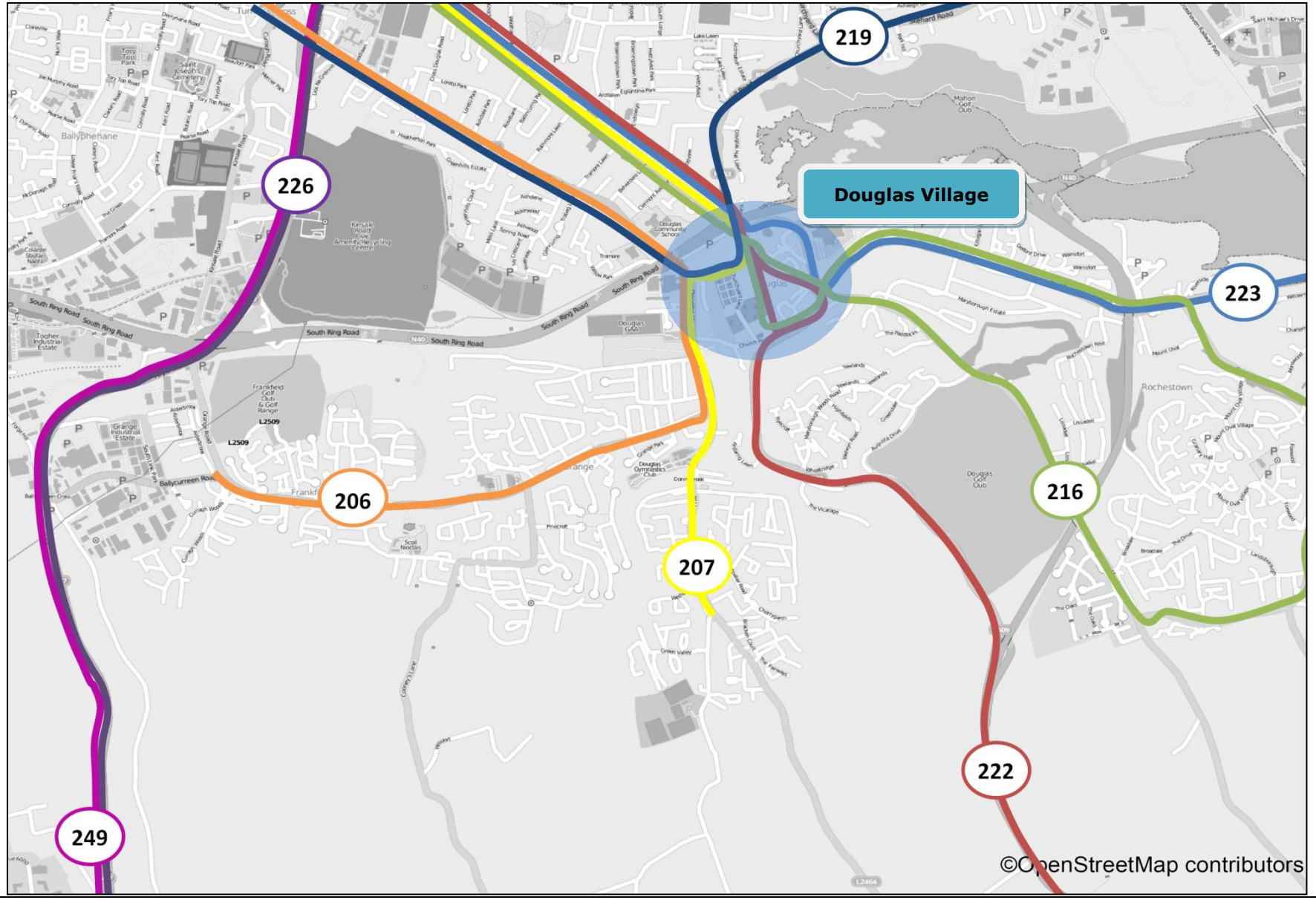


Figure 5-3 Local Bus Operations in Douglas

Picture 1: Passengers Loading onto the 207 at the stop on Church Street.

Picture 2: Sheltered Bus Stop at Douglas Village Shopping Centre.

Picture 3: Unsheltered Bus Stop on Rochestown Road with no Lay by and situated on a very narrow footpath

5.5 Baseline Traffic Evaluation

General Traffic Conditions

5.5.1 The following key points relating to general traffic management arrangements were noted in Douglas:

- Douglas experiences considerable congestion during the peak hours of 08:00-09:00 and 17:00-18:00. The areas around Douglas Street West and Church Road are particularly bad during the AM peak period as school trips and work trips occur simultaneously leading to long queues through the village. Douglas Road East (R610), which is the primary route to and from Cork City experiences large queues in both the AM and PM peak periods as large volumes of traffic makes its way to and from Cork City from Douglas and other conurbations to the south.
- Some of the radial routes leading into Douglas, most notably Grange Road and the Rochestown Road also experience congestion in the AM peak period (08:00 – 09:00). Queuing on the Rochestown Road can extend to over 1km in the mornings as traffic making a right turn onto the N28 causes delays extending back as far as Coach Hill on the Rochestown Road.

Key Junction Arrangements

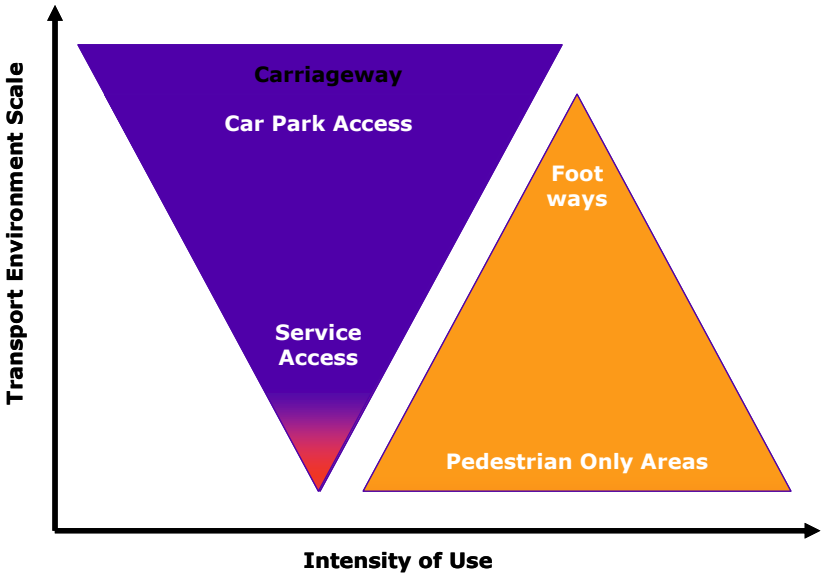
5.5.2 Junctions represent the maximum constraint in an urban transport system as they are the point at which inter and intra-modal conflict occurs. The arrangement at junctions for each mode of transport is therefore crucial in determining the efficiency of the traffic management system in the town for mechanised modes.

5.5.3 During the extensive site visit, junction arrangements at key junctions within the DLUTS Area have been reviewed and issues observed were split into the following categories:

- **Operational Issues -** This relates to a junction or an area where the operation is the main issue, this could include conflict between different modes or uses;
- **Capacity Issue –** This relates mainly to a junction or an area where capacity is the main issue, this could be also be down to operational issues, but mainly relates to demand exceeding capacity (i.e. vehicular demand wishing to pass through a junction or road exceeds the capacity available, this often leads to queuing and congestion), and includes confined / restricted road widths; and
- **Pedestrian and Cyclist Issues –** This relates to a junction or an area where pedestrian and cycle facilities are a main issue particularly where they are not catered for by the design of the road or junction. These issues are usually due to junction arrangements, pavement widths or crossing facilities.

5.5.4 It should be recognised that operational and capacity issues also have an effect beyond pedestrian and cyclist issues, these are:

- **Severance Issues** – This relates to the transport network hierarchy in relation to the adjacent land uses, for example, if there is significant regional movement through a retail or residential area, it could lead to increased vehicle speed and / or volume and a reduction in pedestrians crossing on that road. This could result in an increased footfall in some areas and reduced footfall in other areas.
- **Sustainable Town Centre - Regeneration –** Increased severance due to heavy traffic flows and / or congestion leads to the town centre becoming less walkable and less attractive to some visitors who focus on main shopping centre areas and do not venture beyond them. This effect undermines small retail and service businesses in the village centre. In turn, this undermines the shopping centres as small, unique, retail units attract some visitors to the town in search of the unique /



mixed retail experience not provided in shopping centres with their 'on-every high street' stores. Therefore, it is critical to ensure the transport user hierarchy is appropriate for land use and transport network needs. The intensity of use against the transport needs also needs to be considered, the aims of which are outlined in the UK *Urban Design Manual (2009).*

The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers

- **Supporting the Neighbourhoods and Community -** This is a primary concern within the Urban Design Manual and UK's Department For Transport's (DFT) Manual for Streets I, which is aimed at residential areas. However, for Douglas we need to consider the mixed priorities that the transport network wishes to support, this includes the High Street and Retail core and this is where the Manual for Streets (II), with UK's DfT Mixed Priority Routes, will give better guidance. We need to acknowledge that while there are arterial routes that go through the village centre, they need to be rebalanced and the hierarchy of routes needs to be redefined to support the long term sustainability and viability of the village centre. It has to support residential, retail and leisure uses, as well as the local and regional transport trips that constitute passing trade.

5.5.5 Figure 5.4 below illustrates examples of some of the issues experienced in Douglas. Figure 5.5 shows the 23 key junctions which were analysed and, from this, Table 5.1 summarises where issues have been identified and details them as per the above categories (i.e., Operational, Capacity or Pedestrian and Cyclist).

Figure 5-4 Examples of Issues in Douglas

Example of Issues

- Picture 1 shows an example of traffic congestion at the signalised Junction on Douglas Street East.
- Picture 2 shows an example of queuing at Clarkes Hill and Rochestown Road during the AM Peak Period.
- Picture 3 shows the poor pedestrian facilities on The Rochestown Road near the Fingerpost Roundabout
- Picture 4 shows an example of poor road markings, which is prevalent throughout the village, at the junction of Douglas Street East and the Fingerpost Roundabout.

1

2

3

4

Figure 5-5 Key Junctions Analysed

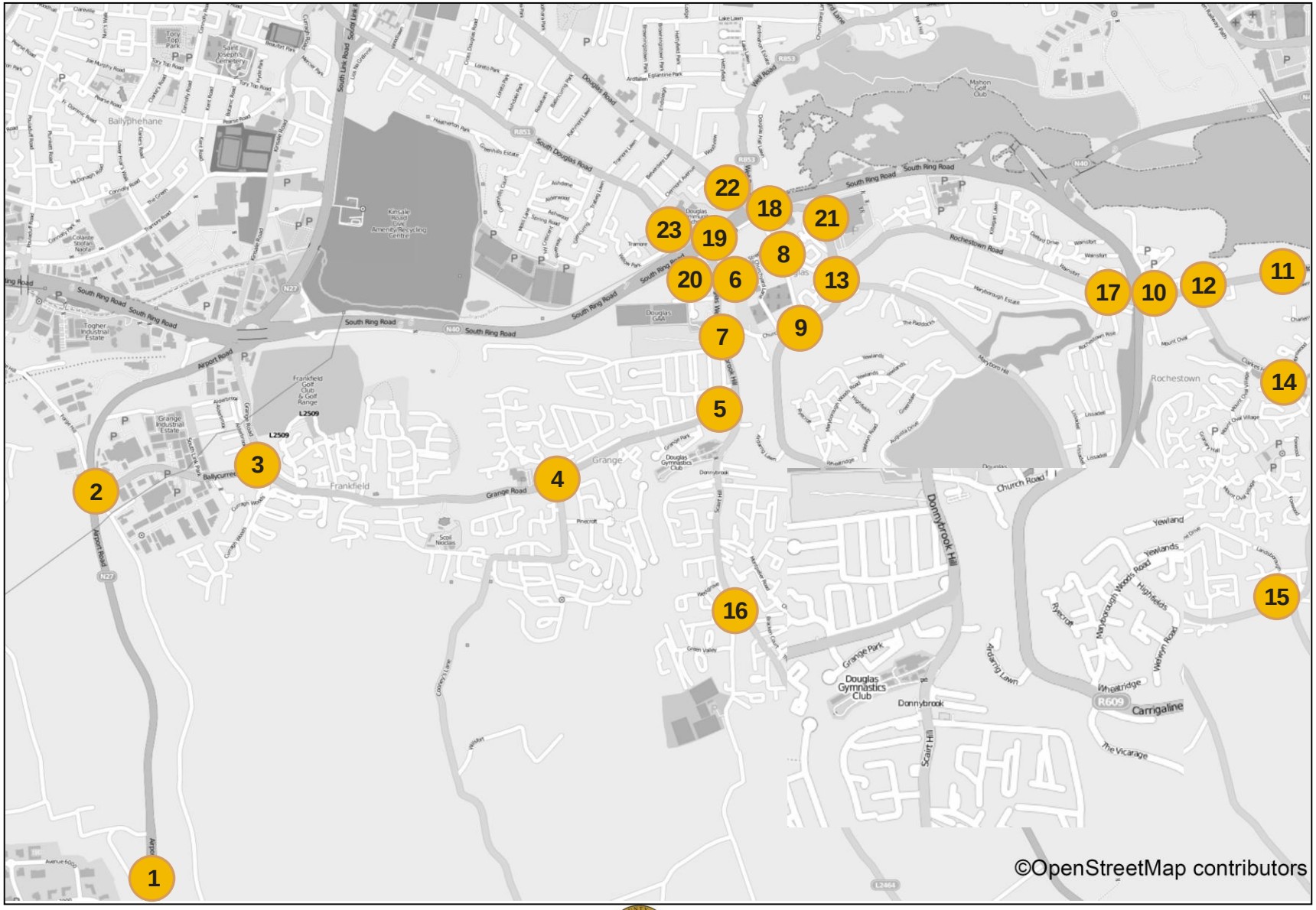


Table 5.1 Junction issues summary

Douglas Junction Summary			
Location	**Traffic Operations**	**Traffic Capacity**	**Pedestrian and cyclist Environment**
Jct 1. Airport Road /Amberley			
Jct 2. Forge Hill / Ballycureen Road	✓		✓
Jct 3. Grange Road / Ballycureen Road		✓	
Jct 4. Grange Road / Cooneys Lane	✓		✓
Jct 5. Grange Road / Donnybrook Hill	✓	✓	✓
Jct 6. West Douglas St. / Church St	✓	✓	✓
Jct 7. West Douglas St. / Church Road/ Donnybrook Hill	✓	✓	
Jct 8. Church St / East Douglas St. / Carrigaline Rd. / Tramway Tce	✓		
Jct 9. Junction at Dry Bridge			
Jct 10. St. Patrick's Roundabout (Marchwood)	✓	✓	✓
Jct 11. Rochestown Rd. / Coach Hill	✓		
Jct 12. Rochestown Rd. / Clarkes Hill;	✓		
Jct 13. Rochestown Rd. / Maryborough Hill		✓	
Jct 14. Coach Hill / Clarkes Hill;			
Jct 15. Clarkes Hill / Ballyorban Road;and	✓		
Jct 16. Scairt Cross on Donnybrook Hill			
Jct 17. On and Off Ramp N28 / Rochestown Road	✓	✓	✓
Jct 18. New Link Road / East Douglas Street / Well Road / N25 E'bound Off Ramp	✓	✓	
Jct. 19. New Link Road / West Douglas Street / N25 On and Off Ramp / South Douglas Street	✓	✓	
Jct 20. St Patrick's Mills / West Douglas Street	✓		
Jct 21. Douglas Court Shopping Centre Roundabout		✓	✓
Jct 22 N28 Off Ramp / Douglas Road	✓		✓
Jct 23 South Douglas Road / Willow Park	✓	✓	✓

5.6 Goods Vehicle Arrangements

Overview

5.6.1 Three, four and five axle HGVs were observed throughout the DLUTS Area during site visits. The limited carriageway width in the village is unsuited to significant HGV flows. This is particularly important in the context of encouraging an environment where cycling can be promoted.

Loading / Unloading

5.6.2 Loading and Service Bays are distributed throughout the village and seem to operate effectively in places. Some premises however provide no loading bays and delivery vehicles have to park on street at their destination. This in turn contributes to congestion as traffic must stop before passing the parked vehicle. This sometimes occurs on West Douglas Street and can disrupt bus services on the Green Route. Consideration could be given to restricting loading and servicing at peak periods within the village centre.

5.7 Implications and the way forward

5.7.1 A large part of the DLUTS transport strategy will be based around improving quality of movement in the area for pedestrians, cyclists and public transport. This is coupled with the clear need, which arises from the baseline site visits evaluation, to improve the operation and organisation of the road network in and around the DLUTS Area for the benefit of all road users. Both of these broad goals will involve redesign of key junctions in terms of their operation to provide for the safe and efficient movement for pedestrians, cyclists and public transport and for the more efficient movement of general traffic and also the redesign of the streetscape in central parts of the DLUTS area. Better organisation and utilisation of available infrastructure and road space for all road users and Village centre traffic circulation need to be core considerations.

6 Guiding Principles

6.1 Introduction

6.1.1 The DLUTS Strategy has been developed in a truly integrated fashion and has been prepared in the context of national policies, strategies and guidelines and using international best practice. The integration of land use, urban design and transport is a key mechanism for the DLUTS Strategy and each discipline plays a key role in informing the final strategy.

6.1.2 Before developing DLUTS strategy recommendations it is necessary to identify the key principles of the three main arms of the strategy, namely; Land Use, Urban Design and Transportation.

6.2 Land Use Principles

6.2.1 In land use terms, by 2032, the aim of DLUTS is to provide a sufficient quantum of mixed use development in the Douglas town centre to ensure that there will be a successful vibrant urban centre and an increased daytime population so that people can live, work and recreate in the area instead of commuting to work in the metropolitan area. In conjunction with this wish, the planning authority must ensure that the people of Douglas have an improved quality of life and it will be important for the planning authority to ensure that an efficient sustainable transport network with improved public realm, adequate recreation, open space and community facilities are provided. This overall aim will be supported by a number of more specific land use principles that will provide the framework for future land use development in the area. These principles are:

- Douglas Village shall continue to operate as a fully functional district centre within the Cork metropolitan Strategic Area;
- Any future development will be primarily mixed use in nature and where possible will promote and support sustainable travel;
- Improve the vibrancy and vitality of Douglas by increasing the day time population. This can be achieved by facilitating the sustainable mixed use development of the town/village core which will in turn allow for more sustainable living. (e.g. people living close to where they work);
- Improved circulation and movement of vehicular traffic to and around Douglas town/village core;
- Reinforce the concept of balanced spatial development within Metropolitan Cork by restricting large scale future development to the south of Douglas extending into the Greenbelt. Focus will be placed on making the most of the development potential of the existing village/town core in a sustainable manner;
- Protect and enhance existing recreation and open space land and provide improved accessibility to the use of this land to all residents, where possible. It will also be the intension to provide adequate community facilities for Douglas to meet the needs of the existing and future population;

- Improve and enhance pedestrian/cyclist connectivity from existing residential areas to Douglas village and onto Cork City. Consideration will be given to the development of new links connecting Douglas village and its surrounding area to the Tramore Valley Park;
- Any new retail development must consider the provisions of the Retail Planning Guidelines and the Cork City and County Joint Retail Strategy. If new retail development has gone through the necessary sequential test process and cannot find a suitable vacant place, it may only be constructed if it can prove that it integrates with the rest of the village and is in accordance with the land use principles and urban design framework. (Maybe potential for an exception to the rule for a discount store);
- There is a need to implement a coordinated and closely monitored approach to the future town management of Douglas. There is a necessity for a Douglas town/village centre partnership to be established involving all relevant stakeholders. For the partnership to be effective, it must comprise of public, private, voluntary, community sectors and all other relevant stakeholders. The partnership will set up a Town Team, that will plan and co-ordinate the implementation of proposals for Douglas on a day to day basis using projects such as town vitality, promotion, branding, streetscape, town centre safety and vacancy/dereliction;
- Any future development within the Village Core of Douglas shall be coordinated, integrated and connected in accordance with the overall development strategy and urban design principles for Douglas; and
- There is a need for the preparation of a development brief of potential backland development in Douglas where different uses and densities could enable mixed use development as well as providing connectivity for pedestrians and cyclists.

6.3 Urban Design Principles

6.3.1 Urban design policy is concerned with more than just the architectural quality of development. It helps to shape the place as a whole, and all its economic, social and environmental impacts. Design policies should be measurable. An example relevant for Douglas would be for development to incorporate the retention or provision of important routes and linkages which contribute to the permeability of an area. Development which results in the unacceptable loss of existing links will not be permitted.

6.3.2 This section will set out a framework providing design guidance for areas undergoing change and identifying areas where growth or change needs to be promoted and managed within the village. The overall aims will include:

- The provision of overarching urban design principles for Douglas Village;
- To provide detailed guidance on the design of buildings and the spaces that connect them taking into consideration context, grain of development, local distinctiveness, use of spaces, scale, massing, materials and hard and soft landscaping;
- To identify areas of opportunity for sympathetic and appropriate development; and
- To provide a framework for connectivity including public transport and linkages with the riverside and gateway sites, analysing the links and spaces that connect the centre with the wider suburban setting.

6.3.3 An urban design framework will emerge from the DLUTS programme. A framework describes and illustrates how planning and design principles should be implemented in an area where there is a need to control, guide and promote change. The purpose of the urban design framework taken in conjunction with the transport and land use options is to set out a vision and proposals for the promotion and improvement of the town centre and associated opportunity sites. Douglas provides functionality for the necessary activities predominately related to shopping with two large shopping centres. Opportunity activities and social activities should be included as part of the framework vision. The present activity deficiency is a reflection on the urban form and layout of the built environment which is not conducive to providing for opportunity. The proposed urban design principles for Douglas up to 2032 are:

- **Places for People**: For places to be well used and well-loved they must be safe, comfortable, varied and attractive. They also need to be distinctive and offer variety, choice and fun. The intention is to make Douglas Village a vibrant place offering opportunities for meeting people, on street activity and watching the world go by.
- **Enrich the Existing**: New development should enrich the qualities of existing urban places. The intention in Douglas should be integrated into the existing urban form and the natural and built environment.
- **Make Connections**: Places need to be easy to get to and be integrated physically and visually with their surroundings. This requires attention to how to get around by foot, bicycle, public transport and the car – and in that order.
- **Work with the Landscape:** Any intervention in Douglas Village will need to consider the direct and indirect impacts on the natural environment.
- **Mix Uses and Forms:** The smart mix option being promoted in the village will address the connections between people and places by considering the needs of people to access jobs and key services.
- **Manage the Investment:** For projects to be developed and well cared for they must be economically viable, well managed and maintained. This means understanding the market considerations of developers, ensuring long term commitment from the community and the local authority, defining appropriate delivery mechanisms and seeing this as part of the local design process.
- **Design for Change:** New development needs to be flexible enough to respond to future changes in use, lifestyle and demography. This means designing for energy and resource efficiency; creating flexibility in the use of property, public spaces and service infrastructure and introducing new approaches to private and personnel transport, traffic management and parking.
- **Design Brief:** The preparation of a design brief for developers which details the place and provides guidance on public realm finishes, street furniture, signage and lighting.

6.4 Transport Principles

Background

6.4.1 DLUTS has been prepared in the context of national policies, strategies and guidelines, in particular the Department of Transport Tourism and Sport's Planning Guidelines for Spatial Planning and National Roads 2012 and the Department of Transport, Tourism and Sport's

Smarter Travel: A Sustainable Transport Future, A New Policy for Ireland 2009-2020. One of the key aims for DLUTS is to secure more compact development that reduces overall demand for transport and encourages modal shift towards sustainable travel modes (e.g. walking, cycling and public transport), whilst also ensuring the strategic traffic function of national roads is maintained.

Transport Analysis

6.4.2 The transport principles which have been used to guide DLUTS have been based on an extensive analysis of the current transport environment, described previously in Chapter 5. As is to be expected of an important urban centre, there is a high degree of competition for space between various road and transport uses. The strategy therefore needs to consider:

- pedestrian movement;
- cycle movement;
- bus movement;
- schools transport;
- general traffic movement;
- parking; and
- goods and delivery services.

6.4.3 **Pedestrian movement:** The level of pedestrian activity varies throughout the DLUTS Area, with the highest concentration of pedestrian movements in and around the local schools and shopping areas. In general, whilst there are areas of intense pedestrian demand, the overall level of pedestrian activity is less than would be expected of a vibrant urban centre of the size of Douglas. In general, the provision of footpaths within the DLUTS Area is quite good. However, footpath provision and widths outside of the village centre is disjointed in places which can lead to pedestrians walking onto the road carriageway at times which in turn leads to a slowing down of traffic.

6.4.4 **Cycle movement:** Very little cycle activity was observed in Douglas and its environs. The cycle lane provision is very limited in Douglas and there was a lack of any on-street cycle parking facilities within the village centre.

6.4.5 **Bus movement:** Douglas is well served by four Bus Éireann City and three regional bus routes. The most frequent service, the 206, operates up to every 10 minutes during peak hours and serves Grange, Douglas Village and Cork City. Frequency on the other routes varies from every 20 minutes to every 60 minutes during peak times. The provision of bus facilities is mixed in Douglas with some areas lacking facilities such as sheltered bus stops, adequate bus bays at schools or bus priority routes in the area.

6.4.6 **Schools transport:** Douglas schools cater for a large number of pupils and there is a very significant level of school trips within the DLUTS Area. At present, the majority of pupils travel to school by car and, consequently, school traffic is a significant contributor to congestion in the DLUTS Area during the peak periods.

6.4.7 **General traffic movement:** The DLUTS Area is well situated with good connectivity to the national and regional road network. The implication of this road network is to encourage high car use for people living within the area and to encourage high levels of through traffic (i.e.

traffic that does not have an origin or destination within the DLUTS Area) for example from Carrigaline to the City Centre. Locally within Douglas the road capacity is limited. Within the village centre a number of roads converge thereby creating significant traffic management operational problems. There is considerable competition for road space within Douglas particularly during peak times primarily due to significant levels of commuter traffic, high levels of through traffic and large amounts of school related traffic.

6.4.8 **Parking:** There is considerable demand for parking within the DLUTS Area. Both the Douglas Court Shopping Centre and Douglas Village Shopping Centre provide large amounts of off-street car parking. Parking in the village centre is mostly on-street, with large amounts of this being taken up by medium and long stay parking. This suggests that the on-street parking in the village centre is being used by people working in the area and not by passing trade. Parking demand measures, including parking charges, have recently been introduced in the village centre in order to manage the demand in the area.

6.4.9 **Goods Vehicle Arrangements:** Three, four and five axle Heavy Goods Vehicles (HGV) were observed during site visits to Douglas. On-street loading and unloading activities take place at some points in the village centre. This can lead to congestion problems as parked HGVs tend to hold up traffic.

Implications & Principles

6.4.10 Based on the above analysis the following are the key transport principles which will form a guide for the DLUTS development:

- Protect vulnerable road users;
- Improve overall safety of all road users particularly walking, cycling and public transport;
- Promote sustainable travel by walking, cycling and public transport;
- Improve the operating environment of public transport and ensure reliability;
- Promote sustainable travel to schools;
- Improve the operation of the road network for all users;
- Provide a transport network to enable Douglas to grow in a sustainable way;
- Enhance integration between transport modes;
- Improve circulation and connectivity within Douglas Village and the remainder of the DLUTS Area; and
- Ensure Land Use, Urban Design and Transport are improved in an integrated way.

The integration of Land Use, Urban Design and Transport is a key element of this project and each discipline will play a role in informing the final Strategy. Figure 6.1 below illustrates the different principles and their relationship to each other.

Figure 6-1 Integration of Land use, Urban Design and Transport Principles

7 Developing and Evaluating DLUTS

7.1 Introduction

7.1.1 This chapter describes how DLUTS was developed and the evaluation process used to fine tune the numerous land use, urban design and transport options leading to a preferred integrated set of measures and recommendations which comprise the DLUTS Strategy for the future years 2022 and 2032.

7.1.2 A land use, urban design and transport strategy is developed by first defining, in the form of a Vision Statement, the future aspirations for the area and its citizens, and how these can be supported by improvements and changes to land use, urban design and the future transport network. The current policy environment aims to promote sustainable travel choices in Douglas in the future, which will give much needed traffic relief to the village centre. This is the background against which DLUTS is developed.

7.1.3 Transport, land use planning and urban design are among the most effective policy instruments available for building a sustainable future. Transport, linked to an appropriate execution of land use and urban design policies, is fundamental to environmental, economic, and social sustainability. These, along with safety, are the pillars of sustainable planning.

7.1.4 DLUTS is a strategy for delivering an integrated land use, urban design and transport system for the DLUTS Area that supports these sustainability objectives. It is grounded in a Vision Statement that encapsulates the link between land use, urban design, transport and sustainability. The DLUTS development process continues with the definition of specific and measurable evaluation objectives for the DLUTS Area that support its sustainable future, the Vision Statement, the specific concerns as communicated during the public and stakeholder consultation process and issues identified from extensive traffic surveys, site visits and from the detailed land use and transport modelling, analysis and evaluation.

7.1.5 As mentioned previously in Chapter 2, the DECLG Spatial Planning and Transport Guidelines have informed the development of DLUTS, particularly the land use and transport planning checklist outlined by these guidelines as follows:

General:

1. Will the plan encourage sustainable land use and transport infrastructure development while also allowing the transport network to function as effectively as possible?

2. Is the plan consistent with the National Spatial Strategy, Smarter Travel, Regional Planning Guidelines and other relevant official policy documents?

3. Will the plan protect existing and any proposed national roads and the wider transport network from adverse direct and indirect effects of development provided for by the plan?

4. Does the plan provide for future transport infrastructure development, including upgrades to existing routes and junctions and the cumulative impact of existing and permitted development?

Modal Shift:

5. Will implementation of the plan reduce car dependency and encourage a shift towards use of other transport options including measures to support the achievement of the Government's targets for modal split under the Smarter Travel strategy?

6. Does the plan make provision for integration of transport networks? Has provision for public transport networks needed now or in the future (e.g. rail extensions) been considered?

Access:

7. Will the plan ensure the provision of suitable non-national roads to provide access to areas of land where new development is proposed and to connect development generated traffic to the non-national road network and public transport system?

8. Are the policies and methods for managing access included in the planning document consistent with maintaining high levels of safety and road function?

Environmental Effects:

9. Have environmental sensitivity issues (noise, air pollution, greenhouse gases, congestion, etc.) been adequately addressed so that the future operation of the transport system can be sustained and amenities protected?

10. Are there appropriate objectives concerning impact mitigation measures, such as noise barriers, set back landscaping and/or buffer zones between areas of land where development is proposed and existing and proposed national roads, the cost of which should be borne by the developer?

Funding and Delivery Mechanisms:

11. Are there appropriate phasing and funding policies and mechanisms in place to ensure that developers pay for mitigation of the adverse effects of their developments on transport infrastructure?

7.1.6 The above checklist has been used in the development of DLUTS and its various land use, urban design and transport recommendations. The DLUTS Strategy delivers on each of these requirements.

7.2 DLUTS Vision Statement

7.2.1 The development of a Vision Statement is a very important part of the land use, urban design and transport strategy process, as, without it, the DLUTS evaluation objectives would be developed in isolation.

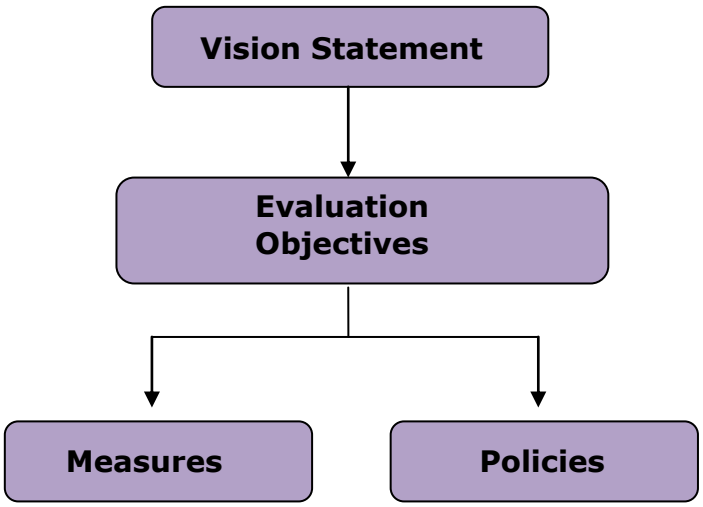
7.2.2 The Vision Statement provides the over-arching context for the specific measures within DLUTS, providing the all-encompassing blanket to which the evaluation objectives (specifically developed for DLUTS) fall under and ultimately the basic justification for the

proposed set of land use proposals, sustainable multi-modal enhancements, individual junction and street improvements and so on. Figure 7.1, below, illustrates the link between the Vision Statement, objectives, policies and measures and evaluation objectives performance measurement. The Vision Statement creates a sense of what DLUTS will achieve in the medium to long term so that the public can easily identify with its rationale and purpose. The Vision Statement communicates the desire to improve quality of life in the DLUTS Area. Evaluation objectives may then be set within the broad framework provided by the Vision Statement, such that land use, urban design and transport are integrated with the future aspirations for Douglas and its surrounding areas. The Vision Statement, therefore, focuses more on the future land use, urban design and transport environment than the current situation.

7.2.3 In developing the Vision Statement, it is vital to impart the importance of a well-functioning transport network which supports the safe and sustainable movement of people (e.g. walking, cycling and public transport) and is supported by sustainable land use and urban design policies. Land use, urban design and transport has an impact on all aspects of how the DLUTS Area functions including economically, environmentally, culturally and socially. DLUTS proposals relating to land use, urban design and transport and their integration will have a long term beneficial effects which has the potential to significantly improve the quality of life for current and future generations within the DLUTS Area.

7.2.4 The DLUTS vision statement considers this and it should stand the test of time, as it will be mentioned again in future developments of the strategy, and over the course of the anticipated timeframe of DLUTS. The DLUTS vision statement builds on previous plans for the DLUTS Area, and was developed by reference to relevant local, regional and national policy documentation to be consistent with existing aims and objectives as set out in these plans.

Figure 7-1 Strategy Development Hierarchy



7.2.5 The DLUTS vision statement is presented below:

DOUGLAS VISION STATEMENT

"To secure a successful vibrant urban centre with a more efficient transport network for Douglas, that provides an improved public realm, reduces congestion, encourages greater levels of walking & cycling, and improves the quality of life for the community, thereby enabling sustainable future growth."

7.3 Developing DLUTS Land Use, Urban Design and Transport Evaluation Objectives

7.3.1 A series of DLUTS land use, urban design and transport evaluation objectives have been developed taking cognisance of the DLUTS vision statement and considering issues raised during the consultation process, from a review of previous documentation, from best practice and from site visits to the DLUTS area.

7.3.2 The Department of Transport, Tourism and Sport's Guidelines on a Common Appraisal Framework for Transport Projects and Programmes sets out high level objectives which can be applied to DLUTS. These can be broadly categorised as follows:

- Economic;
- Safety;
- Environmental;
- Integration; and
- Accessibility and Social Inclusion.

7.3.3 The DLUTS land use, urban design and transport evaluation objectives are developed under these headings and support the broader economic, safety, social, integration and environmental objectives. Developing land use, urban design and transport strategies that contribute in all of these areas is the essence of sustainable land use, urban design and transport planning. Sustainability as an objective is traditionally defined in terms of society and the environment. Sustainable social objectives should consider the needs of the present society, with those of the future in mind. Environmental sustainability implies integrating the conservation of natural resources into the land use, urban design and transport policy framework and thus DLUTS.

7.3.4 Specific evaluation objectives or desired end-states are then listed under each of these headings. These evaluation objectives are typically constructed to meet the goals of relevant National and Local policies, such as reducing congestion, protecting the environment and increasing safety and accessibility for vulnerable road users. A large part of DLUTS is based around improving the quality of movement in the area for pedestrians and cyclists. This may involve redesign of key junctions in terms of their operation and also the redesign of the streetscape in central parts of the DLUTS Area.

7.3.5 Traffic circulation and better use of infrastructure and road space for all road users are core considerations for DLUTS. To encourage more trips by walking or cycling, it is very important to recognise what general measures should be put in place to gain improvements. The

"Hierarchy of Provision" sets out the order interventions required to support sustainable travel choices should be considered, as shown in Table 7.1 below.

Table 7.1 Hierarchy of Interventions

	Pedestrians	Cyclists
Consider First	Vehicular Traffic Volume Reduction	Vehicular Traffic Volume Reduction
↓	Vehicular Speed Reduction	Vehicular Speed Reduction
	Reallocation of Road Space	Junction Treatment
	Provide better crossings along existing desire lines	Off road cycle tracks
Consider Last	New pedestrian alignment or grade separation	Conversion of footpaths or sharing of such for both pedestrians and cyclists

7.4 Explanation of Evaluation Objectives

ECONOMIC Evaluation OBJECTIVES

7.4.1 Economic evaluation objectives can be defined in a number of ways depending on the tools which are available to realise change and the needs of the area. The main instrument available in the context of DLUTS is the zoning of land and the provision of quality transport infrastructure. Thus plans for the regeneration or development of an area should be reinforced by DLUTS. Integrated land use, urban design and transport planning can contribute to economic growth by encouraging new activities in areas where there previously was none. This is achieved by improving accessibility and by enhancing the appeal of an area through street design or improvements in the built or natural environments.

Economic Evaluation Objectives	Potential Measures
■ Improve economic vibrancy of Douglas Village	■ Ensure adequate land is zoned for employment uses
■ Provide for the future sustainable development of a mixed use high quality urban centre	■ Ensure adequate land zoned for retail, social, community and recreation
■ Support economic competitiveness	■ Improvements to public realm in order to make Douglas more attractive and vibrant
■ Support economic growth and employment in Douglas	■ Implement cost effective measures
■ Provide additional housing, retail, social, community and recreation facilities	■ Improve journey time reliability through junction control
■ Reduce cost of travel	■ Reallocate road space to improve access
■ Regenerate Douglas Village via	

increased inward investment	■ Make best use of strategic network ■ Improve travel information

ENVIRONMENTAL EVALUATION OBJECTIVES

7.4.2 Environmental evaluation objectives are concerned with conservation of Bio-diversity, Cultural Heritage, and Landscape. The environmental evaluation objectives seek to reduce the harmful impacts of development and transportation on the environment.

Environmental Evaluation Objectives	Potential Measures
■ Reduce the impact of noise, vibration and emissions generated by traffic movements ■ Improve quality of life for the community ■ Protect and enhance the existing residential and amenity areas ■ Support Smarter Travel, a more sustainable transport & traffic system and reduce car dependency ■ Improve the Public Realm in Douglas Village ■ Minimise reductions in green areas and cultural sites inherited from the past	■ Promote walking and cycling through developing supportive infrastructure ■ Support bus services through the provision of improved bus stop infrastructure ■ Ensure recreation areas remain zoned for recreation and amenity ■ Enhance public realm in Douglas ■ Make lands available for recreation and amenity purposes

INTEGRATION, ACCESSIBILITY AND SOCIAL INCLUSION EVALUATION OBJECTIVES

7.4.3 According to the Department of Transport, Tourism and Sport's guidelines, a number of aspects of integration need to be considered. For DLUTS, it will be necessary to demonstrate some consideration of modal integration (i.e., integrating amongst transport modes), and effectively integrating land uses with transport infrastructure in ways that promoted sustainable development and efficient use of resources.

7.4.4 Social inclusion is concerned primarily with accessibility for those without a car and those whose mobility is impaired. A sub-objective of the Social Inclusion evaluation objective is that of equity. This is primarily concerned with ensuring that the benefits of a transport strategy are reasonably well distributed across society. Differing groups of people will have differing levels of need. An equitable strategy would generally prioritise the needs of the disadvantaged or those with special needs. This includes disabled or elderly people, but more generally is a group described as having no car available.

7.4.5 Accessibility is usually defined as 'ease-of-reaching'. This evaluation objective relates to providing access for people from a variety of areas with differing availability and means of transport, to facilities in different locations. This is usually considered from the point of view

of residents, such that certain areas in which residential development predominates may be categorised by their ease of access to the main facilities provided in the area. Consideration of accessibility from such areas is helped by further defining the availability of car or access to public transport.

7.4.6 Accessibility may also be considered from the point of view of major trip destinations such as areas of employment, retail or leisure facilities. In the case of Douglas, these are usually located in the village centre. However, the dispersed nature of residential areas relative to the major shopping facilities, and employment areas to the west of Douglas, requires most trips between these locations to be made by car. Again, in these cases accessibility to a facility depends very much on car ownership and public transport provision.

7.4.7 Within the Social Inclusion objective there is a need to reprioritise planning and investment in a way that reduces imbalances in accessibility and reduces the level of dependency of society as a whole on car ownership.

Integration, Accessibility and Social Inclusion Evaluation Objectives	Potential Measures
■ Develop integration between transport modes ■ Increase accessibility to land use opportunities and services for all (employment, retail, leisure) ■ Provide better access for pedestrians, cyclists, bus passengers, car users and delivery vehicles ■ Improve connectivity and safe circulation within Douglas Village	■ Improve street design to make village more permeable ■ Improve walking and cycling network ■ More mixed use developments to increase accessibility and reduce car dependency ■ Ensure impact of interventions on all modes is understood ■ Ensure improvements satisfy Mobility Impaired & Disabled (MID) requirements

HEALTH & SAFETY EVALUATION OBJECTIVES

7.4.8 The Health & Safety evaluation objective is concerned with a variety of issues including the reduction in injuries and loss of life, of damage to property, loss of income and improving the overall well-being of people living within the DLUTS area (e.g. improving fitness, reducing obesity).

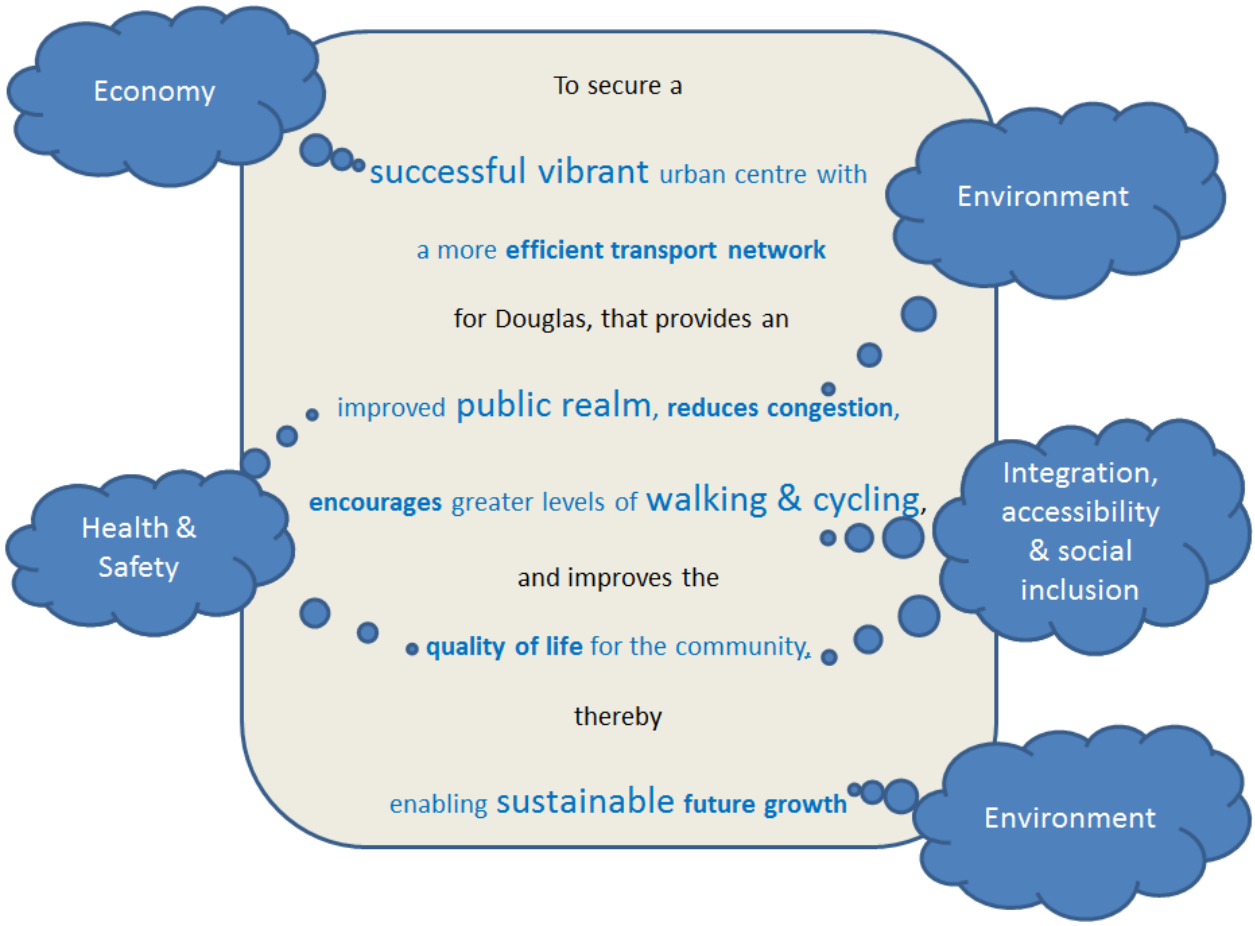
Health and Safety Evaluation Objectives	Potential Measures
■ Encourage a healthy lifestyle for all people living and working in the DLUTS Area ■ Protect vulnerable road users ■ Reduce health risks ■ Improve overall safety of all road users	■ Consider safety implication of all interventions ■ Provide safe, off-street, cycle and walking routes ■ Encourage sustainable travel to schools for healthier children ■ Reduce traffic speeds

- Provide adequate signal controlled crossings
- Improve junction layouts and control

7.5 Linking the DLUTS Vision and Evaluation Objectives

7.5.1 Figure 7.2 below illustrates how the DLUTS vision relates to the broad DLUTS Evaluation objectives.

Figure 7-2 Linking DLUTS Vision with DLUTS Evaluation Objectives



7.6 Linking Evaluation Objectives to KPI's and Evaluation Framework

7.6.1 Performance measurement is used to determine if the recommendations proposed under DLUTS achieve the desired outcomes. Key Performance Indicators (KPI's) have been identified and used to measure the performance of DLUTS under the various objectives outlined above. These KPI's, therefore, must be measurable and clearly related to the desired outcome.

7.6.2 This allows scenarios to be easily comparable and successful scenarios to be identified. Furthermore, the particular attributes which influence a KPI one way or another (for example provision of bus priority, or the location and density of a development) can be fine-tuned to obtain a transport and land use scenario that meets the targets and, therefore, satisfies DLUTS evaluation objectives.

7.6.3 The KPI's are both qualitative and quantitative with the Douglas Traffic Model (DTM) being used to calculate the majority of the quantitative KPI's. The qualitative KPI's for each option are given a ranking or score relative to the Base Case Scenario in the following way:

- ✓ - represents a negative change over the base case scenario;
- ✓✓ - represents no change over the base case scenario;
- ✓✓✓ - represents a positive change over the base case scenario; and
- ✓✓✓✓ - represents a very positive change over the base case scenario.

7.6.4 The performance of the land use and transport options for DLUTS has been assessed through an objectives and Key Performance Indicator (KPI) evaluation framework. Tables 7.2 – 7.5, overleaf, summarises the key evaluation objectives, associated KPI's and means of measurement that are used to evaluate each land use and strategic infrastructure option. Note the approach recommended for the evaluation of alternative land use and transport options is to give each evaluation objective (i.e. economy, health & safety and so on) equal weighting.

Table 7.2 DLUTS Economic Evaluation Objectives

Economic Evaluation Framework			
No.	**Key Project Objectives**	**Key Performance Indicators (KPI)**	**Units of measure**
1	Improve Economic Vibrancy of Douglas Village	Additional Non residential Floorpace in Square meters	Sqm
2	Provide for the future sustainable development of a mixed use high quality urban centre	* Low (Mix) **Medium ***High	Rating Scale
3	Support Improved Economic Competitiveness	Network wide delay / queues of the road network	PCU. Hrs
		Number of V/C movements over 85% at Key Junctions	%
		Journey times of key routes (kph)	% Change
4	Support economic growth and employment in Douglas	Number of Additional Jobs	%
5	Provide additional housing, retail, social, community and recreation facilities	Number of additional Residential Units	Units
		Number of additional Commercial Units	Sqm
6	Reduce Cost of Travel	Cost of Fuel Consumed for travel (Cost per Litre / Km)	€
7	Regenerate Douglas Village via increased inward investment	* Low (Inward Investment) **Medium ***High	Rating Scale

Table 7.3 DLUTS Health & Safety Evaluation Objectives

Heath and Safety Evaluation Framework			
No.	**Key Project Objectives**	**Key Performance Indicators (KPI)**	**Units of measure**
1	Encourage a healthy lifestyle for all people living and working in the Douglas Area	Length of Cycle Network in Kilometres	KMs
		Length of off-street walking routes	Kms
2	Protect the vulnerable road users, e.g. children, older people, people with disabilities	Number and quality of Pedestrian Crossing Points	Rating
3	Reduce Health Risks	Change in Vehicle emissions particularly those that cause higher health risks	% Change
4	Improve overall safety of all road users	Reduce network Speeds in sensitive areas	Rating
		Pedestrian friendly shared space areas measured in sq m	Sqm

Table 7.4 DLUTS Environmental Evaluation Objectives

Integration, Accessibility & Social Inclusion Evaluation Framework			
No.	**Key Project Objectives**	**Key Performance Indicators (KPI)**	**Units of measure**
1	Develop intigration between transport modes	Reduced Car dependency	Rating Scale
2	Increase accessibility to land use opportunities and services for all (employment, retail, leisure)	Density Around Public Transport Corridors / Nodes / Walking and Cycling Networks	Rating Scale
3	Provide better access for pedestrians, cyclists, bus passengers, car users and delivery vehicles	Encourage Mode Shift towards walking, cycling and public transport	Rating
		Reduced vehicular journey times	%
4	Improve connectivity and safe circulation within Douglas Village	Reduce Car Speeds in sensitive areas	Rating
		Bus Priority	rating

Table 7.5 DLUTS Integration, Accessibility and Social Inclusion Evaluation Objectives

Environmental Evaluation Framework			
No.	**Key Project Objectives**	**Key Performance Indicators (KPI)**	**Units of measure**
1	Reduce the impact of noise, vibration and emissions generated by traffic movements	Greenhouse Vehicle Emmisions	CO2 (Kg's)
		Traffic Flow Through Sensitive Areas	PCU's
2	Protect and enhance the existing residential and amenity areas	% Change in existing residential and amenity area	% Change
3	Support Smarter Travel, a more sustainable transport & traffic system and reduce car dependency	Walking & Cycling and Public Transport Mode Share	Rating
4	Improve the Public Realm in Douglas Village	* Poor - Average (Improvement)	Rating Scale
		** Average - Good	
		*** Good - High	
5	Minimise reductions in Green areas and cultural sites inherited from the past	* % /ha of Open Space (passive and active) provision	Rating Scale
		** % / ha of loss of habitiat	
		*** loss of designated buildings / sites	

7.6.5 Table 7.6 below provides a summary of the number of evaluation objectives and measureable KPI's that are proposed for evaluating DLUTS.

Table 7.6 Number of Sub Objectives and KPIs for each Objective Heading

Evaluation Objective Headings	Number of Sub Objectives	Number of KPI's used to measure evaluation objectives
Economic	7	10
Health & Safety	4	6
Environmental	5	6
Integration, Accessibility & Social Inclusion	4	6
Total	**20**	**28**

7.7 DLUTS Development

7.7.1 This section describes DLUTS development options for both land use and transport. The assessment years for DLUTS are 2022 and 2032.

Land Use Options Tested 2022

7.7.2 As described previously in Chapter Two only one land use option was assumed for 2022. This option assumed that all statutory targets for development between 2013 and 2022 were met and that only limited amounts of retail development will take place. This limited retail development amounted to in-filling of approximately 50% of the current retail vacancy within Douglas plus current commitments.

Urban Design Options Tested 2022

7.7.3 The transport and land use interventions will provide opportunities for improvements to the public realm within the DLUTS area.

Transport Options Tested 2022

7.7.4 This assumed level of development for 2022, described above in section 7.7.2, was tested in conjunction with a suite of transport intervention proposals for all modes of transport. This was tested through the DTM Model and the outputs from the modelling process were evaluated. The best performing transport proposals were identified for DLUTS 2022. The transport options tested in 2022 included the following:

- Additional on-street and off-street walk and cycleways;
- Public Transport Corridor on East Douglas Street;
- Shared Space on East Douglas Street;

- The Implementation of a Green Schools Initiative;
- Enhancements to pedestrian and cycle facilities at 23 junctions in the DLUTS Area;
- The construction of a new pedestrian, cycle, public transport and traffic route joining Donnybrook hill and The Carrigaline Road;
- One-way traffic on Douglas Street West;
- The Signalisation of all roundabouts in the DLUTS Area; and
- Various one-way /circulation alternatives for Douglas Village Centre.

7.7.5 Chapter 10 of this report gives a detailed description of each element of the preferred DLUTS transport strategy.

Land Use Options Tested 2032

7.7.6 For the 2032 assessment year, three land use options were tested through the DTM. The three options tested were:

- Option 1: No Policy Change or Trend
- Option 2: Smart Mix
- Option 3: Max Development

7.7.7 The "No Policy Change" option involves a plot based development approach where each application is treated on its own merits in line with current planning principles. This approach would involve a continuation of the development patterns which exist in Douglas at present i.e. residential developments on the outskirts/ periphery of the village with some retail development in the village centre.

7.7.8 The "Smart Mix" option is an integrated mixed development approach, which would consolidate the existing land uses and provide a balanced mix of development (residential, office, retail, etc) in the village centre.

7.7.9 The "Max Development" option assumes that all of the potential development land in Douglas is developed to the highest density possible. This option provides the opportunity to maximise the density of development on both greenfield and brownfield sites in the village centre.

Urban Design Options Tested 2032

7.7.10 In 2032 it is assumed that there will be greater levels of new development which will provide an opportunity for greater levels of improvement to public realm within the DLUTS area. Refer to Chapter 7 of this report for the Urban Design Strategy for 2032.

Transport Options Tested 2032

7.7.11 In 2032 it is assumed that no additional transport interventions are required above those identified for 2022.

7.8 DLUTS 2022 Evaluation

7.8.1 The performance of the DLUTS Strategy is measured against a Do-Nothing situation in 2022. The results of the evaluation are shown below in Tables 7.7 to 7.9. Each table provides the performance measurement for the DLUTS Strategy against the Do-Nothing situation in 2022 under each of the evaluation objectives (economic, environmental etc.).

Table 7.7 2022 Economic Evaluation Framework

Economic Evaluation Framework (2022)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2022	
				Do Nothing	DLUTS
1	Improve Economic Vibrancy of Douglas Village	Additional Non residential Floorpace in Square meters	Sqm	8,800	8,800
2	Provide for the future sustainable development of a mixed use high quality urban centre	* Low (Mix) **Medium ***High	Rating Scale	N/A	N/A
3	Support Improved Economic Competitiveness	Network wide delay / queues of the road network	PCU. Hrs	590	440
		Number of V/C movements over 85% at Key Junctions	%	10	5
		Journey times of key routes (kph)	% Change	-	-20%
4	Support economic growth and employment in Douglas	Number of Additional Jobs	%	440	440
5	Provide additional housing, retail, social, community and recreation facilities	Number of additional Residential Units	Units	195	195
		Number of additional Commercial Units	Units	8805 sqm	8805 sqm
6	Reduce Cost of Travel	Cost of Fuel Consumed for travel (Cost per Litre / Km)	€	€ 19,700	€ 19,200
7	Regenerate Douglas Village via increased inward investment	* Low (Inward Investment) **Medium ***High	Rating Scale	* Low	**Medium

Table 7.8 2022 Health & Safety and Environmental Evaluation Framework

Heath and Safety Evaluation Framework (2022)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2022	
				Do Nothing	DLUTS
1	Encourage a healthy lifestyle for all people living and working in the Douglas Area	Length of Cycle Network in Kilometres	KMs	6.74 km	43 km
		Length of off-street walking routes	Kms	0 km	17.5 km
2	Protect the vulnerable road users, e.g. children, older people, people with disabilities	Number and quality of Pedestrian Crossing Points	Rating	✓✓	✓✓✓✓
3	Reduce Health Risks	Change in Vehicle emissions particularly those that cause higher health risks	% Change	N/A	-5.0%
4	Improve overall safety of all road users	Reduce network Speeds in sensitive areas	Rating	✓✓	✓✓✓✓
		Pedestrian friendly shared space areas measured in sq m	Sqm	0	1250 sqm

Environmental Evaluation Framework (2022)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2022	
				Do Nothing	DLUTS
1	Reduce the impact of noise, vibration and emissions generated by traffic movements	Greenhouse Vehicle Emmisions	CO2 (Kg's)	6,300	5,900
		Traffic Flow Through Sensitive Areas	PCU's	circa 200 pcus per peak hour	Bus and Taxis only
2	Protect and enhance the existing residential and amenity areas	Change in existing residential and amenity area	Rating	✓✓	✓✓
3	Support Smarter Travel, a more sustainable transport & traffic system and reduce car dependency	Walking & Cycling and Public Transport Mode Share	Rating	16%	21%
4	Improve the Public Realm in Douglas Village	* Poor - Average (Improvement) ** Average - Good *** Good - High	Rating Scale	*** Poor - Average**	**** Average - Good**
5	Minimise reductions in Green areas and cultural sites inherited from the past	* % /ha of Open Space (passive and active) provision ** % / ha of loss of habitiat *** loss of designated buildings / sites	Rating Scale	N/A	N/A

Table 7.9 2022 Integration, Accessibility & Social Inclusion Evaluation Framework

Integration, Accessibility & Social Inclusion Evaluation Framework (2022)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2022	
				Do Nothing	DLUTS
1	Develop intigration between transport modes	Reduced Car dependency	Rating Scale	✓	✓✓✓
2	Increase accessibility to land use opportunities and services for all (employment, retail, leisure)	Density Around Public Transport Corridors / Nodes / Walking and Cycling Networks	Rating Scale	-	-
3	Provide better access for pedestrians, cyclists, bus passengers, car users and delivery vehicles	Mode Shift towards walking, cycling and public transport	Rating	✓	✓✓✓
		Reduced vehicular journey times	%	N/A	-20%
4	Improve connectivity and safe circulation within Douglas Village	Reduce Car Speeds in sensitive areas	Rating	✓	✓✓✓
		Bus Priority	rating	✓	✓✓✓

7.8.2 The main conclusions from this evaluation are as follows:

- Under the **Economic** Evaluation Framework 2022:
  - DLUTS has a very beneficial impact on traffic congestion with decreased journey times, queuing and congestions levels experienced throughout the network as a result of the implementation of the DLUTS transport strategy;
  - The DLUTS urban design and land use strategies will also lead to improved inward investment when compared to the Do-Nothing situation.
- Under the **Health and Safety** Evaluation Framework 2022, DLUTS again performs significantly better than the Do-Nothing option as it will:
  - Create additional cycle lanes and walkways to encourage a healthier lifestyle;
  - Improve the quality and provision of pedestrian crossing points;
  - Lead to reduced vehicle emissions; and
  - Lead to reduced traffic speeds in sensitive areas.
- Similarly under the **Environmental** Evaluation Framework 2022 DLUTS outperforms Do-Nothing as it will:
  - Reduce greenhouse emissions;
  - Reduce traffic flow in sensitive areas;
  - Increase the levels of walking and cycling; and
  - Improve the public realm in Douglas.
- Under the **Integration, accessibility and Social Inclusion** Evaluation Framework 2022, DLUTS performs significantly better than Do-Nothing as it will:
  - Lead to greater integration between transport modes;
  - Provide better accessibility for pedestrians, cyclists and Public Transport Users; and
  - Improve connectivity and circulation within Douglas Village.

Overall Implication of 2022 Do-Nothing vs DLUTS:

- DLUTS will include a number of initiatives to help encourage sustainable travel.
- DLUTS will lead to improved integration and accessibility.
- DLUTS will lead to increased protection for vulnerable road users leading to significant increases in walking, cycling and public transport use.
- DLUTS leads to significant improvements in overall traffic conditions (reduced congestion levels & journey times) when compared to the Do-Nothing Scenario.

2032

7.8.3 As mentioned above, the 2032 assessment involved the evaluation of three land use options in conjunction with the recommended set of transport measures established for 2022.

7.8.4 The outputs from each of these land use options were evaluated through the key performance indicator evaluation framework and the best performing land use option was identified.

7.8.5 The results of this evaluation are shown below in Tables 7.10 to 7.12.

Table 7.10 2032 Economic Evaluation Framework

Economic Evaluation Framework (2032)						
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032		
				1 -No Policy Change	2- Smart Mix	3 - Max Development
1	Improve Economic Vibrancy of Douglas Village	Additional Non residential Floorpace in Square meters	Sqm	4,566	23,135	49,848
2	Provide for the future sustainable development of a mixed use high quality urban centre	* Low (Mix) **Medium ***High	Rating Scale	* Low (Mix)	***High	***High
3	Support Improved Economic Competitiveness	Network wide delay / queues of the road network	PCU. Hrs	551	523	633
		Number of V/C movements over 85% at Key Junctions	%			
		Journey times of key routes (kph)	% Change	N/A	-11%	+5%
4	Support economic growth and employment in Douglas	Number of Additional Jobs	%	228	1156	2492
5	Provide additional housing, retail, social, community and recreation facilities	Number of additional Residential Units	Units	607	499	1,249
		Number of additional Commercial Units	Sqm	4,566	23,135	49,848
6	Reduce Cost of Travel	Cost of Fuel Consumed for travel (Cost per Litre / Km)	€	€ 10,105	€ 9,830	€ 10,382
7	Regenerate Douglas Village via increased inward investment	* Low (Inward Investment) **Medium ***High	Rating Scale	* Low	***High	***High

Table 7.11 2032 Health & Safety and Environmental Evaluation Framework

Heath and Safety Evaluation Framework (2032)						
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032		
				1 - No Policy Change	2- Smart Mix	3 - Max Development
1	Encourage a healthy lifestyle for all people living and working in the Douglas Area	Length of Cycle Network in Kilometres	KMs	43 km	43 km	43 km
		Length of off-street walking routes	Kms	17.5 km	17.5 km	17.5 km
2	Protect the vulnerable road users, e.g. children, older people, people with disabilities	Number and quality of Pedestrian Crossing Points	Rating	✓✓✓✓	✓✓✓✓	✓✓✓✓
3	Reduce Health Risks	Change in Vehicle emissions particularly those that cause higher health risks	% Change	N/A	-3.10%	+3.2%
4	Improve overall safety of all road users	Reduce network Speeds in sensitive areas	Rating	30kph Zone	30 kph Zone	30 kph Zone
		Pedestrian friendly shared space areas measured in sq m	Sqm	1250 sqm	1250 sqm	1250 sqm

Environmental Evaluation Framework (2032)						
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032		
				1 -No Policy Change	2- Smart Mix	3 - Max Development
1	Reduce the impact of noise, vibration and emissions generated by traffic movements	Greenhouse Vehicle Emmisions	CO2 (Kg's)	6440	6250	6700
		Traffic Flow Through Sensitive Areas	PCU's	Bus and Taxis only	Bus and Taxis only	Bus and Taxis only
2	Protect and enhance the existing residential and amenity areas	Change in existing residential and amenity area	Rating	✓✓	✓✓	✓✓
3	Support Smarter Travel, a more sustainable transport & traffic system and reduce car dependency	Walking & Cycling and Public Transport Mode Share	Rating	20%	21%	22%
4	Improve the Public Realm in Douglas Village	* Poor - Average (Improvement) ** Average - Good *** Good - High	Rating Scale	** Average - Good	*** Good - High	*** Good - High
5	Minimise reductions in Green areas and cultural sites inherited from the past	* % /ha of Open Space (passive and active) provision ** % / ha of loss of habitiat *** loss of designated buildings / sites	Rating Scale	✓✓✓	✓✓✓	✓✓✓

Table 7.12 2032 Integration, Accessibility & Social Inclusion Evaluation Framework

Integration, Accessibility & Social Inclusion Evaluation Framework (2032)						
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032		
				1 -No Policy Change	2- Smart Mix	3 - Max Development
1	Develop intigration between transport modes	Reduced Car dependency	Rating Scale	✓✓	✓✓✓	✓✓✓
2	Increase accessibility to land use opportunities and services for all (employment, retail, leisure)	Density Around Public Transport Corridors / Nodes / Walking and Cycling Networks	Rating Scale	✓✓	✓✓✓	✓✓✓✓
3	Provide better access for pedestrians, cyclists, bus passengers, car users and delivery vehicles	Encourage Mode Shift towards walking, cycling and public transport	Rating	✓✓✓	✓✓✓✓	✓✓✓✓
		Reduced vehicular journey times	%	-	-11%	+5%
4	Improve connectivity and safe circulation within Douglas Village	Reduce Car Speeds in sensitive areas	Rating	✓✓✓✓	✓✓✓✓	✓✓✓✓
		Bus Priority	rating	✓✓✓✓	✓✓✓✓	✓✓✓✓

7.8.6 The main conclusions from this evaluation are as follows:

- Under the **Economic** Evaluation Framework 2032:
  - Both "Smart Mix" and "Max Development" perform better than "No Policy Change";
  - Although "MAX Development" will provide more jobs and inward investment to Douglas this is compromised by the negative impacts this would have on traffic congestion in the area; and
  - Overall "Smart Mix" scored best as it will provide for increased investment and jobs in the area without adding to congestion and traffic delays.
- Under the **Health and Safety** Evaluation Framework 2032:
  - All three land use options involve the implementation of the DLUTS transport strategy and thus score similarly in the evaluation;
  - "Smart mix" scores best as it will result in the least congestion, and hence the least amount of vehicle emissions, thus increasing health and safety;
- Under the **Environmental** Evaluation Framework 2032:
  - Again all three land use options involve the implementation of the DLUTS transport strategy and thus score similarly in this evaluation;
  - The "Max Development" scenario provides a marginally higher mode share for sustainable modes of travel than "Smart Mix" however Smart Mix achieves the lowest greenhouse emissions of all three land use scenarios.
- Under the **Integration, accessibility and Social Inclusion** Evaluation Framework 2032:
  - Both "Smart Mix" and "Max Development" perform better than no "Policy Change";
  - Although Max development provides for slightly greater accessibility to land use opportunities this results in significantly slower journey times than the "Smart Mix" Scenario.

Overall Implication of 2032 Evaluation:

- Smart Mix is the most sustainable land use option in terms of transport impact and will encourage sustainable travel.
- The level and mix of development provided for under Smart Mix will lead to increased inward investment and job creation above the "No Policy Change" scenario.
- Smart Mix will maximise the benefits of the DLUTS transport strategy which will be delivered by 2022.
- Smart Mix therefore is adopted as the preferred DLUTS land use strategy.

2032 – Golf Course Sensitivity Test

7.8.7 A further evaluation was carried out for 2032, in which the preferred scenario obtained above (Smart Mix) was compared against a 2032 Land Use Scenario which involves developing the lands currently used by Douglas Golf Club. This scenario involved moving the St Columba's schools and GAA club located on Donnybrook hill to the lands currently occupied by Douglas Golf Course and placing mixed use developments in their place. This Sensitivity test also involved the construction of large amounts of residential units on the Douglas Golf Course Lands.

7.8.8 The outputs from these land use options were evaluated through the key performance indicator evaluation framework to identify the best performing land use option.

7.8.9 The results of this evaluation are shown below in Tables 7.13 to 7.15.

Table 7.13 2032 Economic Evaluation Framework

Economic Evaluation Framework (2032)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032	
				Smart Mix	Golf Course Test
1	Improve Economic Vibrancy of Douglas Village	Additional Non residential Floorpace in Square meters	Sqm	23,135	103,821
2	Provide for the future sustainable development of a mixed use high quality urban centre	* Low (Mix) **Medium ***High	Rating Scale	***High	***High
3	Support Improved Economic Competitiveness	Network wide delay / queues of the road network	PCU. Hrs	523	868
		Number of V/C movements over 85% at Key Junctions	%		
		Journey times of key routes (kph)	% Change	-	+24%
4	Support economic growth and employment in Douglas	Number of Additional Jobs	%	1156	5191
5	Provide additional housing, retail, social, community and recreation facilities	Number of additional Residential Units	Units	499	1,950
		Number of additional Commercial Units	Sqm	23,135	103,821
6	Reduce Cost of Travel	Cost of Fuel Consumed for travel (Cost per Litre / Km)	€	€ 9,830	€ 11,336
7	Regenerate Douglas Village via increased inward investment	* Low (Inward Investment) **Medium ***High	Rating Scale	***High	***High

Table 7.14 2032 Health & Safety and Environmental Evaluation Framework

Heath and Safety Evaluation Framework (2032)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032	
				Smart Mix	Golf Course Test
1	Encourage a healthy lifestyle for all people living and working in the Douglas Area	Length of Cycle Network in Kilometres	KMs	43 km	43 km
		Length of off-street walking routes	Kms	17.5 km	17.5 km
2	Protect the vulnerable road users, e.g. children, older people, people with disabilities	Number and quality of Pedestrian Crossing Points	Rating	✓✓✓✓	✓✓✓✓
3	Reduce Health Risks	Change in Vehicle emissions particularly those that cause higher health risks	% Change	-	+17%
4	Improve overall safety of all road users	Reduce network Speeds in sensitive areas	Rating	30 kph Zone	30 kph Zone
		Pedestrian friendly shared space areas measured in sq m	Sqm	1250 sqm	1250 sqm

Environmental Evaluation Framework (2032)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032	
				Smart Mix	Golf Course Test
1	Reduce the impact of noise, vibration and emissions generated by traffic movements	Greenhouse Vehicle Emmisions	CO2 (Kg's)	6250	7230
		Traffic Flow Through Sensitive Areas	PCU's	Bus and Taxis only	Bus and Taxis only
2	Protect and enhance the existing residential and amenity areas	Change in existing residential and amenity area	Rating	✓✓	✓
3	Support Smarter Travel, a more sustainable transport & traffic system and reduce car dependency	Walking & Cycling and Public Transport Mode Share	Rating	21%	21%
4	Improve the Public Realm in Douglas Village	* Poor - Average (Improvement) ** Average - Good *** Good - High	Rating Scale	*** Good - High	*** Good - High
5	Minimise reductions in Green areas and cultural sites inherited from the past	* % /ha of Open Space (passive and active) provision ** % / ha of loss of habitiat *** loss of designated buildings / sites	Rating Scale	✓✓✓	✓

Table 7.15 2032 Integration, Accessibility & Social Inclusion Evaluation Framework

Integration, Accessibility & Social Inclusion Evaluation Framework (2032)					
	Key Evaluation Objectives	Key Performance Indicators (KPI)	Units of measure	2032	
				Smart Mix	Golf Course Test
1	Develop intigration between transport modes	Reduced Car dependency	Rating Scale	✓✓✓	✓✓
2	Increase accessibility to land use opportunities and services for all (employment, retail, leisure)	Density Around Public Transport Corridors / Nodes / Walking and Cycling Networks	Rating Scale	✓✓✓	✓✓✓✓
3	Provide better access for pedestrians, cyclists, bus passengers, car users and delivery vehicles	Encourage Mode Shift towards walking, cycling and public transport	Rating	✓✓✓✓	✓✓✓
		Reduced vehicular journey times	%	-	+24%
4	Improve connectivity and safe circulation within Douglas Village	Reduce Car Speeds in sensitive areas	Rating	✓✓✓✓	✓✓✓✓
		Bus Priority	rating	✓✓✓✓	✓✓✓✓

7.8.10 The main conclusions from this evaluation are as follows:

- Under the **Economic** Evaluation Framework 2032 Sensitivity Test:
  - Although the development of Golf Course will provide for more jobs and inward investment to Douglas the levels of congestion created by this increase dramatically (66% increase in network wide queuing) and significantly outweigh any benefit gained.
- Under the **Health and Safety** Evaluation Framework 2032 Sensitivity Test:
  - Both land use options involve the implementation of the DLUTS transport strategy and thus score similarly in the evaluation;
  - "Smart mix" scores best as it will result in the least congestion, and hence the least amount of vehicle emissions, thus increasing health and safety;
- Under the **Environmental** Evaluation Framework 2032 Sensitivity Test:
  - The development of the Golf Course and GAA pitches will result in a significant loss of amenity space when compared to the smart mix option;
  - "Smart Mix" achieves the lowest greenhouse emissions of the two scenarios; and
  - Smart Mix scores well above the Golf Course test in the Environmental evaluation.
- Under the **Integration, accessibility and Social Inclusion** Evaluation Framework 2032 Sensitivity Test:
  - The Golf Course test again scores poorly in this category as developing large quantities of residential units on the periphery of Douglas, away from jobs and services, will serve to further perpetuate unsustainable travel patterns and car dependency;
  - The level of development associated with the Golf Course test will also result in significantly higher journey times and thus reduce accessibility and integration.

Overall Implication of 2032 Evaluation:

- The relocation of St Columba's Schools and the inclusion of additional residential developments on the site of Douglas Golf Course will result in an unacceptable loss of amenities for the DLUTS area.
- The location of large amounts of residential development on the periphery of the village without any significant levels of other land uses is unsustainable and will lead to increased car dependency.
- The level of over development associated with the Golf Course test will result in a serious deterioration of traffic conditions within the DLUTS area.
- Smart Mix therefore is adopted as the preferred DLUTS land use strategy.

7.9 Conclusions

7.9.1 The following conclusions can be drawn from the evaluations of DLUTS for 2022 and 2032 above:

2022

- For the years 2013 – 2022, DLUTS (which involves the host of transport interventions discussed in chapter 10) significantly outperforms the Do Nothing Scenario.

2032

- "Smart Mix" is the preferred land use development option for the years 2022- 2032;
- The level of Non-Residential Floor Space development proposed for "Smart Mix", combined with the distribution of the proposed development, creates a travel demand environment which is conducive to walking and cycling given the greater emphasis on mixed land uses and will support public transport;
- "Smart mix" is the most sustainable land use option in terms of transport impact and it also provides for significant levels of inward investment to Douglas and Job Creation;
- Smart Mix, therefore is adopted to form the Land Use development aspect of DLUTS; and
- Sensitivity testing has shown that redeveloping Douglas Golf Course should not be considered.

8 DLUTS Land Use Strategy

8.1 Introduction

8.1.1 The key aim of the land use strategy is to provide a sufficient quantum of mixed use development in the town centre to ensure a successful vibrant urban centre over the next 20 years. This will result in an increased daytime population so that people can live, work and socialise in the area. In conjunction with this aim, the land use strategy seeks to ensure that those living and working in Douglas have an improved quality of life and are served by an efficient transport network with an improved public realm, adequate recreation, open space and community facilities.

8.1.2 The land use strategy consists of a comprehensive set of policies that will guide the future development process in the village with a focus on the town centre as the engine for future growth. The strategy takes on board those issues that were identified during the comprehensive analysis of existing conditions as well as the vision statement and guiding principles outlined in Chapters 6 and 7.

8.1.3 In order to provide guidance for future integrated development, the land use strategy is divided into the following sections:

- policies dealing with the town centre as a whole, including the size, type and height of development; and the establishment of a town management partnership;
- specific policies relating to existing and proposed town centre precincts;
- policies relating to the provision of community facilities, recreation and amenities; and including Douglas Golf Course on lands marked X-03b.

8.1.4 As DLUTS involves a 20 year time horizon, the Land Use Strategy is divided into two periods; namely the short to medium term (2013-2022) and the medium to long term (2022-2032). The summary of key issues identified during the surveys of the DLUTS area will assist in framing the future land use policies. The DLUTS Strategy is not a zoning plan but the recommendations may be incorporated into an amendment to the Carrigaline Electoral Area Local Area Plan.

8.2 Summary of Key Land Use Issues

8.2.1 The land use analysis of the study area in Douglas in terms of retail, residential, open space, recreational facilities and environmental designations has highlighted a number of issues that will require attention in the DLUTS Land Use Strategy:-

- As a District Shopping Centre in the Cork Metropolitan Area, Douglas town centre has the largest convenience retail floor space offer in comparison with other district centres in the Metropolitan Area (Mahon, Wilton and Blackpool).
- Douglas has a number of retail shopping areas (Douglas Court, Douglas Village Shopping Centre, East Village and St Patrick' Woollen Mills) that exhibit pedestrian severance issues affecting overall accessibility, amenity and vitality.

- According to the Retail Land Use Survey undertaken for the DLUTS project in 2012, there is an overall retail floor area of 51,625m2 (net), of which 13,500m2 (26%) is comparison and 8,975m2 (17,3%) is convenience retail. The majority of the floor space is retail services (19,779m2), which covers financial, medical, leisure and hospitality services in addition to repair and maintenance services.
- Vacancy levels in Douglas have increased to approximately 20% of the existing floor area due the economic downturn. Within the study area, at St Patrick's Woollen Mills, there is a 42% vacancy rate and in Douglas Village Shopping Centre there is a 28% vacancy rate. These vacancy levels are higher than national averages and will need addressing in the strategy.
- Surveys of footfall in Douglas during 2012 indicated a low level of daytime activity. The predominant footfall was within the Douglas Village Shopping Centre and Douglas Court Shopping Centre, attributed to the existence of anchor stores (Tesco and Dunnes) in both centres. Higher footfalls were recorded on Thursday, Friday and Saturdays.
- Douglas shops are mostly owned by independent traders (70%) with a smaller amount being owned by Irish Multiples. It is these independent traders, who have been most affected by the economic downturn in recent years. The existing shops in Douglas are a random and diverse mix of types with the most common type being comparison retail.
- The existing recreational facilities are not easily accessed and there is a need to improve connectivity between them. Many of the existing open spaces and river valleys, which have potential for improved connectivity, have anti-social behaviour problems. Any new development would be required to provide additional open space and recreation facilities.
- Whilst previous surveys undertaken about community facilities in Douglas have shown that there is no shortage, this study has identified the need for a multi- purpose building which will allow for both leisure and community facilities.
- In terms of built heritage, Douglas has two streets designated as Architectural Conservation Areas (ACA's) and there a number of buildings that are Protected Structures and areas of archaeological significance, showing that heritage value of its origins.
- The Habitats survey of the Douglas area showed that there a number of ecological corridors along the river valleys linking valuable habitats in the area. Douglas is in close proximity to the Special Protection Area of the Cork Harbour and any new development would need to take cognisance of the need to protect this habitat.
- The Flood Risk Assessment Report for the Douglas area as part of the Carrigaline Electoral Area Local Area Plan 2011 shows an area along the Ballybrack Stream south of the Tramore River that is considered subject to flood risk. Any development proposals to be carried out in this area would have to be subject to detailed flood risk assessment in terms of the Guidelines that is being commissioned by Cork County Council. The DLUTS Land Use Strategy will therefore take this into consideration in preparing any future land use development policies.

8.3 Land Use Strategy for 2022

8.3.1 The strategic aim for land use in the period 2013-2022 is to encourage the filling of vacancy of at least 50% of existing levels. This could result in approximately 5,000m2 of retail floor space, predominantly in Douglas Village Shopping centre. The filling of vacancy in existing shopping centres depends, to a large extent, on the return to improved market conditions and increased consumer spending as well as general improvements to the public realm in Douglas village as a whole.

8.3.2 In addition, the land use strategy intends to support new development of additional retail uses in line with current commitments. This could result in an additional 4,700m2 of floor space. If market conditions improve, it is recommended that non-retail office space should be developed on vacant brownfield sites within the town centre. This would encourage more daytime population in the town centre as a whole, thereby increasing footfall, vibrancy and vitality to support the other retail and retail services uses.

8.3.3 It is envisaged that during this short to medium term period, the major redevelopment sites of St Patrick's Woollen Mills, the Cinema site and Douglas Court would encourage the preparation of an overall development scheme that would identify the type of new development that could be constructed when the economy improves over the coming decade. These plans should incorporate the improved transport network and public realm recommendations.

Table 8.1 Land Use Policy LU-01

Policy No.	General Policy – Land Use Strategy (2013-2022)
LU-01	The Land Use Strategy for the period 2013-2022 will follow existing targets regarding population, retail, residential and employment as contained in the existing statutory planning documents. In line with these targets, it is recommended that:- • At least 50% of current retail vacancy filled in the existing retail areas. • Support given to the fulfilment of current retail commitments as well as encouraging non-retail office accommodation to be located within the town centre precincts. • Overall Development Scheme be prepared for the redevelopment of St Patrick Woollen Mills, Cinema Site and Douglas Court.

8.4 Land Use Strategy for 2032

Town Centre Precincts

8.4.1 The Land Use Strategy for the period 2022-2032 shall focus on the consolidation of the town centre into 5 distinct town centre precincts. The consolidation of these precincts into one town centre will ensure that the town centre will operate in a more vibrant, efficient and effective manner and be able to compete with other district centres in the metropolitan area.

It will also enable the more co-ordinated movement within the town centre and support the improvement to the public realm and transport network through the following:

- to improve accessibility to the town centre by all transport modes;
- to improve the mix of activities;
- to re-organise parking;
- provide building frontage along major routes;
- provide priority access to pedestrians and cyclists;
- encourage more day time and night time activities; and
- increase number of town centre residential units and appropriate open space and recreation facilities, community facilities, higher employment levels.

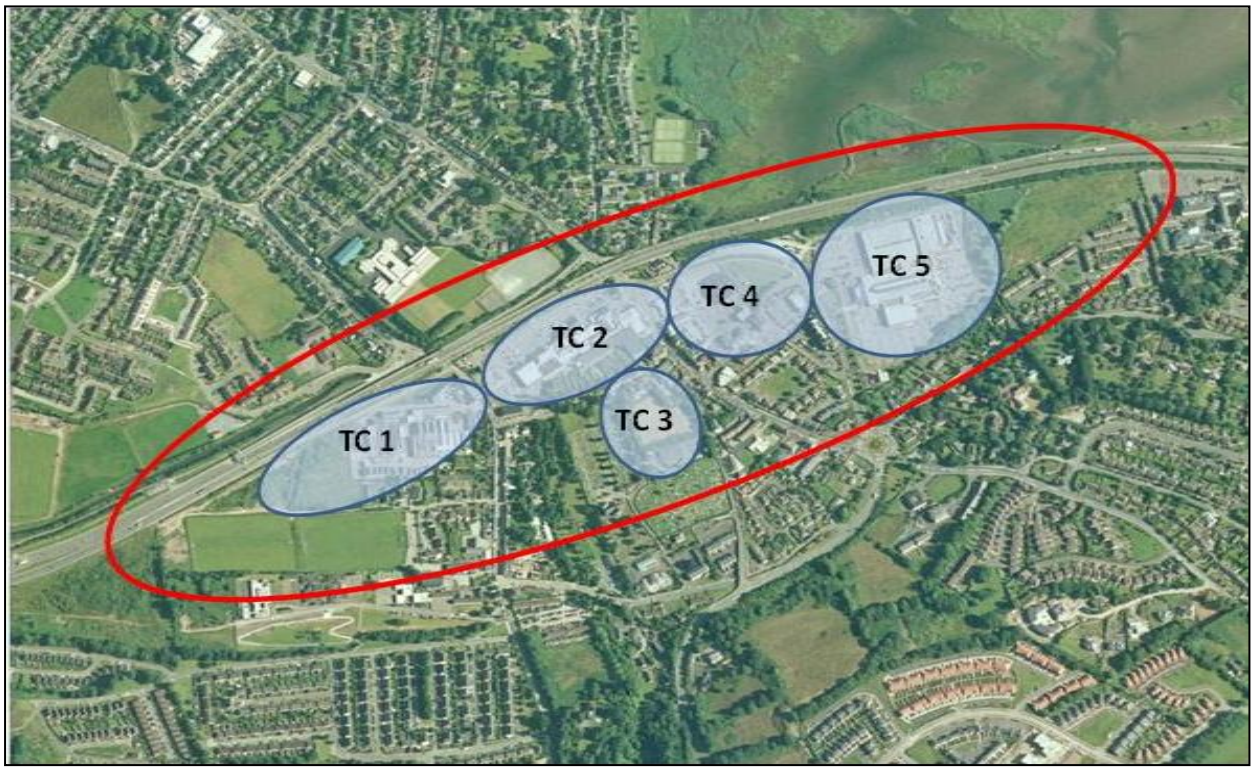
8.4.2 The DLUTS Land Strategy will ensure that retail development is plan-led (the requirement that future retail development should first be set out in Development and Local Areas Plans) and will promote town centre vitality through a sequential approach to new development. This will ensure that new retail development is not permitted in edge of town locations when town centre or edge of centre locations are available.

8.4.3 The DLUTS Strategy will encourage competitiveness in the retail sector by enabling good quality development proposals to come forward in suitable locations that will facilitate a shift towards increased access to retailing by public transport, cycling and walking in accordance with the Government's Smarter Travel Strategy and delivering quality urban design outcomes.

8.4.4 Douglas Town Centre includes both Brownfield and Greenfield lands, incorporating the Woollen Mills to the west and Douglas Court in the east, a distance of approximately 1000 metres (1Km). The five distinct town centre precincts are as shown on the diagram below:-

- TC 1: Woollen Mills – transitional heritage site with redevelopment potential
- TC 2: Douglas Village Shopping Centre – contemporary high street shopping mall
- TC 3: Barry's Field – Greenfield site with development potential
- TC 4: Cinema Site – composite use with redevelopment potential
- TC 5: Douglas Court – older suburban shopping centre with redevelopment potential

Figure 8-1 Land Use Development Framework



8.4.5 Each of the above town centre precincts have their own qualities and characteristics and share a potential for the consolidation into a co-ordinated town centre that can compete with other district centres in Metropolitan Cork. The setting of Douglas with the N40 on the northern boundary and the raised land on Maryborough Hill on the southern boundary, provide a suitable area where a "village centre" can be designed that will ensure that it is safe to walk and cycle, encourage a larger daytime population with accessible and sufficient open space and recreation facilities in close proximity.

8.4.6 The general land use policy relating to the consolidated town centre precincts is below:

Table 8.2 Land Use Policy LU-02

Policy No.	General Policy – Land Use Strategy (2022-2032)
LU-02	To consolidate the town centre into 5 precincts comprising the Woollen Mills, Douglas Village Shopping Centre, Cinema Site, Barry's Fields and Douglas Court Shopping centre. The priority is to fill existing retail vacancy and there will be a plan led approach to town centre development which will provide for an additional 25,000sqm floor space by 2032 and approximately 175 residential units. In addition to retail development, additional employment uses will be encouraged to stimulate daytime population. Residential units will be provided as part of mixed use in precincts. Considering Douglas's location and sensitive setting, it is recommended that the height of any new buildings should be considered in relation to their setting and they should not exceed 4-

	5 storeys

Town Centre Management

8.4.7 There is a necessity for a Douglas town centre partnership to be established involving all relevant stakeholders. For the partnership to be effective, it must comprise public, private, voluntary, community sectors and all other relevant stakeholders. Town centres are unique as they are used by every section of the community. The Town Team could compromise Local Authorities, Retailers , the two town centre shopping centre managers, owner of the Woollen Mills, Landlords, Employers, Local Media, Business Associations, Resident Groups, Tourism Groups and Agencies, An Garda Siochana, Charities and Community Groups and Schools.

8.4.8 Best practice examples indicate that for the team to be effective it should have a core group of perhaps 10 members or less who will actively communicate decisions and progress to all other stakeholders. These partnerships must focus on the needs of the town centre and devise a measurable town team plan for the town centre. The partnership must take responsibility for the plan and engage with all stakeholders, thus becoming a "Town Team".

8.4.9 The financing of a Town Team could come from sponsorship from local industries, local authority and other partners. They could apply for funding from the National Lottery as a cohesive community initiative to part fund specific town events.

8.4.10 For town centres to compete with out of town retailing alternatives, the Local Authority and the Town Team must manage the town/village as a shopping centre manager would. There is a necessity for the following matters to be practiced:

- Co-ordinate town and village marketing campaigns;
- Coordinate special occasions and events;
- Co-ordinate opening hours;
- Co-ordinate town/village branding;
- Implement a managed response to vacant units;
- The co-ordination of car parking charges and parking incentive schemes for consumers;
- Publicise and promote accessibility including car parking availability and transportation alternatives;
- Managed spend localised campaigns including a town/village gift card and generation of gift card sales to local industries;
- The introduction of a loyalty card;
- Build and market to a localised database of customers. The database is owned by the town team and used exclusively for town and village promotion and communication;
- The organisation of street parades and open air stage shows;

- The organisation of community workshops such as children's events cooking classes etc;
- The provision of a town or village centre crèche;
- The provision of free wi-fi hotspots;
- The provision of an information kiosk in the main street for use by town/village residents as well as visitors to the town and city; and
- The implementation of building and store window presentation standards.

8.4.11 For the town and city centre to be managed proactively and in a co-ordinated fashion the "Town Team" will require the assistance of a full time town co-ordinator. The coordinator could be appointed through the establishment of a BID or through the secondment of a Local Authority, chamber of Commerce or a Business Association executive team member.

8.4.12 The Management of the town centre must also take account of daily nuisances. The Garda representative on the Town Team can assist with the enforcement of laws and bye laws in this regard. The Town Team must also implement an annualised review of activity including seeking feedback from all stakeholders including the general public, retailers landlords and Local Government.

8.4.13 It is an imperative that the Town Team prepare a healthy town centre list of priorities. These priorities must take account of all the stakeholders needs and must clearly express the vision for the town centre, the actions required and who is responsible for what. There is a need to take into account "internal factors" affecting the town rather than the external factors such as the state of the economy.

8.4.14 Some of the key outputs from the Town Team set of priorities will be as follows:-

1. **Local Distinctiveness and Branding –** achieve a unique selling proposition
2. **Streetscape –**preparation of a streetscape design guide and code
3. **Dealing with Vacancy –** develop an agreed strategy between stakeholders
4. **Town Centre Safety –** develop an agreed strategy between stakeholders
5. **Purple Flag -** to provide a safe, appealing, well-managed night out

Table 8.3 Land Use Policy LU-03

Policy No.	General Land Use Policies – Town Centre Management
LU-3	To establish a multi-disciplinary "Town Team Partnership" comprising all key stakeholders to provide guidance on the management of the town centre in the co-ordination of town marketing campaigns, special occasions and events, opening hours, branding, vacant units, car parking charges, street parades and open air stage shows, community workshops and provision of an information kiosk in the main street for use by town/village residents, security, town centre safety and prepare a town centre design guide for shop frontages.

Back land Development

8.4.15 Back land sites are generally landlocked, such as rear gardens and private open space. They are generally within predominantly residential areas, and many of them are not visible from public vantage points. Back land can usually be defined as development on land behind the rear building line of existing housing or other development, and is usually land that is formally used as gardens, or is partially enclosed by gardens. Not all of back land development is surrounded by residential, or proposed residential, however. It does not include sites where development, as opposed to access to the development, adjoins a public highway. Within Douglas back land sites might comprise a group of old industrial building that has fallen into disrepair or a set of large gardens. A large portion of the sites are simply a piece of open land which provides an outlook for the houses that back onto them, but which is not generally accessible to members of the public.

8.4.16 The Council will normally only grant planning permission for development schemes which involve back land or rear garden sites where they meet all appropriate standards. Back land sites may be capable of being used for different uses and these might include new workspace, live/work units, residential, community facilities and so on. Each use will be looked at on its merits and on the basis of the policies of the current County Development Plan or Local Area plan and any other material considerations. The issue of potential overlooking will be given consideration in all proposals. Any proposal should not result in a change of use which is unacceptable in terms of the general pattern of the area, or in terms of the informal open space in an area. In determining whether planning permission should be given for a change of use, regard will be given to the current or last use of the site, and the relevant policies of the current County Development Plan or Local Area plan will be taken into account.

Table 8.4 Land Use Policy LU-04

Policy No.	General Land Use Policies – Back land Development
LU-4	Consideration will be given to the sustainable development of 'Back lands' on appropriate sites within Douglas Village. It is acknowledged that back land sites may be capable of being used for different uses including mixed use development. Each use will be looked at on its merits and on the basis of the policies of the current County Development Plan or Local Area plan and any other material considerations. Roadside development within the town centre shall be sited and designed to ensure that the development potential of back land sites is not compromised and that suitable vehicular and pedestrian access to these lands is retained.

Douglas Golf Course

8.4.17 The surveys conducted by the DLUTS project produced a number of issues that are relevant to the Douglas Golf Course

- That there is a need to preserve existing recreation amenities and provide for more community facilities in Douglas
- That the existing Golf Club at Douglas has no intention of closing down and moving to another location.
- That the existing schools at St Columbus have no intention of closing down and relocating.
- That the current delivery of pupils to St Columbus School follows an unsustainable transport pattern (75% drive).
- That the current network of roads and junctions do not provide for efficient movement through and around Douglas.
- That there is a deficit in the provision of education facilities in Douglas and there is a need for additional primary schools in the southern suburbs.
- The golf course sensitivity test for the 2032 Land Use Evaluation was done using the performance indicators in Chapter 7 which showed that the location of large amounts of residential development on the periphery of the village will result in more unsustainable car dependency and further traffic congestion for the village.

8.4.18 As a result of these surveys, it was agreed by the project team that the location of the existing schools in Douglas and the GAA club were suitable because they were centrally located. However, it is imperative that there is a major shift in travel to school patterns for the schools to remain sustainable. In addition, previous local area plans in 1996 and 2005 all zoned the land for established recreation and amenity purposes.

8.4.19 If this land was to be developed there would be a serious loss of amenity to the local community. The strategy to construct houses on these green-field sites would be contrary to

the intended objective to provide a mixed use high density urban form in Douglas that encourages smarter travel. It is therefore recommended that the golf course remains for golf course purposes.

Community Facilities and Recreation

8.4.20 The existing schools within the DLUTS area will remain in their respective locations and minor extensions within the current landholding will be encouraged to allow for a more appropriate and safer education facility to be provided. There is no additional land within the town centre available for education purposes and as a general policy, any future schools will need to be located in close proximity to their residential areas. The existing GAA playing fields and clubhouse is to remain in its current location and additional facilities could be located on adjacent lands as and when required. On the basis of public consultation, submissions received and endorsed by public representatives, the study recognises the growing demand for playing pitches and other community facilities in Douglas. The DLUTS Study area is the preferred location for a multi-purpose leisure facility however, it may not be possible or practicable to accommodate the demand for sports pitches here. Other locations within the wider Douglas area outside of the DLUTS Study area or locations within the adjoining Green Belt have the potential to accommodate this additional demand. In the short to medium term, Clubs wishing to provide sports pitches should be encouraged to consider these options.

8.4.21 There is a requirement for a multi-purposes leisure facility in Douglas to cater for sports clubs, community organisations and leisure. This facility should be located in or near to the Town Centre to serve the community as a whole. The preferred location for this facility is adjacent to the existing GAA playing pitches and schools for ease of access for the users. Road access to the lands to the west of the GAA playing pitches will require careful assessment.

8.4.22 The land to the west is suitable for additional playing fields, parks and walkways/cycleways that provide a link to the Tramore Valley Park over the N40 and access to Vernon Mount walkway through to Grange providing an alternative link for Grange and Frankfield residents' to get to Douglas Town Centre without using a vehicle. This new pedestrian and cycle access could also assist in delivering the Travel to School programme.

8.4.23 In order to address this need there are three key steps to delivering of this facility:-

- Put a land use zoning framework in place reflecting the recommendations of this study through an amendment to the Local Area Plan
- Consider acquisition and ownership issues and take appropriate steps
- If unsuccessful consider a broader approach to identify alternatives

Table 8.5 Land Use Policy LU-05

Policy No.	General Land Use Policies – Community Facilities and Recreation
LU-05	The DLUTS study area is the preferred location for the provision of a multi-purpose leisure facility in Douglas to cater for sports clubs, community organizations and leisure activities. In addition, playing fields, parks and walkways/cycleways that provide a link to the Tramore Valley Park over the N40 and access to Vernon Mount walkway through to Grange, should be provided. Improved access from the south to the community park via the Mangla and from the north via improved crossing points should be provided. Within the park, improved lighting, landscaping and security measures should also be provided. Existing schools will remain the in their present locations and future schools will need to be located in close proximity to their residential areas. Existing recreational and sports facilities will be retained in their present locations (including Douglas Golf Club and Douglas GAA).

Car Parking for New Development

8.4.24 A county wide strategy for parking is under consideration in the County Development Plan review process currently underway. It is envisaged that the parking strategy will place greater emphasis on walking, cycling and public transport use. Therefore, in Douglas, car parking in any new development shall adhere to the revised parking policy in the County Development Plan that will support national policies in relation to Sustainable Travel.

Table 8.6 Land Use Policy LU-06

Policy No	General Policy - Car Parking for new development
LU -06	The car parking standards for new development within the Town Centre Precincts shall be guided by the revised parking policy in the County Development Plan that will support current national policy, (Smarter Travel – A Sustainable Transport Future - 2009).

8.5 Specific Land Use Policies of Town Centre Precincts

8.5.1 Town Centre precincts are individual areas which can be developed or redeveloped in a co-ordinated manner which will form part of a fully functional and fully integrated mixed use urban/town centre.

8.5.2 The town centre precincts allow for the implementation of the land use principles and policies of the DLUTS as well as the facilitation of the future rezoning of Douglas Town Centre as

required under the Planning and Development Act 2000 -2011. The individual town centre precincts are detailed as follows:-

8.6 Precinct 1 - St Patricks Woollen Mills

8.6.1 At the western area of Douglas to the south of the N40 are the former Woollen Mills which are now a private industrial estate with a mix of retail and commercial units. The area has its origins in the milling of yarn and two of the main mill buildings are listed for preservation in the Record of Protected Structures in the County Development Plan 2009. The emerging Issues for St. Patricks Woollen Mills are:

- High levels of vacancy and units in disrepair.
- Poor pedestrian safety as a result of car priority.
- Car dominated with a large surface car park.
- Great potential for improved mixed use brownfield development, however, large investment would be required to regenerate the area.
- Busy junction at the entrance to the Woollen Mills and this could dictate development potential of the site.
- This site has a unique history directly linked to the development of Douglas. Any future development would have to have consideration for this history and architectural heritage.

Future Strategy

8.6.2 St. Patricks Woollen Mills represents an underutilised car dependent town centre location which has the unique opportunity of linking the present day to the past through the carefull redevelopment of the existing mill buildings and the sustainable development of existing brownfield and greenfield lands on the site.

8.6.3 The site has the potential to develop as a mixed use town centre development which will allow for a strong mix of uses that will bring a sense of vitality and vibrancy by virtue of increased use of the area by different types of people including workers, shoppers, and residents. Any new development of the site will need to be built at a density that will ensure that the necessary critical mass is achieved so that each function is attractive for users and viable for investors. These levels of density must also support a reliable public transport service while at the same time not be at a level which will threaten the value of the proposed improvements to the existing transport network.

8.6.4 The redevelopment of the site will give the priority to the pedestrian and will allow for improved connectivity which follows the preferred desire lines to and from Douglas Village Centre.

Table 8.7: Recommended Policy for St. Patrick's Woollen Mills

Policy No.	Specific Policy- St Patrick's Woollen mills
TC-01	It is recommended that an Overall Planning or Development Scheme be prepared for the entire site and which can be implemented on a phased basis. This shall include comprehensive proposals for a mixed use development which caters for a variety of town centre type uses including offices, retail (including urban format retail warehousing in a mixed use building), retail services and some residential. The redevelopment of the site should only result in an increase of 25% to the floorspace to the footprint of the existing buildings. If the developer wishes to increase this density of development they will have to prove that there will be no negative net impact to the proposed improvements to the existing transport network. The site can cater for an additional 70 dwellings. If the developer wishes to increase this density of development they will have to prove that there will be no negative net impact to the proposed improvements to the existing transport network. The redevelopment of the site shall create linked pedestrian routes which will provide safe permeability and connectivity and which shall follow the preferred desire lines to the existing village. Traffic calming management to reduce the severance effect from the Woollen Mills to the Douglas village Shopping Centre including additional crossing points. Car parking for new development should follow the policy identified in LU -06. The existing historic buildings will be protected and where possible enhanced.

8.7 Precinct 2: Douglas Village Shopping Centre

8.7.1 The Douglas Village Shopping Centre has been recently constructed (2009) and commands a central position in the Douglas Village centre with Tesco's as their major tenant and anchor store on the western end. The shopping centre provides a central pedestrian mall through the centre and this provides an east to west link. On the eastern end, Mark and Spencer have both convenience and comparison retail. The whole site has been developed as a mall shopping centre and there is high vacancy rate.

8.7.2 **The Emerging issues** for this area are:

- The site is fully developed and there is no capacity for extension.
- The shopping centre is centrally located to the whole of Douglas and it provides a focal point to shoppers.

- The provision of free car parking in the multi storey car park is attractive to visitors to Douglas and local residents.
- There is an opportunity to improve connectivity to other sites in Douglas, particularly to the Woollen Mills and Cinema Sites and community park.
- The western façade onto West Douglas Street is unpleasant to the eye and un-functional to the use of the shopping centre.
- High levels of vacancy at the shopping centre are affecting the footfall in the Mall.
- It is well served by infrastructure services.

Future Strategy

8.7.3 The future strategy for Douglas Village shopping centre is directly linked to the overall development and policy focus of Douglas Village as a whole. The focus for the shopping centre will be to reduce vacancy levels, improve pedestrian and cyclist accessibility, desire lines and overall public realm appearance.

Table 8.8: Recommended Policy for Douglas Village Shopping Centre

Policy No.	Specific Policy - Douglas Village Shopping Centre
TC-02	It is recommended that the vacancy in the shopping centre be filled as a matter of urgency and that improved connectivity be provided as part of the urban design public realm programme.

8.8 Precinct 3: Barry's Field

8.8.1 This is a very important site in Douglas Village that has remained undeveloped. Adjacent to the cemetery and behind Barry's pub is an unused piece of land (approx 1.1ha) which has development potential (Barry's Field). The site is bounded on three sides by roads and streets and if development is to be considered at this location it should incorporate the Eircom exchange building to the south of the site. The site fronts the Carrigaline Road, Church Street and Churchyard Lane.

8.8.2 The **Emerging issues** for this area are:

- Potential opportunity site at "Barry's field".
- Narrow footpaths need upgrading and widening which would allow for outside dining in an already vibrant restaurant area.
- The existing Taxi rank outside of Barry's public house acts as a pedestrian barrier and represents a poor use of road space.
- Offers great potential for the development of a proper town centre with good public realm, pedestrian priority and day & night time activity.
- As a Greenfield site, there is opportunity for significant mixed use development to take place on the site that will enhance the future viability and vitality of the town centre.

Future Strategy

8.8.3 The development of Barry's Field is linked to the comprehensive redevelopment of other key sites in Douglas. If other sites reach optimum capacity there is an onus on the Local Authority to provide a municipal car park in the village centre. The site is in close proximity to the heart of Douglas (Barry's Corner) and is adjacent to the Douglas Village Shopping Centre.

Table 8.9: Recommended Policy for Barry's Field

Policy No.	Specific Policy - Barry's Field
TC-03	It is recommended that the entire site be developed in an integrated manner that will result in the provision of a mixed use development of 4,000sqm which will include office accommodation and commercial development with full frontage development along the Church Street and Carrigaline Road to form a continuous commercial strip with the existing Barry's Pub and Restaurant. If the developer wishes to increase this density of development they will have to prove that there will be no negative net impact to the proposed improvements to the existing transport network. It will be more functional use of land if there was acquisition of the Eircom storage building and yard as part of the Barry' Field site and the removal/or incorporation of the existing dwelling house and outbuildings into an overall site development. Consideration of the construction of a new municipal car park of at least 200 bays with the provision of improved pedestrian linkages from west to east. Vehicular access to the site shall be from Church street and the old Carrigaline road. Car parking for new development should follow the policy identified in LU -06.

8.9 Precinct 4 – Cinema Site

8.9.1 The Cinema Site is bounded by the filling station on the north western corner and the East Village Street on the south-eastern corner. It has road frontage onto the East Douglas Street and the relief road (R610). It has a number of existing buildings, namely; the Cinema building, the TSB building which is vacant, the filling station, and the buildings on the East Douglas Street comprising numerous high street convenience and comparison retail. There is a vacant undeveloped portion of land at the rear of the cinema site opposite the McDonalds drive in restaurant.

8.9.2 The **emerging issues** for this area are:

- Poor use of land at the Northern part of this site.

- This is a gateway into Douglas and is currently dominated by a petrol station and forecourt as well as a five screen cinema which is surrounded by underutilised and unattractive surface level car parking.
- Potentially one of the most important sites in Douglas. Increased noise pollution from the N40.
- Poor junction design/operation at the petrol station/Douglas village shopping Centre.
- Poor pedestrian and cyclist connectivity and permeability.
- Barriers to preferred pedestrian desire lines.
- Narrow footpaths need upgrading and widening which would allow for outside dining in an already vibrant restaurant area.
- High levels of vacancy at important locations on East Douglas Street (e.g. the old TSB Bank site). Could lead to very prominent dereliction which will further detract from the environment and surroundings of the area.
- The recent planning permission from An Bord Pleanála for the change of use from a cinema to a discount food store and ancillary retail facilities.

Future Strategy

8.9.3 The site is centrally located, to the rear of the main street and has yet to realize its potential. The intention here would be to have a gateway building fronting the relief road and for it to wrap around the site protecting it from the noise and visuals of the N40 and relief road. This sense of enclosure would create an attractive central space that would become the focus or centre of the village. In parallel with this, pedestrian routes through the site should be created, improved and enhanced.

Table 8.10: Recommended Policy for Cinema Site

Policy No.	Specific Policy – Cinema Site
TC-04	It is recommended that an Overall Planning or Development Scheme for the entire site, taking account of the planning permission granted to the existing cinema. Development on the site can be implemented on a phased basis. This shall include the provision of a comprehensive mixed use development with an additional 5,500sqm of non-residential floor space and 70 residential units. If the developer wishes to increase this density of development they will have to prove that there will be no negative net impact on the proposed improvements to the existing transport network. The new development will have active ground floor uses, an anchor store, office space and residential units on the whole site incorporating the cinema, the car park, vacant land and the old TSB site and the filling station site. It is desirable to enable the relocation of the filling station and rehabilitation of the site for the construction of a landmark building that will represent the entrance to Douglas Village from the gateway underneath the N40 flyover on Douglas Road. The future buildings should

	form an edge along the relief road on the north of the site, which will provide a noise barrier to the N40. There should be the provision of a number of pedestrian linkages from East Douglas Street through the site to the pedestrian crossing to Douglas Court on the relief road and from the site to the East Village complex to the south. The development of the site could include a central town square which will host public events, retail and community services. Road access to the site would be provided from the new signalised junction at the Douglas Court pedestrian crossing. Car parking for new development should follow the policy identified in LU -06. This development is dependent on promoting smarter travel measures and achieving safer and more user friendly access for pedestrians and cyclists. The above suggested quantum of development assumes that all existing vacancy will be filled before new building takes place.

8.10 Precinct 5: Douglas Court Shopping Area

8.10.1 The Douglas Court Shopping centre is anchored by Dunnes Stores, comprising a total of 4752m2 of convenience and comparison goods. An internal shopping mall consists of two central walkways with a mixture of shop types. There are three car parks on the site with a total of 1096 bays, the car parks surround the shopping centre and provide ease of access. Douglas Court Shopping Centre is served by two entrances one off the roundabout on the R610 and the second is from the Rochestown Road. There is an internal one way traffic system in operation throughout the site.

8.10.2 The **Emerging issues** for Douglas Court are:

- Douglas Court Shopping Centre is a 1980's development which is in need of updating and modernising.
- Ad hoc approach to planning proposals for extensions rather than an overall plan for the future development potential of the entire site.
- The Shopping Centre is dominated by surface level car parking which is not pedestrian friendly.
- Poor pedestrian and cyclist access as well as poor cycling facilities e.g. small number of bicycle stands, lack of lockers etc.
- Poor connectivity to the rest of Douglas town centre. This is primarily due to the R610 road acting as a barrier to pedestrians and giving priority to vehicles
- Poor pedestrian and cyclist desire lines (movement) thereby increasing the car dependency problem.
- Low vacancy levels.
- This Shopping Centre is currently in receivership.

Future Strategy

8.10.3 It is acknowledged that given the current state of retailing in Ireland there needs to be a long term view for the redevelopment of this large site. A comprehensive plan will see the redevelopment of Douglas Court possibly post 2032.

8.10.4 Today, Douglas Court Shopping Centre consists of a wide variety of shops providing both convenience and comparison goods. While the shopping centre provides a reasonable choice of shopping facilities and reported business is strong, the overall centre is quite poor in visual design quality and is not an attractive environment for non-car users. The appearance of this area is dominated by surface car parking which encircles the entire shopping centre creating an 'Island Effect'.

8.10.5 The site has the potential to develop as a town centre development which will allow for a strong mix of uses that will bring a sense of vitality and vibrancy by virtue of increased use of the area by pedestrians and cyclists. Any new redevelopment of the site will need to build at a density that will ensure that the necessary critical mass is achieved so that each function is attractive for users and viable for investors. These levels of density also support a reliable public transport service while at the same time not being at a level which will threaten the value of the proposed improvements to the existing transport network. The redevelopment of the site will give the priority to the pedestrian and will allow for improved connectivity which follows the preferred desire lines to and from Douglas Village Centre.

Table 8.11: Recommended Policy for Douglas Court Shopping Centre

Policy No.	Specific Policy - Douglas Court Shopping Centre
TC-05	It is recommended that an Overall Planning or Development Scheme is prepared for the entire site which can be implemented on a phased basis. This shall include the provision of a comprehensive mixed use development with an additional 7,500sqm non residential floor space. If the developer wishes to increase this density of development they will have to prove that there will be no negative net impact to the proposed improvements to the existing transport network. The new development shall cater for a variety of town centre type uses which will add life and vibrancy to the area outside the opening hours of the existing shopping centre. Appropriate uses could include offices, retail, retail service (restaurants, public houses etc.) leisure/recreational facility, community buildings and cultural uses. An improvement in the urban environment of the area with the removal of some surface car parking and the provision of a civic space would encourage such uses to locate in this area. The redevelopment of the site shall create linked pedestrian routes which will provide safe permeability and connectivity that shall follow the preferred desire lines to the existing village. Traffic calming/management to reduce the severance effect from the existing site to the rest of Douglas Village which may include additional crossing points. Car parking for new development should follow the policy identified in LU -06. Any new scheme will have to include the wetland site to the rear. At the moment it is informal open/green space. There is an opportunity here for a park or other amenities for the benefit of the wider community.

	There is potential to create a new urban civic space which could provide for connectivity to the existing wetlands at the east of the site. New development will be encouraged to create a tighter urban form with frontage development onto a new civic space with the creation of an active streetscape, which is more appropriate for this town centre location.

9 DLUTS Urban Design Strategy

9.1 Introduction

9.1.1 One of the key objectives of DLUTS is to improve the public realm in Douglas Village. The land use and traffic interventions will allow best practice urban design interventions in Douglas Village for the benefit of all. Urban Design is the process of shaping the public realm for life in our cities, towns and villages. One of the key issues which the DLUTS urban design strategy will seek to address and deliver on is how the public realm works together with the built form and transportation issues. In general terms, the public realm (i.e. streets, street furniture, public squares, parks and open space) influence the type of urban environment we can create.

9.1.2 It is acknowledged that the public realm in Douglas is poor but with the successful implementation of the DLUTS, opportunities will present themselves where streets and junctions can be visually and physically improved and pedestrian movement can be prioritised. It is at this stage that urban design interventions should improve the public realm. As cities look to the future, urban design becomes a powerful tool in helping to successfully achieve the aspirations of making a place for people to possess and occupy for social interaction and amenity.

9.1.3 The key aspects seek to make a place better. It has become primarily concerned with the quality of the public realm. There is an acknowledgement as evident from this assessment that the public realm in Douglas is poor, dominated by traffic with random building dispersal. There is a need to address the interface between the elements that make up our streetscape, roads and buildings. In creating a successful framework plan there is a need to create places for people. For places to be well used and well loved, they must be safe comfortable, varied and attractive. They also need to be distinctive, and offer variety, choice and fun.

9.1.4 Vibrant places offer opportunities for meeting people, playing in the street and watching the world go by. New development should enrich the qualities of existing urban places. This means encouraging a distinctive response that arises from and complements its setting. Places need to be easy to get to and be integrated physically and visually with their surroundings. This requires attention to how to get around on foot, by bicycle, by public transport and by car - in that order!

9.2 Public Realm Issues

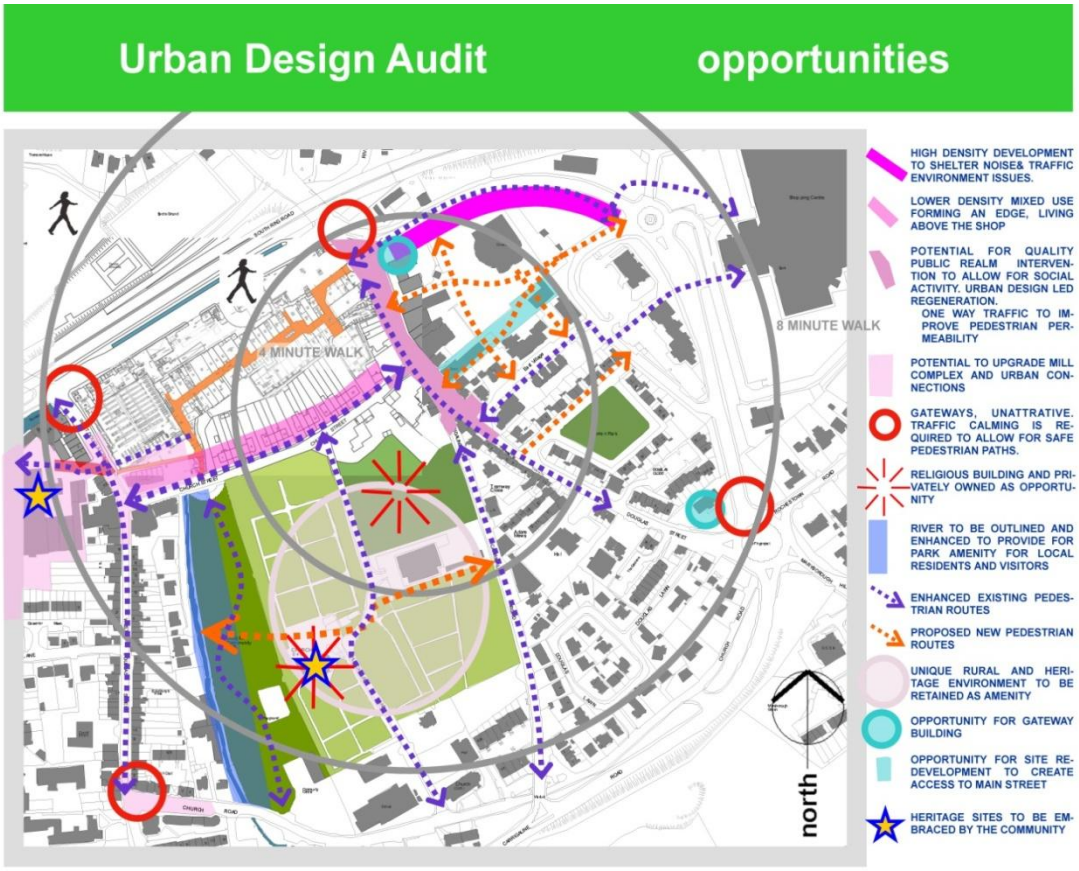
9.2.1 The streetscape assessment of Douglas Village has identified the existing deficiencies in the public realm of the village. This is further compounded by the South Ring Road creating a physical and visual barrier between Douglas village and the greater Douglas residential areas and the city to the North of that road. It is also a generator of noise pollution. The R610 that was built to by-pass Douglas Village creates a heavy traffic and visual segregation between the Douglas Court shopping Centre and the 'village'. The edge is visually aggressive and deters pedestrian movement across the site, thereby encouraging the use of motor cars on short trips.

9.3 Opportunities

9.3.1 Given the location of Douglas and the perception of the village and environs as being a popular place to live in Cork City, there is immense opportunity if the key issues such as better transportation links can be addressed. On the basis of traffic and land use guidance and betterment, public realm improvements can be attached which will create a more pleasant and hospitable environment especially for the pedestrian and cyclist. The urban design audit below examines the opportunities that present themselves in Douglas. In this chapter the key areas are identified and intervention measures proposed.

9.3.2 A network of routes makes for an integrated and whole village and with a choice of quality materials and the demarcation of edges, paths and nodes and with the addition of landmark buildings and an astute urban design layout, the village will become legible and a useable place for all.

Figure 9-1 Opportunities



9.3.3 In order to achieve the above, the following opportunities need to be realised:

- A relatively high density development on the cinema side of the R610 will create an edge to the road and give enclosure to pedestrians. This development will screen traffic noise pollution from the R610 and the South Ring Road from Douglas Village.
- The relatively low density housing along Church Road does not form an attractive visual edge to what has become a pedestrian link between the Mill, the Tesco side of Douglas Village Shopping Centre and east Douglas Street. There may be an

opportunity to replace these houses with low mixed use development which will form an edge to Church Street and to provide living units above the retail units.

- There is potential to upgrade the quality of the public realm generally throughout Douglas Village to give the village a sense of identity and creating a sense of place. This can be achieved by designating different areas for different interventions in a grade of say High, Medium and Low. The heart of Douglas village along the East Douglas road for instance could be designated as a high intervention area where Pedestrian Priority becomes paramount. In this instance, with perhaps the reduction of traffic to a single lane, high quality paving and streetscape materials and street furniture could create an environment where pedestrians reclaim and animate the street. Restaurants can then also spill out on to the street and perhaps even the Saturday Farmers Market take up its rightful place in the heart of Douglas.
- The Woollen Mill Complex is an underutilised asset that could become a major attraction to Douglas as a mixed use development if it was redeveloped sensitively taking into account its heritage and spatial value. The more minor intersections at, say, West Douglas Street and Church Road and West Douglas Street and Church Street should have a medium intervention to improve the streetscape to allow for easier pedestrian access and to encourage more retail activity.
- The creation of attractive gateways on all roads entering Douglas Village will give a sense of a threshold to the Village and an identity as being distinct from other areas in the city. The indication of providing for safe access for pedestrians within Douglas Village should start at the gateways.
- There is an opportunity to make the historic religious buildings and the graveyards more accessible to the inhabitants of Douglas and beyond. This may even be in the form of limited development for a visitors centre, for instance. There is also development opportunity for the privately owned vacant land adjacent to the graveyard but this should also be limited to keep the ambience of the quiet rural green space at the heart of Douglas Village.
- The river, the river bank and the park could be more meaningfully structured to give more of an amenity opportunity to the public. Enhanced access routes through and to the park will make it more user friendly and not merely to act as a thoroughfare.
- The design of a hierarchy of a network of open spaces in 'leftover' open areas behind buildings is important to create useable pedestrian links and to create vitality on the street. New pedestrian routes and enhanced existing pedestrian routes through the village will encourage shoppers and visitors to leave their cars behind providing that the routes become legible, safe and alive with incidental and other optional activity.
- The unique rural and heritage environment around the church and graveyard, including the original stone walled Churchyard lane should be retained as an amenity in itself but should be enhanced by allowing for easier visual and perhaps physical access.
- There is an opportunity for two gateway buildings at either end of the R610. These buildings should be signature buildings, unique in character and relatively tall.
- There is an opportunity to perhaps redevelop derelict sites within Douglas Village. This will in turn give opportunity to improve connectivity through these sites where possible.

Potential

9.3.4 The re-branding of Douglas Village will create a strong sense of place and urban legibility so that it can be easily navigated and used. The establishment of a quality public realm fosters a sustainable community through the use of high quality natural materials to create and define space. Accessibility throughout Douglas Village based on the assessment of desire lines between Points of interest (POI) will encourage users to maximise their stay in Douglas particularly if the urban landscape includes for the concept of pedestrian priority and the reduction of the impact of cars and parking in public space

Figure 9-2 Night time activity, people on the street and an example of town branding

LISMORE
HERITAGE TOWN

Figure 9-3 Example of potential in Douglas

9.3.5 The potential to realise the opportunities to improve Douglas should take place over an extended period, but to make early gains it is important to start at the heart of the Village on East Douglas Street. A public realm project that aligns the levels of the road and pavement with a quality natural stone finish to paved surfaces, a reduction of clutter, and the addition of contemporary street furniture that ensures pedestrian priority would create the initial draw to the village. Lesser interventions at gateways and other intersections could dramatically improve the legibility of the Village in the short term. Planning and other incentives to motivate landowners to develop back lands and the edges to the R610 might initiate

developments in the short to medium term. The amalgamation of properties for the re-development of Church Street housing will be complex and may never be realised in the short to medium term.

9.4 General Policies for Urban Design

9.4.1 It is the intention to create a comfortable and stimulating public realm that encourages social interaction. This requires detailed attention to the structure of a space and the elements it contains. Public realm can be a street, square or a park that is accessible whether publicly or privately owned, 24 hours a day for everyone to see, use and enjoy. The quality of these spaces can influence how we interact and perceive the spaces and the buildings that contain it. The visual and accessible appearance of these spaces can also establish how both the user and visitor are welcomed to a place. In creating such a successful and sustainable place, key public realm attributes will need to be promoted in conjunction with developing any future public realm improvements and policies. These attributes are listed below:

9.4.2 **Attractive:** The choice of materials used needs to be both attractive and sustainable. They need to integrate and reflect local character whilst at the same time providing a fit-for-purpose, maintainable streetscape treatment.

9.4.3 **Uncluttered:** A creative and innovative design thinking how the street scene works will need to be applied. This includes elements in the street such as level changes and signalised junctions to reduce the use of columns, railings and signage.

9.4.4 **Adaptability:** The public realm should be as flexible as possible to provide for a wide range of uses. The potential for removable street furniture could provide access to spaces that enable East Douglas Street to accommodate a programme of events.

9.4.5 **Movement:** Improvements to the public realm should encourage easy flowing pedestrian movement. Future designs should take into account existing and proposed desire lines and remove any unnecessary physical barriers that currently restrict people getting from A to B.

9.4.6 **Gateways:** The most important transport interchanges or nodes serve as gateways to a town or city centre. Main junctions, roundabouts footpaths car parks are all arrival points. Four gateways have been identified in Douglas, the most important two are at the two bridging points over the N40. Others include the Finger Post Roundabout when coming in from the Rochestown road and Daly's Corner on west Douglas Street. Emphasising their prominence through a feature or landmark building is important to clarify where the centre begins (usually marked by a change of use and by building height) and prevents the indistinguishable blurring of centre and edge.

9.4.7 **Lighting:** Both functional and aesthetical lighting should be used to encourage the positive use of spaces within the town centre at night.

9.4.8 **Public Art:** The appropriate use of public art could be implemented. Themes or historic references can be introduced at appropriate locations.

9.4.9 **Desire Lines:** Successful development depends on good access and connections. The connections between a site and its surroundings are important for even the smallest developments. Watching how people move through an existing area reveals the various

influences on movement at work. How many people move on foot is not just a matter of the simplest and most obvious route, but will be influenced by, for example variety and interest, safety, light and shade, commercial activity, landscape, noise and pollution. The analysis of Douglas has identified desire lines across the urban area. The best used paths will follow natural desire lines between destinations. This means aligning direct paths along popular routes and providing seating and lighting along the way. The table below outlines desire lines which would benefit the pedestrian.

Table 9.1 Desire lines of benefit to the Pedestrian

Desire Lines
Lane to the rear of the filling station, through the cinema car park and across to the Douglas Court Shopping Centre
North south links from the East Village through the car park of the former bank into the cinema car park. In addition option to have a pedestrian link into Gartan Park
East west connection from Gartan Park to Douglas Court Shopping Centre
East west connection from East Village to Douglas Court Shopping Centre
North south connection in Douglas Park
East west connection from west Douglas Street through the grounds of St Luke's Church to East Douglas Street
Additional linkages and entrances from Douglas Woollen Mills including separate pedestrian entrances to West Douglas Street Church road and The Douglas Village shopping centre.

Points of Interest (POI): The analysis of the DLUTS area identified a number of points of Interest (POI) which would allow for potential key development based on their location and uniqueness. The Douglas Court SC, given the large footprint of the site with surface level car parking and a single storey building has the potential for a high capacity development here. Another POI site identified is the cinema site and attendant grounds. This site located to the rear of the main street offers the opportunity to create a public square suitable as a meeting place or for staging events the objective of which is a suitable people place. Another use may be the inclusion of public art at this location. Public art can make a major contribution to giving a place character and identity, bringing people into and through places.

Another POI is the former Woollen Mills to the west of the village, a visit to this location demonstrates the enormous potential of the site and buildings. The fact that the site is listed on the Record of Protected Structures (RPS00482) should not be seen as a deterrent but as an opportunity. Such a proposal could include a retail or cultural quarter.

Streetscape: It is evident from walking through Douglas that signage is creating a visual clutter problem and can often be misleading. Roads and streets are often dominated by ugly and sloppily applied white and yellow paint and littered with railings, lighting, bollards signposts, CCTV, substations cycle stands and phone boxes.

9.4.10 Not, infrequently, the only signage provided is for vehicles, so that the person on foot can find himself circulating around one way systems. The answer lies in:

- Consistent and coordinated design of these elements over a wide area;
- Making the structure of the place legible so as to minimise the need for signs, especially those concerned with traffic direction and control;
- Concentrating pedestrian signage in a designed locality at specific nodal points;
- Implicit routing defined by the paving type, installing art in the floorscape, and introducing other imaginative means of easing orientation.

General Policies

Table 9.2 General Urban Design Policies

Policy No	General Urban Design Policies
UD 1	There is a need to increase permeability in Douglas Village by improving the pedestrian environment with the long term intention of allowing easy access from the peripheral outlying areas of Donnybrook, Grange, Frankfield Maryborough and the Rochestown Road through Douglas into the city centre.
UD 2	Within the town centre, it is proposed to improve the general public realm through widening footpaths, introducing raised paved areas at junctions that can facilitate better movement of pedestrians and cyclists, thereby improving connectivity and safety between other land uses. Other public realm features that could be introduced are more green trees and flower beds (landscaping), water features, benches, lighting and removal of overhead wires. A noise barrier is also proposed along the N40 section which overlooks Douglas Village
UD 3	Four town centre gateways have been identified in Douglas, the most important two are at the two bridging points over the N40. Others include the Finger Post Roundabout when coming in from the Rochestown Road and Dalys Corner on West Douglas Street. Public Realm measures will be implemented to improve their appearance and functionality.
UD 4	Beneficial desire lines have been identified in Douglas (see Table 9.1) and these shall be sensitively and sustainably improved where possible.
UD 5	The analysis of Douglas identifies a number of points of Interest (POI) which would allow for potential key development based on their location and uniqueness. It will be important that any proposed developments at these POIs will contain public realm improvement.
UD 6	The public realm improvements identified for Douglas Village will seek to bring order and uniformity to the streets to enhance the streetscape, reduce clutter

	and have a uniform style in street furniture.

9.5 Specific Urban Design Policies

9.5.1 Specific Urban Design Policies have been identified for a number of areas within the Village Centre to illustrate the specific public realm improvements intended. The areas identified are East Douglas Street, West Douglas Street which provides accessibility to all the schools in the study area; Barry's Corner, which is the heart of Douglas; Daly's Corner, the Cinema Site and St Patrick's Woollen Mills. In addition, there are a number of other specific public realm interventions at Tramway Terrace, the Community Park, the Mangla and the walkway/cycleway to Tramore Valley Park in the City. Each of these areas have an urban design sketch and photomontage to illustrate the favoured intentions for the area.

East Douglas Street

9.5.2 With the northern part of this street being reserved for public transport only during the day (08:00 – 18:00), there is potential to increase pedestrianisation of this area. This will be provided for by having a raised shared surface so vehicles know that the pedestrian has the priority. Other improvements will include removing street clutter, undergrounding overhead wires, uniform signage style and having a consistent surface treatment which will be replicated throughout the village. This work presents an opportunity to underground services so there needs to be coordination with all the utility providers.

9.5.3 This is the main thoroughfare in Douglas Village and it is imperative that a high finish is applied here. With the street closed to only public transport during the day (08:00 – 18:00) there is an opportunity to turn this area over to the pedestrian and public activity.

9.5.4 The northern plaza in front of the Village Shopping Centre presents an opportunity for landscaping and the construction of retail kiosk that will animate this location. This area receives a lot of solar gain but its strategic location is not being optimised.

9.5.5 While not shown on the sketch it is acknowledged that the combined site of the filling station, the cinema site, ancillary car parking and the former TSB site combined has huge potential for a comprehensive redevelopment for the betterment of both the physical and social aspect of Douglas Village.

9.5.6 The interventions will include a shared surface for the street, appropriate street furniture and given the number of bus routes on this street an appropriate bus shelter with timetables and real time info. The paving pattern at this location will visually establish urban squares at various points on the street. The removal of daytime traffic from this street provides an opportunity to hold outdoor events, public displays, farmers markets etc. In order to promote surveillance and safety the street will be open to car traffic in the evenings. The access control into the street will be by way of bollards similar to the type in Maylor Street and Oliver Plunkett Street in Cork City Centre.

9.5.7 Interventions at the lower end of the street will be similar however there will be no traffic restrictions during the day. Footpaths will be widened to facilitate activity on the street from restaurants and allow shops to display their goods on the pavement. The improvement of the

public realm at this location will enhance east west connectivity through the village and make the street an important destination for shopping and socialising.

Figure 9-4 East Douglas Street - Before

Figure 9-5 East Douglas Street - After

Figure 9-6 Sketch for East Douglas Street

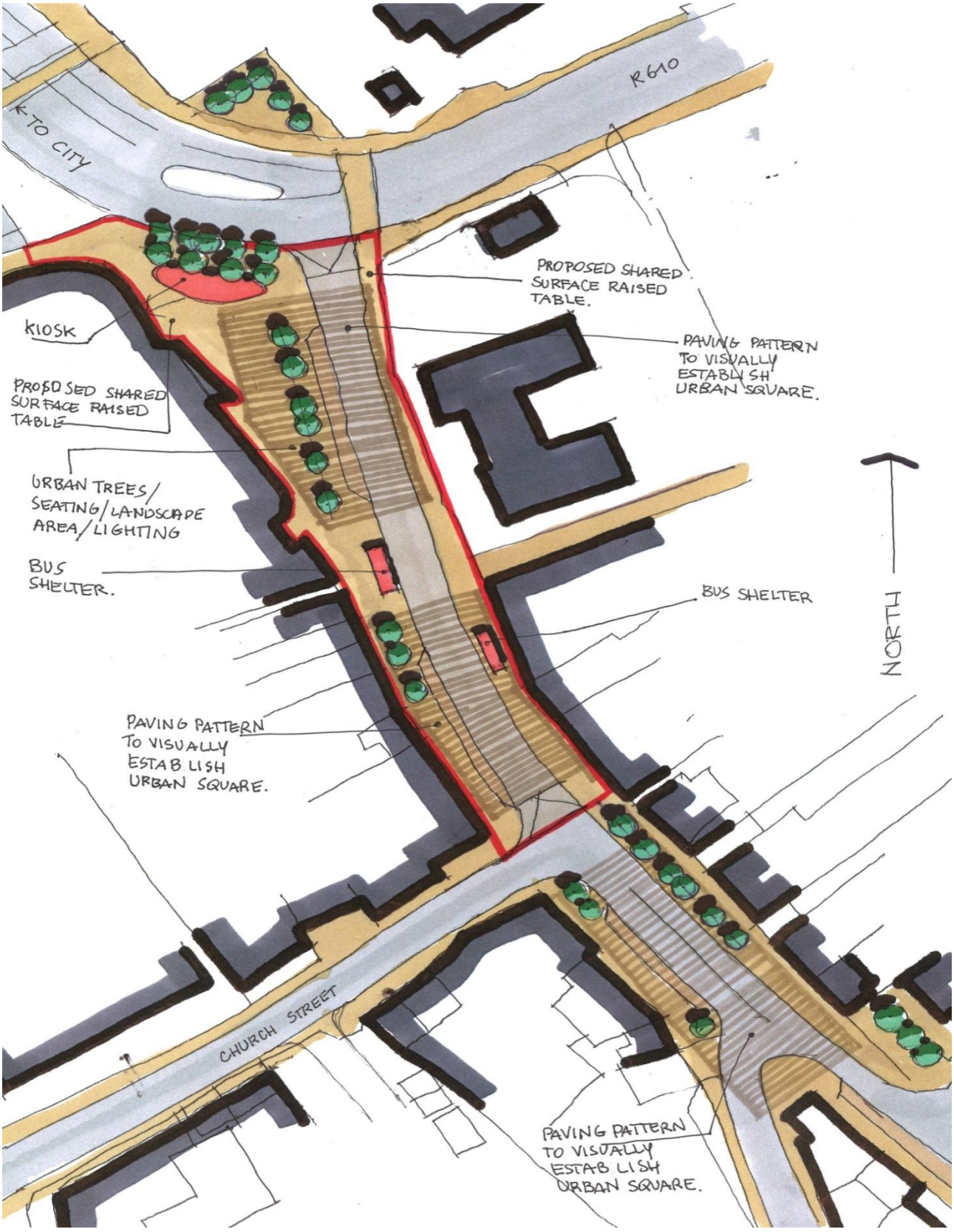


Table 9.3 Specific Urban Design Policy for East Douglas Street

Policy No	Specific Urban Design Policies for East Douglas Street
UD 7	There is a need to increase the pedestrianisation of this area by removing daytime private transport through the street. The street will have public transport access only during the day (08:00 – 18:00) and will reopen at evening time to allow for night time surveillance. Public Realm improvements will include bus shelters kiosks raised shared surfaces for pedestrian and cyclists.

Barry's Corner

9.5.8 It is the intention at this location to create a café/restaurant quarter in the village to bring some day time activity and vibrancy. This will be facilitated by extending the footpaths outside the local restaurants. In addition this will allow the florist to display their products out on the street which will bring colour and vibrancy to the street.

Figure 9-7 Photomontage of Barry's Corner East Douglas Street

Table 9.4 Specific Urban Design Policies for East Douglas Street

Policy No	Specific Urban Design Policies for East Douglas Street
UD 8	It is the intention at this location to create a café/restaurant quarter that will be facilitated by extending the footpaths outside the local restaurants and having outdoor seating and tables. It is imperative that a high quality finish is applied to the public realm such as streetscape urban sculptures and lighting to facilitate a safer more pleasant environment.

Cinema Site

9.5.9 This is a key site located in the centre of the village. Cork County Council would favour a comprehensive masterplan for this site which would involve all landowners. The initial key objective would be to remove/relocate the filling station. A comprehensive redevelopment of this site would see the building of a landmark building at the northern corner and the new building line to extend along the frontage with the relief road, this building would be punctuated by pedestrian linkages through it with active street frontage. Possible additional set back from the relief road to allow more pedestrian circulation and soft landscaping should be incorporated. The recent planning permission from An Bord Pleanála for the change of use from a cinema to a discount food store and ancillary retail facilities

Figure 9-8 Sketch of Cinema Site

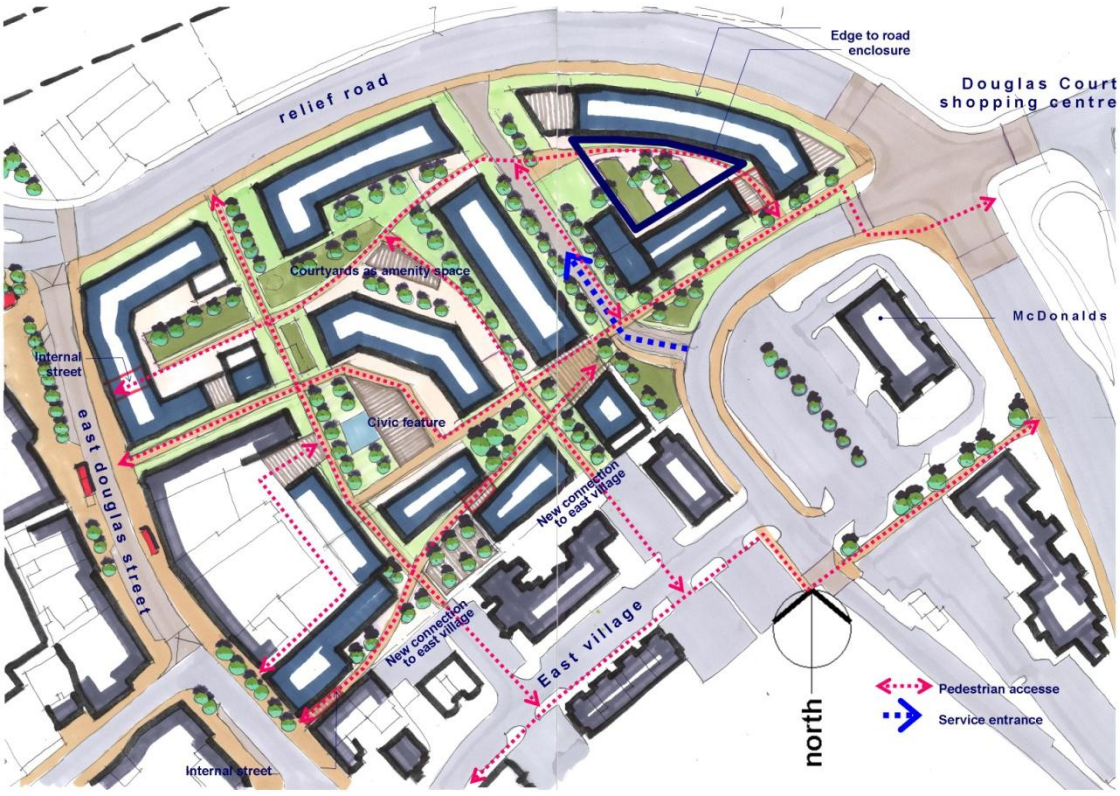


Figure 9-9 Indicative Image of East Douglas Street

Table 9.5 Specific Urban design Policies for Cinema Site

Policy No	Specific Urban Design Policies for Cinema Site
UD 9	To prepare an Overall Planning or Development Scheme for this site which would involve all landowners. The design brief for the site needs to consider; the building of a landmark structure at the northern corner, a new building line to extend along the frontage with the existing relief road, this building would be punctuated by pedestrian linkages through it with active street frontage. Any new build shall be set back from the relief road to allow more pedestrian circulation and soft landscaping to be incorporated. Improved pedestrian connectivity between Douglas Village Shopping Centre and Douglas Court Shopping Centre and between the site and the East Village. Creation of public spaces within the site that could be focal points for social interaction

9.5.10 This is a prime central site in Douglas Village and the objective here would be to amalgamate the filling station, cinema, car park, former TSB building and green open space site on the relief road into one comprehensive development unit. Its location lies on the important east west connection within the village. A development brief for this location would include a landmark building at the corner of East Douglas Street and other buildings fronting the relief road. These buildings would be set back from the relief road to allow wide pedestrian movement and would also be punctuated by gaps to facilitate north south movement through a central plaza square into the East Village. This area will serve as a new Urban Quarter in Douglas and will contain a mix of retail, commercial offices and residential.

Figure 9-10 Indicative 3D Sketch of Cinema site and East Douglas Street

Woollen Mills

9.5.11 The DLUTS will encourage the redevelopment opportunity presented at this location. This site is often referred to as the third shopping area and it is important that pedestrian linkages to this site are improved. This site is in private ownership so the intention would be to have policies that support its improvement and rehabilitation bearing in mind its status as a listed building and archaeological importance being on the Records of Monuments and Places (RMP).

9.5.12 The public realm interventions here are to promote and enhance east west connectivity. As stated earlier the three centres in Douglas are independent destinations that have difficult or unattractive pedestrian links. The urban design concept seeks to make it easier to navigate the junctions at this location. There will be a raised shared surface at the junction of Douglas West with Church Street and this surface will continue across the entrance to the Woollen Mills. The desired pedestrian connectivity from the Douglas Village Shopping Centre is the path between Morris House and the rear of the Shopping Centre. An appropriate surface treatment here could lessen its impact and backyard experience. The pedestrian crossing point should be relocated to this area which will allow a straight line connection into the Mills Complex. The area will be supplemented by soft landscaping and tree planting. To the east of Morris House and additional/iconic building could be constructed on the underused open space at this location.

Figure 9-11 West Douglas Street and St Patrick's Woollen mills entrance

Figure 9-12 Sketch for St Patrick's Mills Entrance

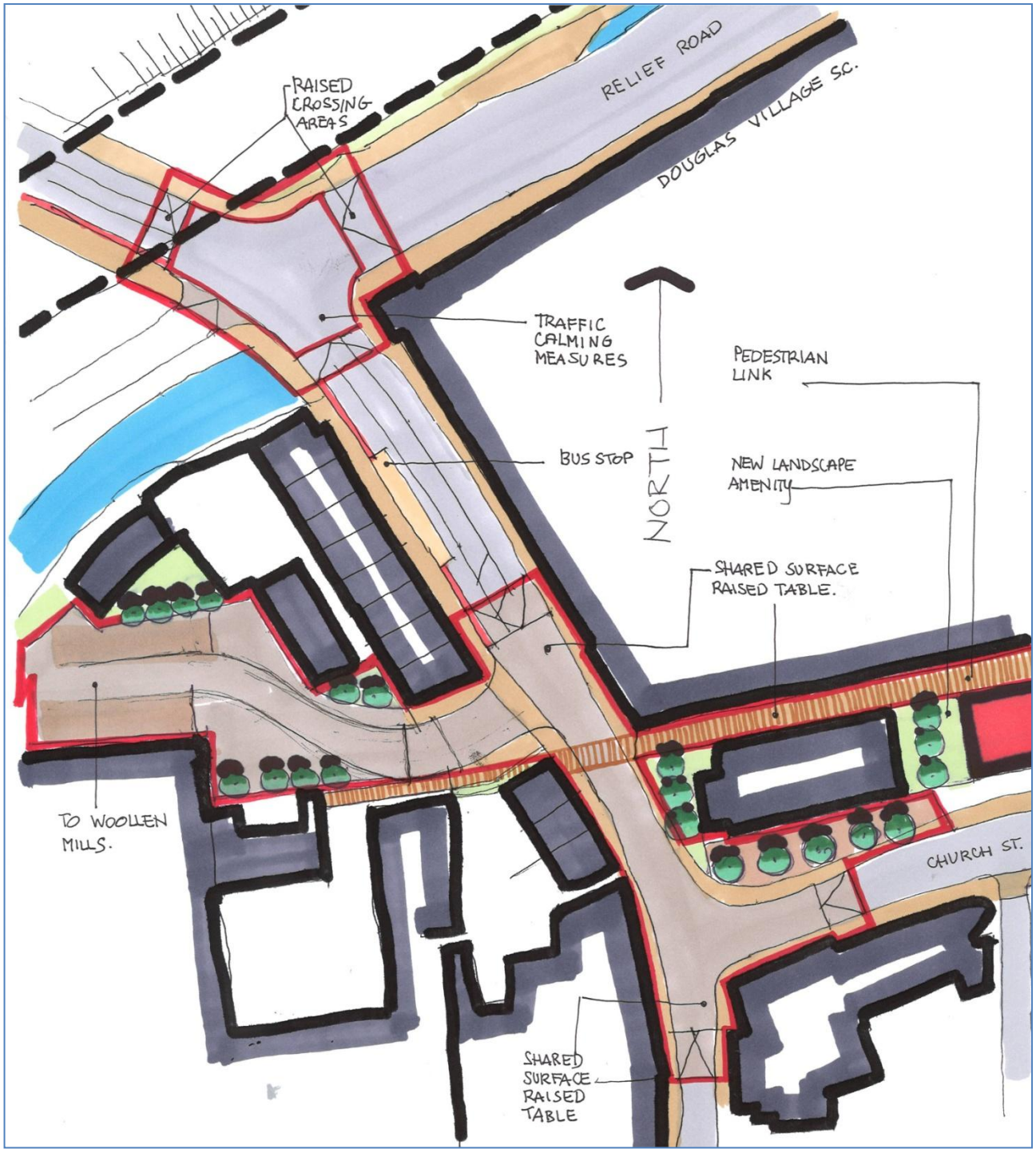


Figure 9-13 Photomontage of Douglas Woollen Mills Entrance

Figure 9-14 Photomontage of West Douglas Street

Table 9.6 Specific Urban Design Policies for Woollen Mills

Policy No	Specific Urban Design Policies for Woollen Mills
UD 10	To realise the immense opportunity presented on this site for increased public realm interventions that promote and enhance connectivity with the Douglas Village Shopping Centre. The redevelopment of this site will include the retention of all buildings of historic and architectural merit and any new build to enhance this precinct shall compliment the established building fabric. The entrance to West Douglas Street needs to have a raised paved area that encourages increased walking and cycling

Daly's Corner

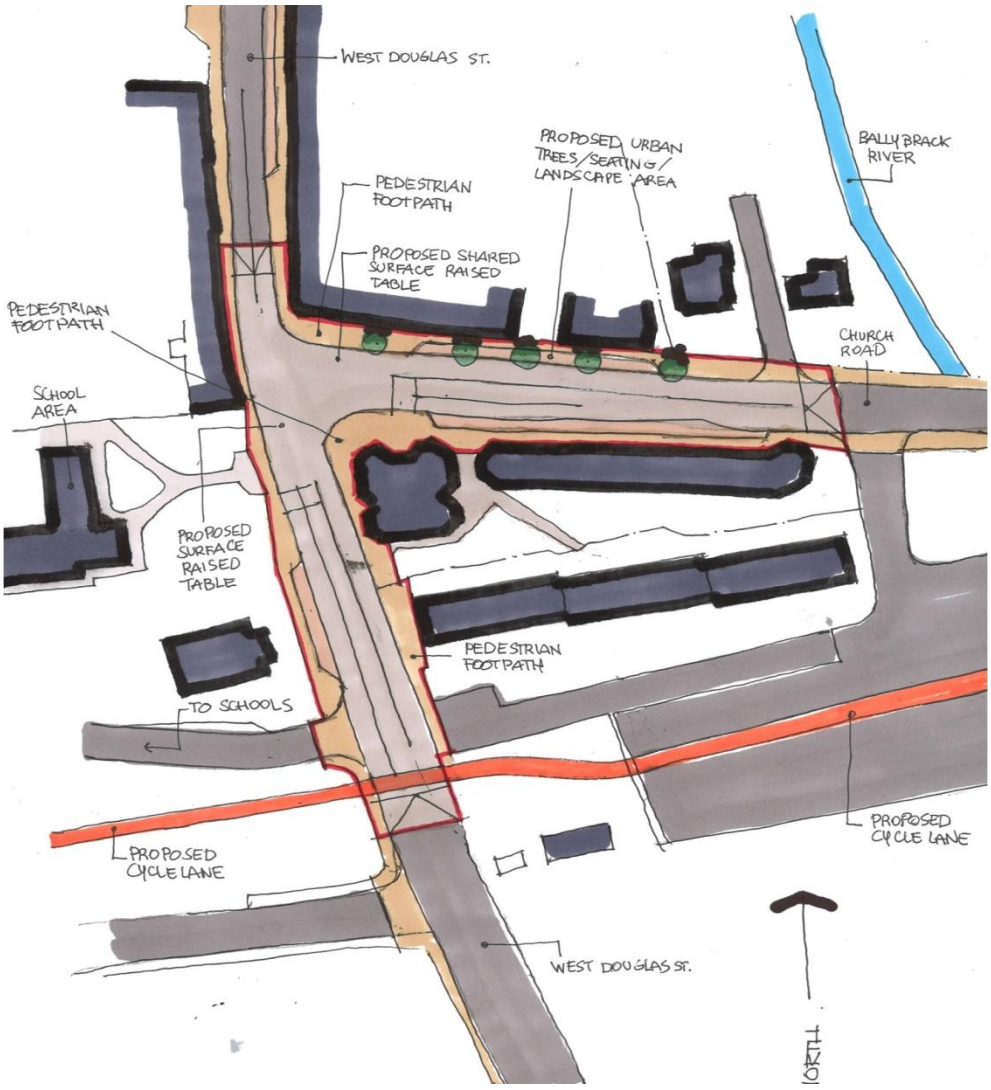
9.5.13 Given the location of this site it is critical that it is made pedestrian and child friendly which will enhance safety that will encourage parents and children to walk to school.

9.5.14 In conjunction with the traffic solutions being proposed for this area it would be the intention to improve the public realm at this location. Interventions would see the continuation of a cycleway east west from the Tramore Valley Link to the Mangla. This facility will allow safe cyclist connectivity to the school area of Douglas.

Figure 9-15 Photomontage of Daly's Corner looking east

Figure 9-16 Photomontage of Daly's Corner looking north

Figure 9-17 Sketch for Daly's Corner



9.5.15 Public Realm improvements will include the construction of a raised area at the junctions this will force vehicular traffic to slow down. The road level will be flush with the footpath and this will continue along West Douglas Street and Church Road. The space given over to pedestrians will be increased and the northern side of Church Road will be suitably landscaped with street furniture to soften its effect.

Table 9.7 Specific Urban Design Policies for Daly's Corner

Policy No	Specific Urban Design Policies for Daly's Corner
UD 11	Given the location of this site near the schools in Douglas, it is critical that it is made pedestrian and cycling friendly through public realm improvements. Measures shall include a raised platform at the road junction, improved footpaths and pedestrian/cycling crossing points. These interventions will enhance safety which will encourage parents and children to walk and cycle to the nearby schools.

The Community Park

9.5.16 The visual appearance of the park should be improved and there should be discouragement of any measures that would erode its size. It is acknowledged that there is an anti-social element associated with the park and this needs to be tackled to make this space open and attractive to all through improved measures in surveillance, lighting and connectivity. Presently the park has a wide variety of functions including a children's playground, community hall, car park, riverside walk and recycling bring site.

Figure 9-18 Photomontage of Community Park along Church Road

9.5.17 The park should become the main north south link in Douglas Village, as part of this process the northern entrance should be opened out as per the photomontage above. The barriers and gates at the front should be removed. Other improvements could include the provision of outdoor gym equipment and suitable park furniture.

Figure 9-19 Photomontage of Community Park from Douglas Village Shopping Centre

Table 9.8 Specific Urban Design Policies for Community Park

Policy No	Specific Urban Design Policies for Community Park
UD 12	The Community Park should be at the centre of life in the village and should be an integral part of the population's lifestyle choice. Cork County Council in conjunction with the Tidy Towns should support a competition which will provide a fully integrated leisure and passive space in the village to the benefit of residents and visitors alike. Measures shall be implemented to improve north south and east west connectivity, enhance public safety and install suitable lighting.

9.6 Design Guidance for the Public Realm

9.6.1 In order to ensure consistency there will be an agreed palette of materials for use in Douglas Village and this can be agreed at design stage. Establishing a design brief will ensure consistency in the public realm of the village

Surface Materials

9.6.2 Surface materials provide the foundation in defining the character of the built environment. Paving and surfacing materials need to reflect local distinctiveness and context whilst being practical and sustainable in terms of function, supply and lifetime maintenance. High quality and low maintenance material and finishes should be used.

9.6.3 Materials should be natural/sustainable and local (as per recent guidelines from the Department of Environment)

Grey Granite Paving

Granite Kerbs

General Principles

- Natural, local materials are preferred to manmade alternatives;
- Relate ground surfaces to their surrounding streetscape context;
- Retain the historic form of streets by maintaining kerb lines, using dropped kerbs where necessary;
- Where footways are widened, demarcate the kerb line;
- Avoid small paving modules laid in arbitrary colours and patterns;
- Respect the subtle proportional relationship between the footways, the buildings and the carriageway;
- Invest in quality and simplicity; and
- When assessing costs, use sustainable accounting methods and consider life cycle costing.

Street Furniture

9.6.4 Bespoke or historically influenced street furniture can help contribute to the distinctiveness of a place, create a sense of arrival and instil pride. It can be the signature, the delineation of a particular use, or a interactive element within the landscape. Street furniture should seek to incorporate historical or cultural references but not be too literal.

Sample of Furniture

and information sign

General Principles

- Design street furniture as an integral part of the street;
- Locating seating in places of interest / activity;
- Consider needs of visually impaired people;
- Street furniture should be simple, functional and robust;
- Eliminate the need for bollards through higher quality kerb definition and good design;
- Restrict signs to those which convey essential information;
- Signage should be designed as part of a family of street furniture;
- Remove superfluous and redundant signs;
- Locate signs on buildings or at the back edge of pavements; and
- Avoid placing signs on new posts which add to clutter.

Lighting

9.6.5 Lighting - Both functional and aesthetical lighting should be used to encourage the positive use of spaces within the town centre at night. Creative lighting design and projection schemes can provide and reinforce distinct character areas. Lighting forms an integral part of our streets and can signify or contribute to the character of public spaces.

9.6.6 Whether it be for functional highway lighting or for the aesthetic lighting of a heritage building, lighting elements need to be considered as part of the overall public realm design and not just an afterthought. The Lighting specification should be architectural lighting to enhance the village centre.

Sample of street lighting

General Principles

- Select lighting which reflects the function of the place;
- Consider street lighting in conjunction with other light sources, including shop windows and floodlit buildings;
- Respect local designs where appropriate;
- Avoid light pollution especially within residential areas;
- Avoid clutter by mounting lights on buildings where appropriate; and
- Consider the daytime appearance of light fittings, associated cabling and feeder pillars.

Trees

9.6.7 Tree planting enhances the character of a street or public space. They create great visual appeal, offer a natural form of climate control for buildings and provide shade for seated areas. Tree planting should form an integral part of the design stage and not be considered as an afterthought. Architectural specimen urban trees should be specified. Of course these should be local trees, indigenous to the place.

Sample of landscaping in a park and on the street

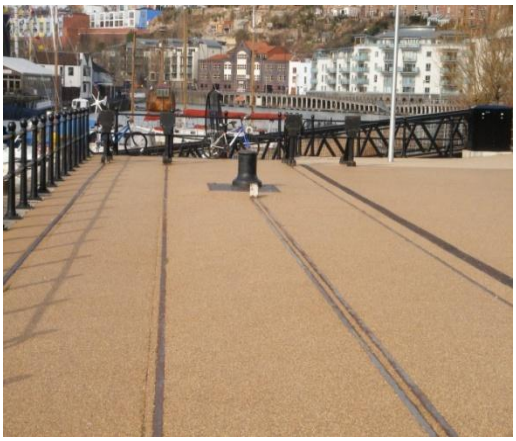
General Principles

- Species to be chosen carefully to suit the urban context;
- Tree species selection to be made at early design staged in co-ordination with existing and/or proposed service runs;
- Consider shape and form in conjunction with pedestrian flows, surrounding buildings, street furniture and lighting;
- Locate trees in areas that don't restrict road visibility; and
- Consider the overall height and future maintenance of the specified tree.

Public Art and Animation

9.6.8 The appropriate use of public art could be implemented to support the character of a space. Themes or historic references can be introduced both on a small scale into street furniture or on a large scale such as a fixed iconic sculpture. The successful delivery of an animated public space can attract people into a town and provide the opportunity for people to stay, interact and engage. This can be achieved through subtle and encoded pieces to the literal and overt demonstration of local history. Either way public art and animation of the public space should be a foundation within the design process.

Manhole cover with local personalisation


The importance of maintaining heritage tradition

General Principles

- Restrict use to high quality, well conceived items;
- Features can vary from large scale to temporary pieces;
- Features may be stand alone or incorporated into bespoke street furniture;
- Public art should be appropriate to the local context;
- Consider sighting and aesthetic life;
- Consider life-time maintenance;
- Use feature lighting to enhance appeal at night; and
- Features should be as interactive or engaging as possible.

Conclusion

9.6.9 In conclusion the intention of having a recognised palette and design code will allow:

- Materials and external design to make a positive contribution to the locality;
- The landscape design facilitates the use of the public spaces from the outset; and
- Design of the buildings and public space will facilitate easy and regular maintenance.

10 Transport Strategy

10.1 Introduction

10.1.1 One of the key objectives of DLUTS is to improve the transport network within the DLUTS area, thereby providing for all road users and supporting the sustainable development of the area.

10.1.2 This chapter presents the proposed strategic and local transport recommendations that have been developed to support the DLUTS vision and evaluation objectives defined previously in Chapter 7. These recommendations also take cognisance of the Douglas Baseline Traffic Evaluation findings outlined in Chapter 5 of this report.

10.1.3 The DLUTS transport strategy focusses on:

- Improving pedestrian and cycle movement within the DLUTS area;
- Improving public transport movement, facilities and accessibility;
- Improving urban permeability within the DLUTS area;
- Delivering Smarter Travel objectives for the DLUTS area;
- Developing a schools travel strategy to increase use of sustainable modes;
- Protecting the investment in strategic infrastructure;
- Complying with the transport objectives of CASP and integration with Cork City Council;
- Reducing local traffic congestion levels in sensitive areas;
- Improving the management of vehicular movements and access within the DLUTS area; and
- Achieving accessibility and social inclusion in the DLUTS area.

10.1.4 The DLUTS transport strategy has been categorised into the following sub-strategies:

- Pedestrian and Cycling Strategy;
- Public Transport Strategy;
- Schools Strategy;
- Village Centre Strategy; and
- Wider Network Strategy.

10.1.5 The remainder of this chapter is structured as follows:

- Summary of Key Issues within the DLUTS area;
- Overview of DLUTS Transport Strategy;
- Introduction to Transport Management Improvements;
- Pedestrian and cycling strategy;
- Public transport strategy;

- Schools strategy;
- New East to West Link Road;
- Village Centre traffic management measures; and
- Wider network measures.

10.2 Summary of Key Transport Issues in the DLUTS Area

Poor Pedestrian Facilities and Conditions

10.2.1 Junctions in the wider network such as those along the Rochestown Road and Grange Road carry significant traffic flows yet do not make sufficient provision for pedestrians. Key radial routes are often heavily trafficked, particularly during peak periods, with traffic moving at high speeds and therefore formal crossings are required as these routes can be hazardous for pedestrians, children, the mobility impaired and the elderly. Significant traffic movements on roads surrounding the village area acts as both a physical and social barrier and improvements need to be made to improve accessibility for vulnerable road users.

Poor Cycling Network & Environment

10.2.2 The DLUTS area has a poor cycling environment which contributes to low levels of cycling. The primary issue for cycling in the DLUTS area is the lack of adequate cycling infrastructure with only fragmented cycle lanes in some locations, cyclists are impeded by the large levels of on-street parking, set-down parking and lack of space provided for on carriageways which creates a difficult and unsafe environment for cyclists. In addition, the lack of cycle parking facilities in the DLUTS area acts to discourage cycling. Overall, the lack of a coherent and safe cycle network and environment discourages cycling in the DLUTS area.

Poor Public Transport Priority and Usage

10.2.3 Whilst the DLUTS area is well served by bus in terms of the number of routes provided and the service pattern, the level of bus priority in the area needs to be significantly improved to encourage better use of public transport. Furthermore, the bus stop facilities outside of the village are poor.

Road User Conflict

10.2.4 Narrow carriageway widths are a feature of some roads in the DLUTS area (particularly in Douglas Village and on Rochestown Road). Central locations such as East Douglas Street, which are located in the retail core of the village, contain narrow footpaths with high pedestrian flows. This creates a difficult environment for vulnerable road users to move around safely. Other examples of deficiencies, within the DLUTS area, include ambiguous road markings, inconsistent provision of tactile surfacing and lack of adequate pedestrian and cycle crossing facilities. Vehicular traffic dominates space sensitive areas of the village creating barriers to pedestrian and cycle movement. Reducing road user conflict between vehicular traffic and vulnerable road users in sensitive areas, such as the village centre, is a core objective of the village centre improvements recommended as part of the DLUTS transport strategy.

Capacity Issues

10.2.5 The Douglas Baseline Traffic Evaluation Report identifies junctions in the DLUTS area that experience delay or queue formation, and categorises the problems as either Operational or Capacity related. Junction operation is a function of attributes like visibility, clarity of priority and signal timing. These attributes may be configured in a suboptimal way that can cause traffic flow problems. Capacity issues arise when traffic demand exceeds the capacity of the junction or one of its approaches. Traffic flow at peak times can often reach a level that is in excess of the capacity for a particular movement through a junction. In some cases this can cause adjacent junctions to experience reduced performance and the effect may also cascade to other parts of the network. The junction of Douglas Road and the Douglas Relief Road is an example of a junction where such congestion can occur.

10.2.6 The road network within the DLUTS area contains a small number of bottlenecks which may contribute to the perception of a more widespread congestion problem. Relatively small peaks in traffic flow in one part of the network may cause deterioration in operation at multiple adjacent junctions or across significant parts of the central road network. Vehicle arrival rates to a congested area are usually unimpeded in the DLUTS area, whereas the dispersion of this congestion depends both on overcoming the immediate operational difficulties and on having spare capacity elsewhere on the network to move queued traffic to.

10.3 Overview of DLUTS Transport Strategy

10.3.1 The DLUTS transport strategy is consistent with recent local, regional and national policies such as the National Transport Authority's National Cycle Manual (2011), the Cork County Development Plan, CASP, Regional Planning Guidelines, DOECLG Spatial and Transport Planning Guidelines and the Department of Transport Tourism and Sport's Smarter Travel Policy. Central to these policies is to promote a mode shift from the private car to more sustainable modes, such as walking, cycling and public transport. In this way, the transport strategy is consistent with the most up to date thinking that reflects the needs of the population of the DLUTS area to produce a transport environment that promotes the sustainable, safe and healthy movement of people.

10.4 Introduction to DLUTS Transport Improvement Options

This section sets out the interventions that are recommended as part of the DLUTS transport strategy and the benefits that will be delivered. The DLUTS transport strategy is a multi-modal strategy that will benefit pedestrians (including mobility impaired users), cyclists, public transport users and other vehicular traffic (car and Heavy Goods/ delivery Vehicles).

Pedestrian Improvement Measures

10.4.1 Improving the environment for pedestrians is a core objective of the DLUTS transport strategy. Walking accounts a very small proportion of trips made to work and education in the DLUTS area (7% according to the 2006 census). This level is well below the Cork County average (12%) and the National average (17.5%). There is a significant opportunity, therefore, to increase the walking mode share for the DLUTS area through the introduction of sustainable policies and localised traffic management arrangements that are supportive of pedestrian movement. Significant steps can be taken towards achieving National Smarter

Travel targets (to reduce the number of car commuter trips by 20%), not just in the village centre but also in the surrounding DLUTS area, by simply creating a more amenable and permeable environment for the movement of pedestrians (and all vulnerable road users).

10.4.2 The following are some of the DLUTS transport strategy concepts that are recommended to improve the environment for pedestrians:

Shared Space Concept:

10.4.3 One of the key recommendations of the DLUTS transport strategy is the development of a shared space environment on Douglas Street East. Shared space is a street where pedestrians, cyclists and low levels of vehicular traffic interact in a space that is not physically divided by kerb or level differences into areas for particular uses. Level surface is a feature of Shared Space schemes. This enables pedestrians and cyclists to move freely by reducing traffic management features that generally encourage vehicles to assume priority. An illustrative example of the shared space concept that could be implemented on East Douglas Street is shown in Figure 10.1.

10.4.4 In summary the overall benefits afforded by Shared Space are as follows:

- support economic activity in a place;
- Make pedestrian movement easy;
- Reduce the dominance of traffic flow;
- Maintain or improve safety;
- Encourage low vehicle speeds;
- Create an environment in which pedestrians can walk, stop or chat without feeling intimidated by motor traffic;
- Make it easier to move around; and
- Promote social interaction.

10.4.5 The design of Shared Space streets is inevitably a compromise between the needs of a range of users which seeks to accommodate rather than exclude particular uses. There is sufficient evidence to suggest that well-designed schemes in appropriate settings can bring benefits in terms of visual amenity, economic performance and perceptions of personal safety. These benefits must be set against the dis-benefits to some users (discussed below) and evidence that the perception of road safety can be reduced among some users.

10.4.6 Shared space can create specific difficulties for some visually impaired people especially when crossing traffic. This can be mitigated however by using textured paving to alert the pedestrian that as they are moving onto what is considered the vehicle carriageway. On the other hand, a level surface is generally appreciated by mobility impaired people.

10.4.7 Other measures that have been considered in the development of the DLUTS transport strategy include:

Speed Tables:

10.4.8 Speed tables, or raised pathways, bring portions of the roadway to footpath level. This is normally used at pedestrian crossings or at junctions. The primary aim of raising the pathway is to slow traffic arriving at the junction and also to create an awareness that a crossing is ahead. The effect of slowing traffic is to decrease the potential for user conflict between vehicular traffic and modes such as walking and cycling.

Junction Signalisation:

10.4.9 Adding signals to a junction offers pedestrians a fixed period to make a safe crossing across a junction. The addition of signals will also promote safe crossing and lessen the amount of informal crossing on roads and at junctions. Traffic signals are also the preferred method of crossing by the blind and mobility impaired as they offer a secure break in traffic and can be used as reference points.

Removal of Roundabouts where Feasible:

10.4.10 Roundabouts are generally inhibiting for pedestrians as they detract from the ideal pedestrian desire line (the shortest possible route). Roundabouts are also difficult to cross. As is the case with the roundabouts in Douglas they are not signalised and pedestrians wishing to cross at roundabouts find it difficult to anticipate traffic entering or leaving the roundabout and finding a safe gap to cross.

Figure 10-1 Example of shared space on East Douglas Street

Cycle Infrastructure Improvement Measures

10.4.11 As mentioned previously, cycling remains a very under-utilised mode of transport in the DLUTS area. Census statistics show that cycling trips made up a very low proportion of trips made to work and education (1%), which is well below the National average of 2.1%. Similarly to walking, there is great potential for cycling in the DLUTS area to be greatly improved with the appropriate levels of cycle incentives and facilities put in place.

10.4.12 The NTA's National Cycle Manual has been used as a reference for the development of the DLUTS cycling strategy. The following cycle infrastructure measures have been considered when preparing the DLUTS transport strategy:

Cycle network:

10.4.13 A full cycle network is recommended as part of the DLUTS transport strategy (shown in Figure 10.2) to provide connections with the City's cycle network and to integrate with the County's cycle network proposals.

Advanced Stacking Locations:

10.4.14 Advanced Stacking Locations (ASL's) at signalised junctions comprise of a stop line for vehicles, an additional stopping area for cyclists at the head of the traffic queue and a lead in lane that allows cyclists to move to the top of the queue passing stationary vehicles stopped at the junction. The benefit of providing this facility is that it allows cyclists to clear the junction ahead of other vehicular traffic which not only improves the safety of the junction but also the perception of safety for the cyclists. The perception of safety when promoting cycling is central to achieving mode shift and this must be taken into account when designing infrastructure.

Cycle Lanes:

10.4.15 Well-designed cycle lanes can be of great benefit to cyclists. At present the DLUTS area has a fragmented cycle network that is impaired by elements such as on-street parking and limited carriage widths. Cycle lanes have significant benefits on offer:

- create a comfort zone, especially for less experienced cyclists nervous about mixing with motor traffic;
- promote cycling through the provision of infrastructure;
- assist cyclists in difficult or congested situations;
- allow cyclists to bypass features intended to slow or exclude motorised traffic;
- help guide cyclists through complex junctions;
- help control the speed of traffic flows by limiting the widthof the all-purpose traffic lane; and
- help to raise driver awareness of the presence cyclists.

Removal of Roundabouts:

10.4.16 The combination of route choice, high level of vehicular flow and high speeds can make some roundabouts hazardous for cyclists. Many studies show that there is a higher risk of accidents for cyclists at roundabouts than any other place. It is difficult for cyclists to find a safe and secure road position given the changing of lanes and the unpredictability of traffic

on a roundabout. The perceived danger associated with roundabouts is also a deterring factor for route and mode choice. Roundabouts along major routes in Douglas replaced with cycle friendly infrastructure are likely to improve cycle mode choice by providing a viable safe alternative to road users.

Cycle Parking Facilities:

10.4.17 The lack of cycle parking facilities is seen as a major deterrent to cyclists. Provision of secure freely available parking in popular locations such as workplaces, retail centres, schools and leisure areas can provide an excellent stimulus for people to cycle instead of using the car. They also improve the visual amenity of an area as bicycles chained against fences, shop fronts and lampposts can take away from the appearance of a location. There is also a safety issue arising from lack of facilities. Bicycles parked against lampposts, shop fronts and other unconventional parking locations can be hazardous to pedestrians and in particular the mobility and visually impaired.

Public Transport Improvement Measures

10.4.18 Increasing the use of public transport is a vital component of reaching the government's smarter travel targets for achieving a 20% decrease in car commuter trips. Despite the fact that the DLUTS area is currently well served by public transport, Census statistics showed that public transport trips made up less than 8% of those trips made to work and education. This low level of usage coupled with the provision of a comprehensive network of bus services means that there is potential for increased public transport use in the DLUTS area. Some of the following measures can be used to realise this potential:

Provision of improved Bus Priority:

10.4.19 The provision of increased bus priority will lead to decreased journey times and increased reliability for public transport particularly through the central Douglas Village area where there is a concentration of bus movement. Results of the DLUTS public consultations and online travel questionnaire have shown that a key driver for encouraging more people to use public transport is to offer a frequent and reliable public transport service.

Improved infrastructure and facilities:

10.4.20 Improvements to the provision of facilities such as bus shelters, lighting, etc, also result in increasing the attractiveness of public transport as an alternative to car use. By providing safe, sheltered waiting areas for buses the perceived discomfort associated with using public transport can be drastically reduced.

Access:

10.4.21 Providing direct access to public transport and waiting areas is another crucial element to increase public transport usage. By improving the provision of, and access to, bus stops and integrating the different sustainable modes of travel is very important in ensuring large numbers of people can have easy access to public transport.

Traffic Management Improvement Measures

Junction Realignment:

10.4.22 Visibility, access and predictability are all key components that make up a safe functioning junction. There are a number of junctions that have been modified and reshaped in the DLUTS area over the past ten to fifteen years due to increased traffic levels. Some of these junctions are, however, lacking these components. These junctions can be improved significantly by carrying out some straightforward alterations.

10.4.23 Small basic changes such as pavement build outs and defining turning movements can affect the speeds and predictability of junction movements. Such modifications can lead to a vast improvement in safety for all road users, particularly for pedestrians and cyclists. Other junctions require significant realignment with entire sections of road rebuilt to improve visibility and access. The improved visibility and functionality of a junction will also have significant effects in increasing the flow and capacity of a junction. This will decrease pressure on the network as a whole as localised bottlenecks are removed providing significant benefit for public transport movement.

Limiting Speeds:

10.4.24 The limiting of traffic speeds where there are high levels of interaction between vehicular and vulnerable road users has obvious benefits for the safety of all road users. By reducing speeds, the risk of accidents and the severity of those accidents are greatly decreased. Lowering speeds in areas where on-street parking, set-down parking and deliveries are in competition for space with pedestrians and cyclists will result in reduced levels of conflict and hazard for all road users.

10.4.25 Lower speeds also provide environmental benefits. Lowering traffic speeds results in reduced traffic noise which benefits the local environment. Lower speeds also improve the perceived safety of the area which in turn makes it more attractive for walking and cycling. Imposing low speed in sensitive areas could be achieved through a combination of signage, street layout, and strict enforcement.

Parking Management:

10.4.26 A county wide strategy for parking is under consideration in the County Development Plan review process currently underway. It is envisaged that the parking strategy will place greater emphasis on walking, cycling and public transport use. Therefore, in Douglas, car parking in any new development shall adhere to the revised parking policy in the County Development Plan that will support national policies in relation to Sustainable Travel (refer to Land Use Policy LU-06 presented previously in Chapter 8 of this report).

Signalised Junction Control Systems:

10.4.27 Some of the existing traffic lights in the DLUTS area work using a standard staged and phased signal system. They do not have any censoring systems but are set to specified fixed stage times. Increased efficiency can be achieved by installing demand responsive or linked traffic signal control systems.

10.5 DLUTS Walking and Cycling Strategy

10.5.1 The DLUTS walking and cycling strategy has been developed through detailed analysis of local issues and opportunities which were identified in the production of the Baseline Traffic Evaluation Report (contained within Appendix 3 of this report).

10.5.2 In addition, the walking and cycling strategy takes cognisance of recent local, regional and national policies such as the National Transport Authority's National Cycle Manual, the Cork County Development Plan and the Department of Transport, Tourism and Sport's Smarter Travel Policy.

Walking and Cycling Network (Transport Policy T-01)

10.5.3 A fully integrated pedestrian and cycle network for the DLUTS area is recommended as shown Figure 10.3. This network consists of a number of existing proposals as well as new proposals put forward as part of the DLUTS walking and cycling strategy. The different elements of the proposed Douglas walking and cycling network are outlined below.

Connectivity with the City Cycle Network

10.5.4 To support connectivity with the Cork City cycle network, on-street cycle lanes are recommended for Douglas Road and South Douglas Road which will link with existing cycle lanes on the City side of the N40 and thus allow for a continuous, integrated, cycle network linking Douglas with Cork City. To enable the provision of these cycle lanes it will be necessary to construct new walking and cycling lanes beneath the N40 overpass on both the Douglas Road and South Douglas Road. Figure 10.2 below shows potentially how these new cycle and walkways will look once completed.

Figure 10-2 Walk and Cycle Way beneath N40 overpass

Tramore Valley Walk and Cycleway

10.5.5 A key element of the recommended Douglas pedestrian and cycle Network is the Tramore Valley Walk and Cycleway Strategy. This plan includes a high quality pedestrian / cycle corridor from the residential areas of Grange and Frankfield to the proposed Tramore Valley Park via a new pedestrian and cycle bridge over the N40. The plan also provides additional linkages east to Douglas via the Tramore River Amenity Greenway, and a walk & cycle route through lands to the south of St Columba's School and the GAA Grounds. Figure 10.4 below gives an impression of what the Tramore Valley walk and cycleway will look like once completed.

10.5.6 This strategy also makes proposals for a cycle and walkway around Douglas village and along the Rochestown Road, connecting with Passage West Greenway which has the potential to connect with Ringaskiddy, Carrigaline and Crosshaven. This would offer a complete cycle route connecting the Passage West Greenway through Rochestown, Douglas and Tramore Valley Park to the Kinsale Greenway which would offer an attractive commuter and amenity route to both residents and tourists.

Ballybrack Stream Walk and Cycleway

10.5.7 Another element of the proposed DLUTS Cycle network is the Ballybrack Stream walk and cycleway which follows the banks of the Ballybrack Stream through Douglas Community Park southbound towards Donnybrook Cottages where the route splits in two, connecting with residential estates to both the east and west of Scairt Hill. Figure 10.5 below gives an impression of what the Ballybrack Stream walk and cycleway could look like once completed.

10.5.8 This new off-road link will provide a direct and safe route linking the residential areas around Donnybrook to Douglas village and most importantly to the schools near Donnybrook Hill. This will greatly support measures to increase the mode share of walking and cycling to the village and to schools.

On- Street Cycle Lanes

10.5.9 As well as the cycle lanes already mentioned, a number of additional On-street cycle lanes are recommended as part of the DLUTS walking and cycling strategy. These additional measures include the following;

- Cycle lanes in both directions along the length of Ballycurreen Road and Grange Road;
- Cycle lanes in both directions along Maryborough Hill between N28 and Fingerpost Roundabout;
- Cycle lanes in both directions along Carrigaline Road between Marryborough Woods and Fingerpost Roundabout;
- Northbound Cycle Lane beneath N40 overpass on the South Douglas Road; and
- Southbound Cycle Lane beneath N40 overpass on Douglas Road.

Figure 10-3 Future Pedestrian and cycle network Proposals

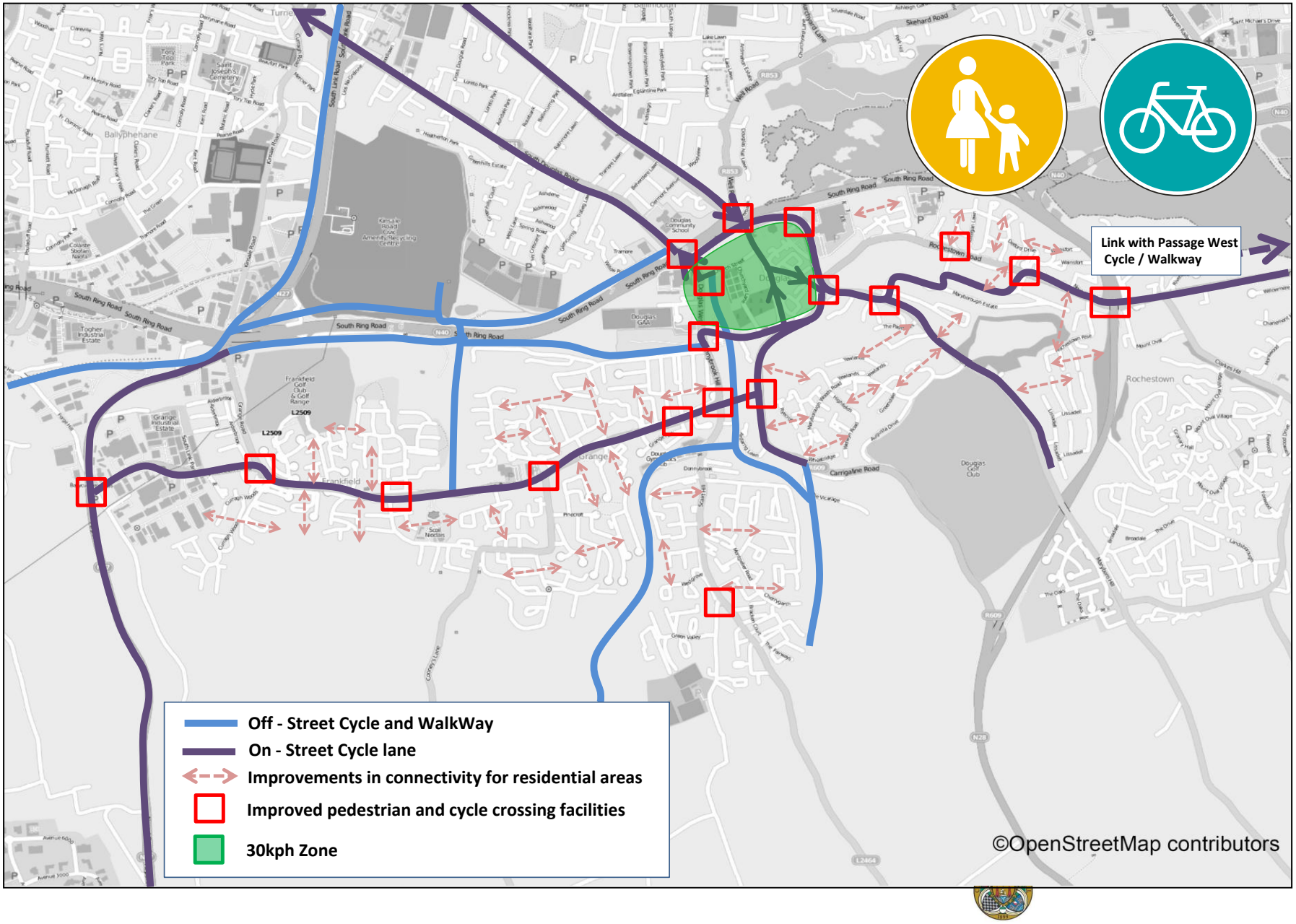


Figure 10-4 Tramore Valley Walk and Cycle way Photomontage

Figure 10-5 Ballybrack Stream Walk and Cycle way photomontage

Residential Estate Connectivity:

10.5.10 Long and circuitous routes for pedestrians and cyclists to travel within and between housing estates can act as a disincentive for walking and cycling. A Further recommendation of the walking and cycling strategy is to improve connectivity and access for pedestrians and cyclists from housing estates onto the proposed future walk and cycle network. As the walking and cycling network is delivered it is recommended that the strategy seek to connect adjoining residential estates with the walking and cycling network to create more direct routes for pedestrians and cyclists into Douglas Village to provide direct and safe access to schools, shops and leisure facilities.

Junction Upgrades (Transport Policy T-12):

10.5.11 Improvements to pedestrian and cycle facilities, at a number of key junctions throughout the DLUTS area have been recommended, as shown in Figure 10.3. These upgrades will concentrate on improving visibility, access and predictability and will involve changes such as:

- pavement build outs to increase stacking capacity at pedestrian crossings;
- formalised pedestrian crossings where there are none;
- advanced stacking areas for cyclists; and
- raised pathways at pedestrian crossings.

10.5.12 Junction upgrades are discussed in more detail later in this chapter and in Appendix 4.

30Kph Zone (Transport Policy T11):

10.5.13 It is recommended that a 30kph zone be implemented in Douglas Village (discussed further in section 10.9). This will lead to improved safety for pedestrians and cyclists in the village centre and will help to promote these sustainable modes of travel and promote Douglas as a destination. The 30kph zone, in conjunction with other traffic management implementations, will lead to a reduction in through traffic in the Village centre, thus freeing up additional road space for the safe movement of vulnerable road users.

Shared Space on East Douglas Street (Transport Policy T-02)

10.5.14 A major recommendation of DLUTS is to introduce a shared space area on East Douglas Street (discussed in detail in section 10.9).This will give increased priority for pedestrians, cyclists and public transport in the area which in turn will promote social interaction and help to vitalise economic activity in the area.

Complementary Measures:

10.5.15 As well as the initiatives outlined above a number of, more general, complementary measures will also be required as part of the strategy, Appendix 4 gives detail on the specific proposals for each junction. These measures will include:

- The provision of secure, freely available, cycle parking in the village centre and at all major destinations such as workplaces, retail centres, schools, etc.;
- Improved and additional pedestrian crossing facilities including the use of speed table or raised pathways at crossings; and

- Advanced stacking areas at junctions for cyclists.

Benefits of Pedestrian and Cycle Strategy:

- ***Greater connectivity with wider Cork cycle network;***
- ***Increased connectivity between schools and residential areas;***
- ***Improved access to schools***
- ***Additional 23km of off-street walk and cycle routes;***
- ***Additional 19km of on-street cycle lanes;***
- ***Improved connectivity between and within residential areas;***
- ***Safer village centre with increased priority for pedestrians and cyclists; and***
- ***Improved vibrancy of village centre.***

10.6 Public Transport Strategy

Introduction

10.6.1 Public Transport in the DLUTS area currently comprises Taxis and Bus transport services. The DLUTS area has a large number of taxis and city and regional bus services that are provided by Bus Éireann.

10.6.2 In preparing the strategy, the transport characteristics of the DLUTS area were examined. One of the key findings from analysis of the Census travel data was the relatively low level of public transport use in Douglas. Bus use for trips to work and education from Douglas is 8.3% this compares to 9.9% for Cork County and 10.3% for Cork City. On the other hand, Car accounts for 84% of all trips from Douglas for Work and Education Purposes. This indicates that Public transport use does not offer an attractive option when compared to car.

10.6.3 This is not simply a reflection of the current public transport offering. It would require significant public transport investment and policies over the long term to support a large shift to public transport use for commuting (i.e. parking restraint at key destinations, bus priority, public transport orientated developments etc.) to get more people to travel to work (and to education) by public transport. The statistics do however indicate that given the very low levels of public transport use for travelling to work there is a large untapped market for the public transport system to target and that even minor enhancements of the public transport offering (i.e. through the improvement themes) could yield more use of the system. The use of public transport for education trips is higher than that of work trips in Douglas. Further enhancement to the public transport offer should encourage more use of the public transport system for education trips, especially in the wider review area.

10.6.4 Operational efficiency and reliability is a key consideration for public transport. The quality and cost of providing public transport is significantly impacted by traffic conditions. Where bus priority is unavailable, general improvements in traffic conditions will also be beneficial for public transport. The proposed Public Transport Strategy seeks to support the existing

public transport services through providing appropriate infrastructure such as Taxi Ranks and Bus Stops. Furthermore, improvements to Douglas' pedestrian infrastructure will improve access to bus stops and taxi ranks for those availing of the services.

Existing Services and Facilities

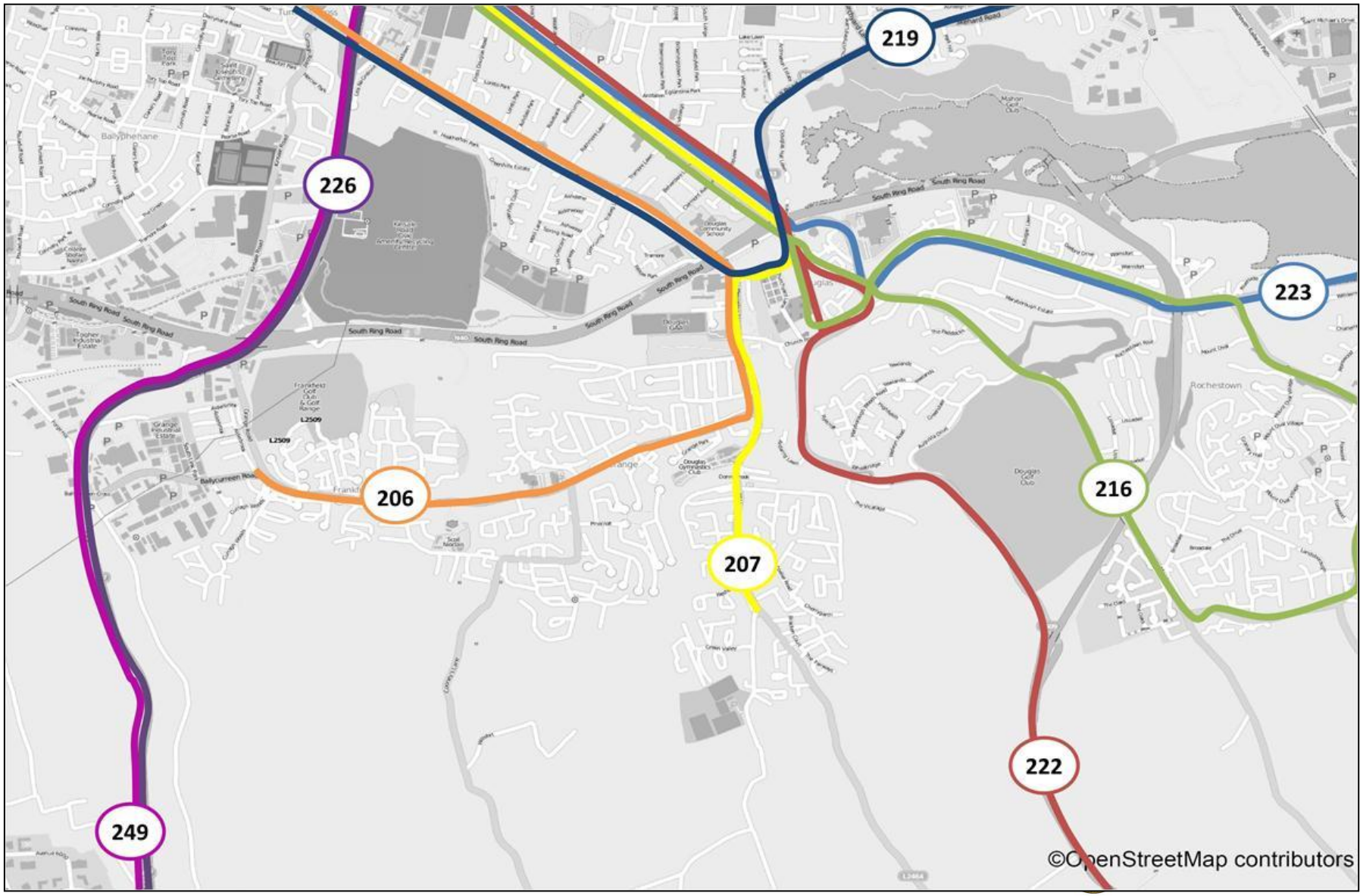
10.6.5 At present, the DLUTS area is served by four Bus Éireann City bus routes (206, 207, 216 and 219) and three Bus Éireann Regional Routes (222, 223, 226 and 249). These routes are shown in Figure 10.6 below. With the exception of Routes 226 and 249, all of these routes serve Douglas Village. Some of the key destinations served by bus services from Douglas Village are:

- Cork City Centre;
- Mahon;
- Cork University Hospital;
- Cork Institute of Technology;
- Ringaskiddy; and
- Carrigaline

10.6.6 As mentioned previously the provision of bus facilities and bus lanes is mixed in the DLUTS area. Some areas, particularly in the village centre, have sheltered bus stops with bus lay-bys. However some of the stops outside of the village centre have no shelters or lay-bys. Bus lanes are limited to two roads, Grange Road and a short section of Donnybrook Hill northbound.

10.6.7 The bus services are supported by Real Time Passenger Information (RTPI) in Douglas Village.

Figure 10-6 Existing Bus Routes in the DLUTS Area



DLUTS Public Transport Strategy Proposals:

10.6.8 The stated aims within the Government's recently published policy document, "Smarter Travel – A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020", is to achieve an overall target of a 20% reduction in work related commuting by car from the current modal share of 65% to 45%. One of the overarching goals of the policy is to take actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved pedestrian and cycling environment and improvements in public transport accessibility.

10.6.9 The Cork County Development Plan also highlights the importance of increasing the emphasis given to public transport and that particular attention should be given to social inclusion, environmental sustainability, efficiency, safety and competitiveness.

10.6.10 Taking these policy documents into consideration the focus of the future DLUTS public transport strategy is to support the continued operation of public transport services in Douglas and to integrate with other transport initiatives to assist in achieving a viable mode shift away from private car use towards sustainable modes of transport.

10.6.11 The following are the DLUTS public transport strategy recommendations:

- Increase bus priority where possible;
- Provide adequate supporting public transport infrastructure, especially the provision of sheltered bus stops in suitable locations and adequate Taxi ranks and/or set-down areas;
- Improve pedestrian and cycle connections to public transport to enhance accessibility;
- Promote public transport through the dissemination of up to date information, for example at bus stops, in public buildings and through school and workplace travel plans; and
- All new developments to accommodate public transport, both buses and taxis.

10.6.12 The proposed enhancements to the pedestrian and cycle environment outlined above will greatly benefit public transport users particularly with respect to access to and from bus stops and taxi ranks. Furthermore, the proposed junction improvements will improve conditions for bus movements by providing added priority.

10.6.13 Specific proposals to improve the public transport operating environment are as follows:

- East Douglas Street Public Transport Priority Corridor;
- East to West Link Road & Potential for new routes;
- Improved Facilities;
- Pedestrian and cycle connections; and
- Taxi Facilities.

East Douglas Street Public Transport Priority Corridor (Transport Policy T-03):

10.6.14 One of the key recommendations of the DLUTS public transport strategy is the development of a, public transport priority corridor, shared space environment on the northern end of East Douglas Street, between Church Street and the Douglas Relief Road. Key to DLUTS are the following:

- Reducing/eliminating through traffic from East Douglas Street (rat-running);
- Prioritisation of public transport movement through Douglas village; and
- Reduce turning movements at Junction 18 so as to provide improved traffic management and capacity for movement through this junction thereby reducing traffic conflicts that generate current traffic delays and congestion.

10.6.15 Figure 10.7 below illustrates the traffic management arrangements proposed for the public transport priority corridor on East Douglas Street. These traffic management arrangements include the following:

- Bus only(Bus Lane) access to East Douglas Street from Douglas Road;
- Retain left turn from Relief Road (R610) into East Douglas Street;
- Retain left out turn from East Douglas Street onto R610;
- Unrestricted access from Church Street to East Douglas Street;
- Bus only (Bus Lane) access to East Douglas Street travelling northbound from Old Carrigaline Road; and
- Two-way traffic retained for all modes on East Douglas Street.

10.6.16 This proposal will give better priority for public transport vehicles passing through Douglas Village and in doing so reduce delays currently experienced for public transport vehicles. The bus routes which pass through the new Public Transport Priority Corridor and will benefit directly are:

- The 207 (approximate headway of 2 per hour during peak times);
- The 216 (approximate headway of 2 per hour during peak times);
- The 222(approximate headway of 2 per hour during peak times); and
- The 223 (approximate headway of 2 per hour during peak times).

10.6.17 Figure 10.7 below shows the location and design of the East Douglas Public Transport Priority Corridor as well as the bus routes which pass through Douglas Village.

Figure 10-7 Traffic Management Arrangements for Public Transport Priority Corridor on East Douglas Street

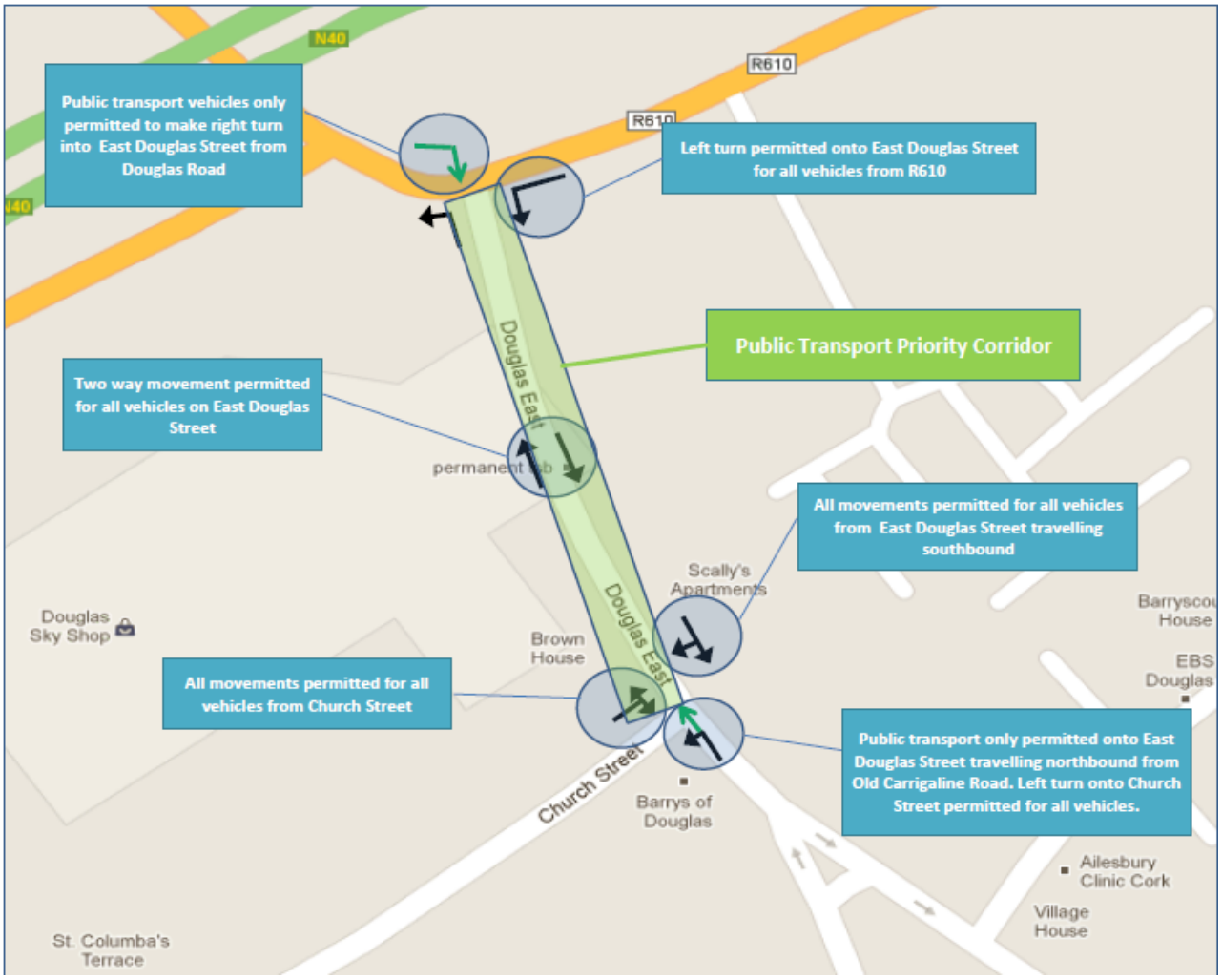
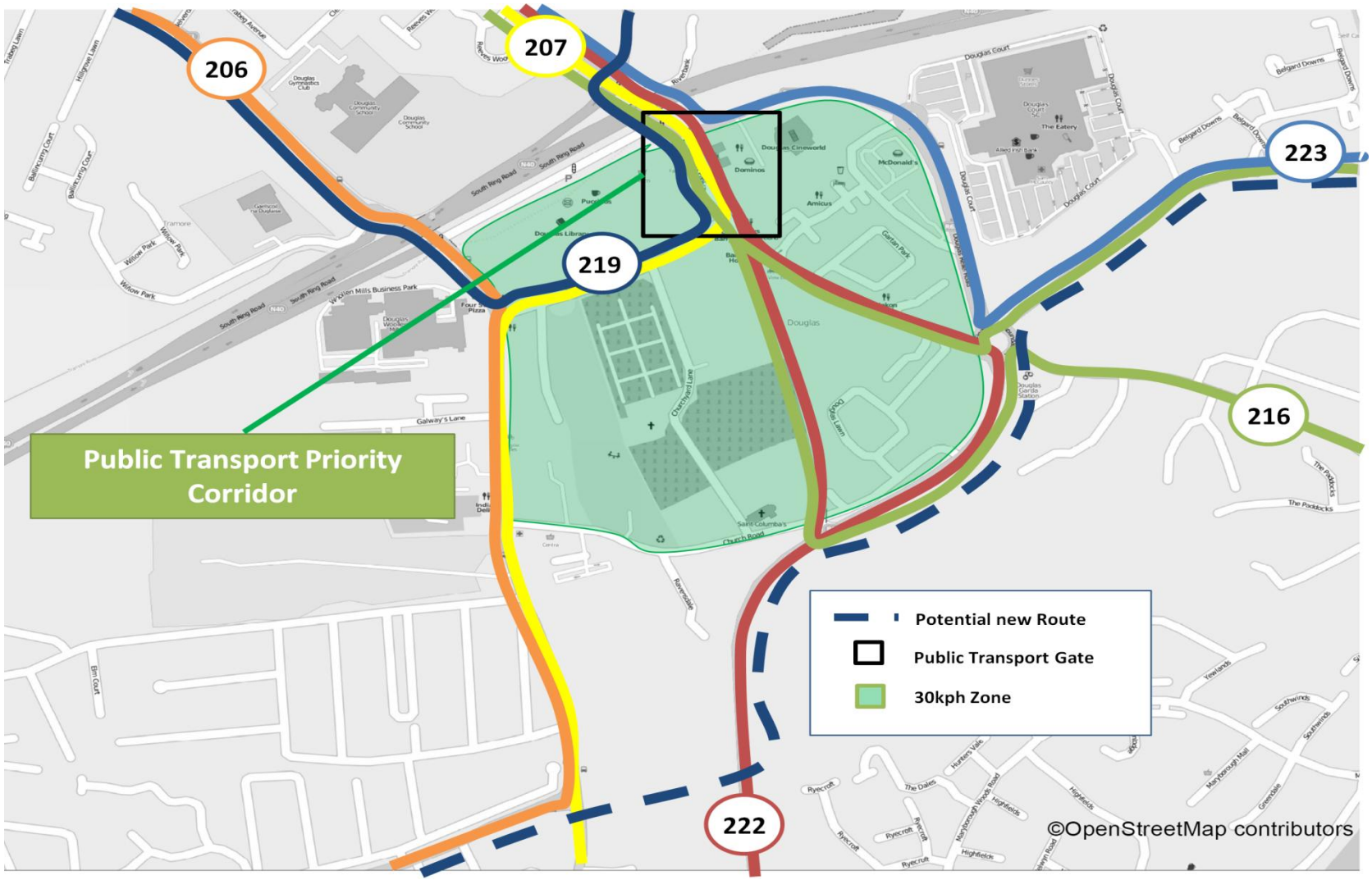


Figure 10-8 Bus Routes passing through Public Transport Priority Corridor on East Douglas Street



East - West Link Road & Potential for new routes (Transport Policy T-04):

10.6.18 Another key proposal of the DLUTS public transport strategy is the construction of a new link road joining Donnybrook Hill with the Carrigaline Road (discussed further in section 10.8). This new link road will create the opportunity to provide a new route linking areas to the south and west of Cork City with Cork International Airport for example. Two potential new bus routes could serve:

- Monkstown, Passage West, Douglas and Cork Airport; and
- Ringaskiddy, Carrigaline, Douglas and Cork Airport.

Improved facilities (Transport Policy T-05):

10.6.19 The provision of bus stop infrastructure is mixed in the DLUTS area at present. A key element of the DLUTS public transport strategy is to ensure that adequate support infrastructure is provided throughout the DLUTS Area. This will involve the provision of:

- Fully sheltered and demarcated bus stops;
- Real Time Passenger Information (RTPI) at bus stops;
- Bus and public transport priority where possible; and
- The addition or extension of public transport only lanes where possible.

Pedestrian and cycle connections:

10.6.20 The pedestrian and cyclist strategy proposes a number of high quality links within the DLUTS area greatly increasing the permeability in the DLUTS area and improving access to public transport from residential areas.

10.6.21 In addition to pedestrian and cycle network proposals, the provision of high quality cycle parking facilities in Douglas Village Centre will encourage the integration of cycling and public transport.

Taxi Facilities (Transport Policy T-06)

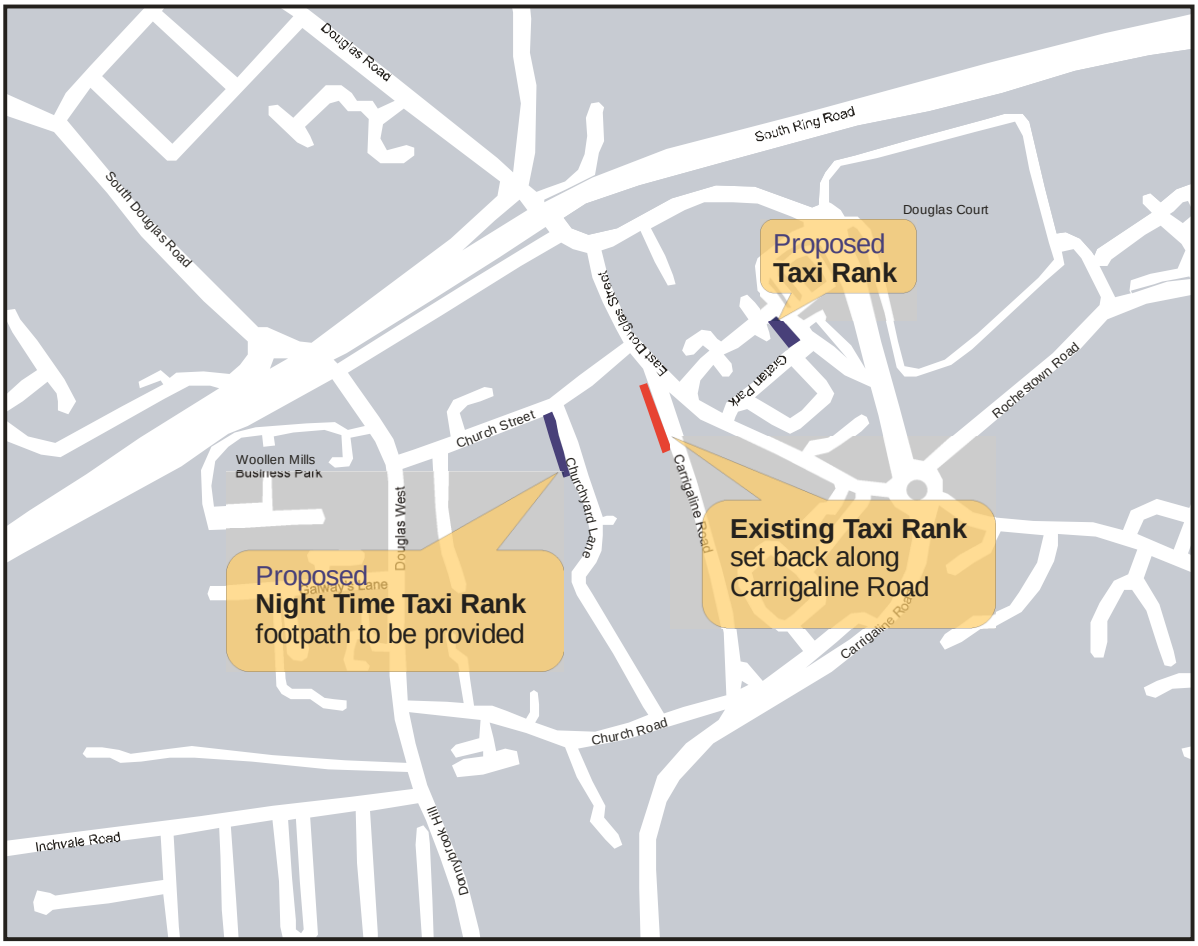
10.6.22 Taxi is effectively a form of on-demand public transport providing service to any destination in Douglas or within a reasonably large distance from it.

10.6.23 The main taxi pick-up facility in Douglas village is currently on the old Carrigaline Road close to the junction with East Douglas Street. There are currently 13 taxi spaces demarcated on this section of the Carrigaline Road.

10.6.24 In general these 13 spaces are sufficient to meet the day-time demand in the area. However during the evenings and weekends there is deficit of taxi spaces in the DLUTS area. In order to rectify this it is proposed to create 2 additional ranks in Douglas. One would be a night time only rank and would be located on the western side of churchyard lane. The other would operate all day and would be located in the east village. The location of all three of these ranks is shown in Figure 10.9 below.

10.6.25 These new locations were considered due to their central location and proximity to key destinations, especially village centre retail, business and social amenities. This new arrangement also gives an increase in the provision in services and serves a wider catchment area of Douglas, as can be seen in Figure 10.9.

Figure 10-9 Proposed Taxi Facilities



Benefits of Public Transport Strategy:

- Enhanced accessibility to public transport by improving pedestrian and cycle network;
- More priority for public transport travelling through Douglas;
- Much improved reliability and reduced journey times of routes travelling through Douglas Village; and
- Will help achieve government policy of a 20% reduction in trips to work by car.

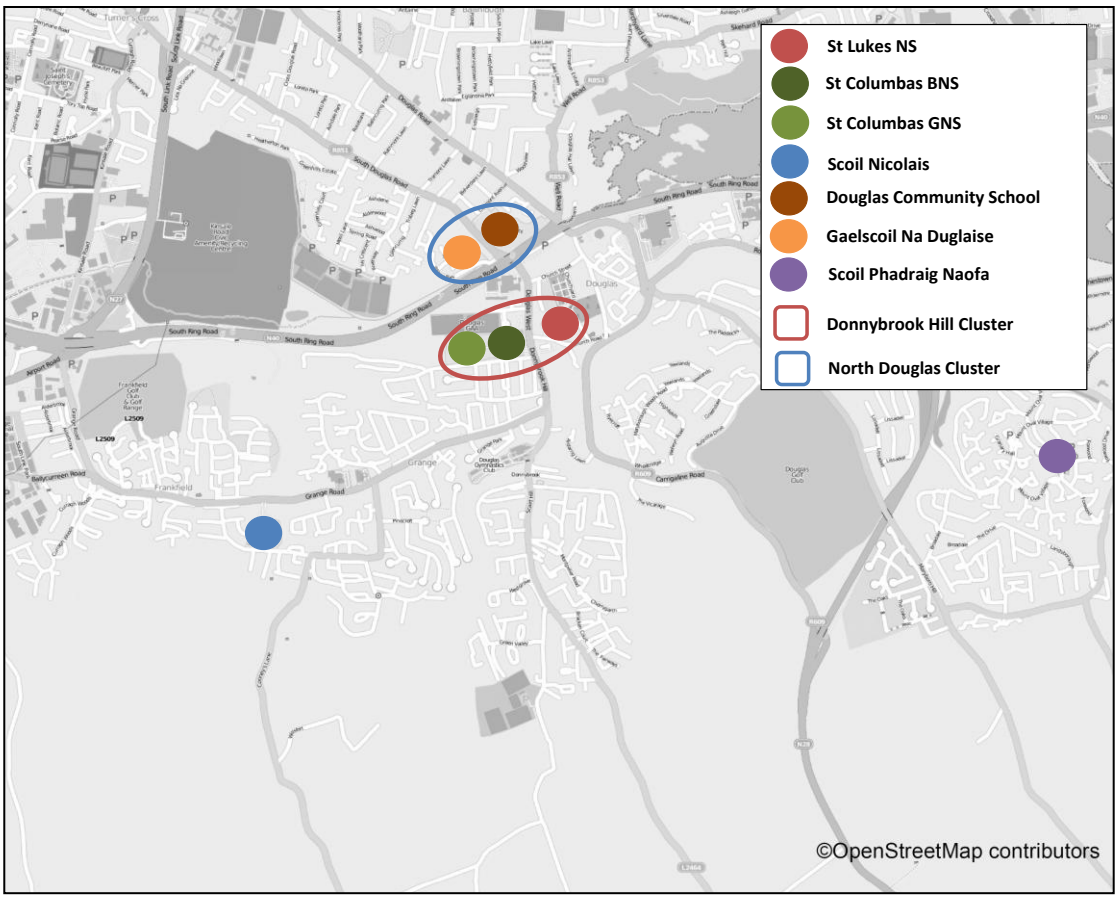
10.7 Schools Transport Strategy (Transport Policy T-07)

10.7.1 There are a large number of schools, both primary and secondary, within the DLUTS Area and these schools are key generators of transport demand. The school run, by its nature, contributes significantly to the demand for travel during the morning peak period. Travel to school by private car contributes to congestion during the morning peak and results in negative impacts on the environment. To counteract this, ways are sought to reduce the need to travel by car to places of education, particularly during peak traffic times of the day.

10.7.2 A number of schools are clustered beside each other close to Douglas Village Centre as shown below in Figure 10.10. The local authority should make specific efforts to develop links with these

schools, through a School Travel Advisor, with a view to highlighting improvements that will support sustainable access.

Figure 10-10 Location of Schools in Douglas



10.7.3 The following are some of the key recommendations of the DLUTS Schools Strategy.

Improvements to junctions close to schools:

10.7.4 The Junction outside the St Columba's Schools (Donnybrook Hill and Church Road) is of particular importance in terms of school access and as such it is proposed to provide the following improvements to this junction for pedestrians and cyclists:

- kerb build outs to reduce pedestrian crossing distance and increase pedestrian stacking;
- advanced stop cycle areas; and
- full pedestrian crossing signalisation.

It is also proposed to convert the Roundabout at the entrance to Gaelscoil na Dúglaise to a signalised junction, thus providing more priority and safer access to the school for pedestrians and cyclists.

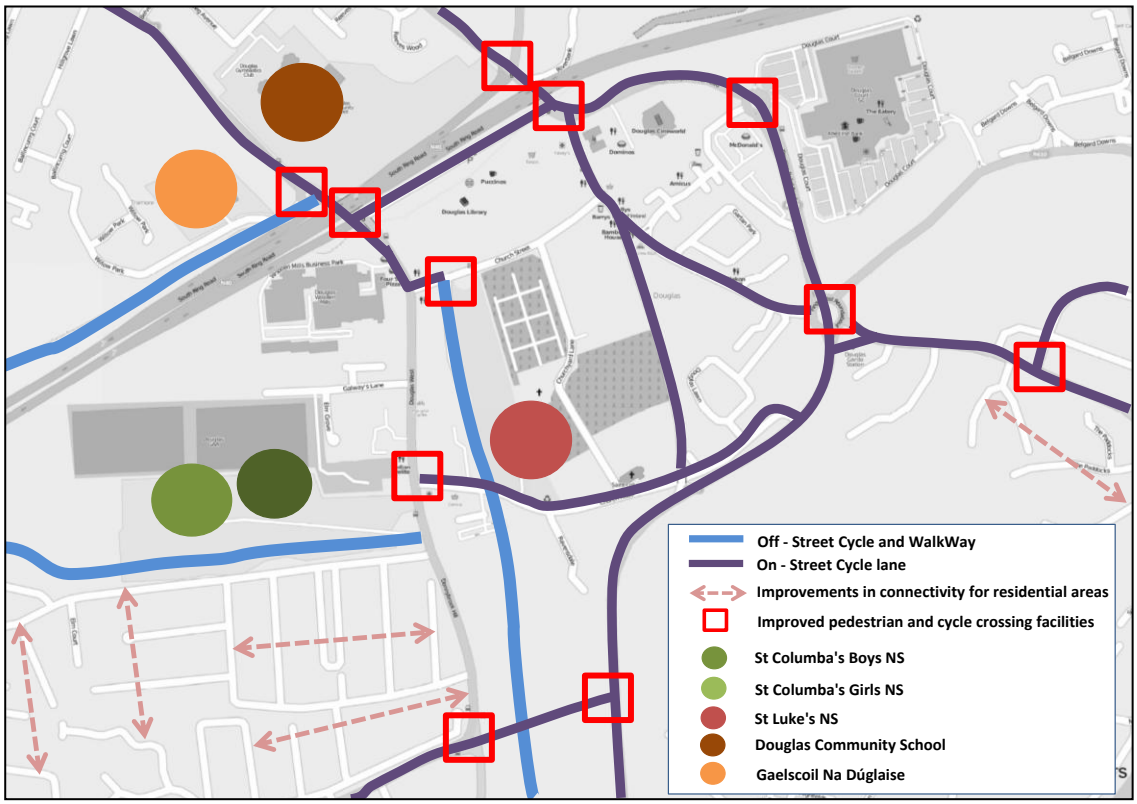
Improved Walking and Cycling Network:

10.7.5 The School Clusters, shown above in Figure 10.10, will also benefit from the development and improvement of the Douglas Walking and Cycle network. The School Clusters will be well connected to the improved walk and cycle infrastructure. Priority has been given in the strategy

to provide pedestrian and cycle priority that links areas of demand including schools, therefore improvements in the vicinity of these schools are proposed for the short term.

10.7.6 One of the key proposals of the walking and cycling strategy is an off-street walk and cycleway linking the Grange and Frankfield areas to Donnybrook hill and South Douglas Road. This route will provide direct access for pedestrians and cyclists to the schools in Douglas Village from the large housing estates in Grange and Frankfield. Similarly The Ballybrack Stream Walk and cycleway will provide direct access to the schools from residential areas to the south and south east of Douglas such as Mount Oval and Scairt Cross. These new routes, shown in Figure 10.11 below, will act as a major incentive for a shift away from using car for school trips towards sustainable modes of transport.

Figure 10-11 Future walk and cycle links to school clusters



Green Schools Programme:

10.7.7 In order to achieve the maximum benefit from the improvements to the transport network within Douglas, it is recommended that all schools be encouraged to participate in the Green Schools Programme and to develop School Travel Plans.

10.7.8 A School Travel Plan is a written document which outlines the various ways in which pupils, parents and staff can travel to school. Generally School Travel Plans are focused on encouraging alternative means of travel other than the private car. This involves promoting more sustainable modes of travel such as walking, cycling, school bus and car pooling.

10.7.9 The benefits of implementing a School Travel Plan are numerous, and include:

- improved health and fitness among pupils, parents and staff as active modes of travel such as walking and cycling are promoted;
- improved concentration levels among pupils who walk/cycle/use bus transport;
- safer access to school for all;
- increased road safety awareness among pupils through pedestrian/cycle training and education;
- reduced traffic congestion and pollution in the vicinity of the school;
- reduced carbon emissions due to a reduction in use of private cars for school travel;
- improved community awareness among pupils, parents and staff; and
- increased parent-child interaction among parents and children who cycle/walk to school.

Every single kilometre not driven in a car reduces carbon dioxide emissions by 145 grams

Benefits of Schools Strategy:

- Improved walking and cycling environment;
- Significant mode shift to walking and cycling;
- Reduced traffic congestion around schools; and
- Supports healthier lifestyle for children.

10.8 Road Network Enhancements

New Link Road Joining Carrigaline Road and Grange Road (Transport Policy T-04):

10.8.1 As discussed previously, the proposed link road is located to the south of Douglas Village between the existing junction of Donnybrook hill with Grange Road and Carrigaline Road. Figure 10.12 below shows the location of the proposed link road in the context of the local road network.

10.8.2 The proposed link road is approximately 180m in length and will consist of a single carriageway in each direction with a flared right turn lane at either end on the approach to the junctions with the existing road network. It will also include a bridge to carry the road over the Ballybrack Valley River.

10.8.3 Designated walking and cycling lanes, in both directions, will also be provided on the New Link Road. This will provide an alternative and more direct route for pedestrians and cyclists who travel from east to west (and vice versa) through Douglas, and provides a convenient route for students travelling from the Maryborough Woods area to schools on Grange Road and Donnybrook Hill.

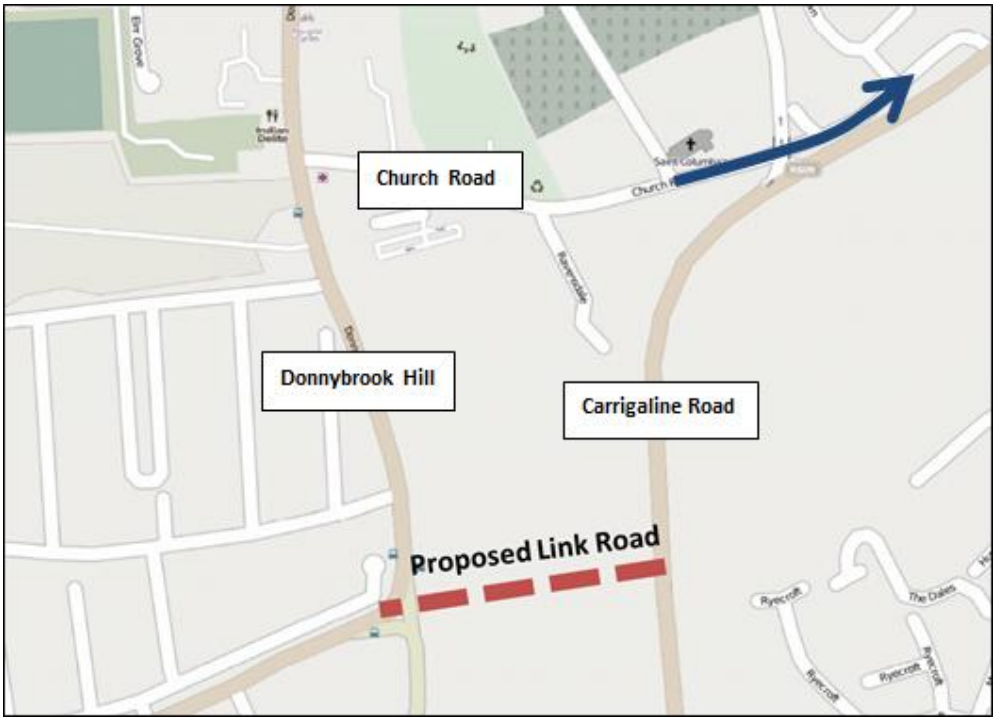
10.8.4 As discussed in section 10.6 above, the New Link Road also creates the opportunity to provide a new, east to west / west to east, bus route potentially linking Cork International Airport with the suburban developments of Douglas, Carrigaline and Ringaskiddy.

10.8.5 Church Road, which currently carries the majority of the east to west movement to the south of Douglas, will experience the greatest impact on traffic movements as a result of the construction

of the new link road. The construction of the new link road will allow the transfer of the majority of this traffic from Church Road and will therefore help to ease the congestion currently experienced during peak times, particularly at Daly's Corner.

10.8.6 The new road will also improve the connectivity between the Maryborough Hill area and Frankfield / Grange and will provide improved access between the new residential estates on Maryborough Hill with the Primary schools in Douglas.

Figure 10-12 Proposed East-West Link Road



Benefits of East – West Link Road:

- More direct east – west route for public transport, walking & cycling and general traffic;
- Reduces traffic using the N40;
- Relieves congestion at Daly's corner and on Church Road;
- Maximises capacity on Carrigaline Road; and
- Reduces "rat running" through Douglas Village and allows traffic movement to be managed in a better way.

One way on Church Road East (Transport Policy T-08):

10.8.7 Sections of Church Road are very narrow at present particularly on the approaches to the Dry Bridge making the provision of two-way traffic very difficult. To improve safety for pedestrians, cyclists and vehicles the DLUTS strategy recommends that Church Road becomes one way only eastbound from Church Yard Lane to the Carrigaline Road. This proposal will only come into effect once the East-west Link road is in place and thus provide an alternative route for cars which

avoids Douglas Village Centre. This proposal combined with the 30kph speed limit will lead to increased levels of safety for the large numbers of pupils who currently go to school at St Luke's and St Columba's Schools. The proposed new layout of Church Road is shown above in Figure 10.12.

Benefits of One-way on Church Road from Church Yard Lane to Carrigaline Road:

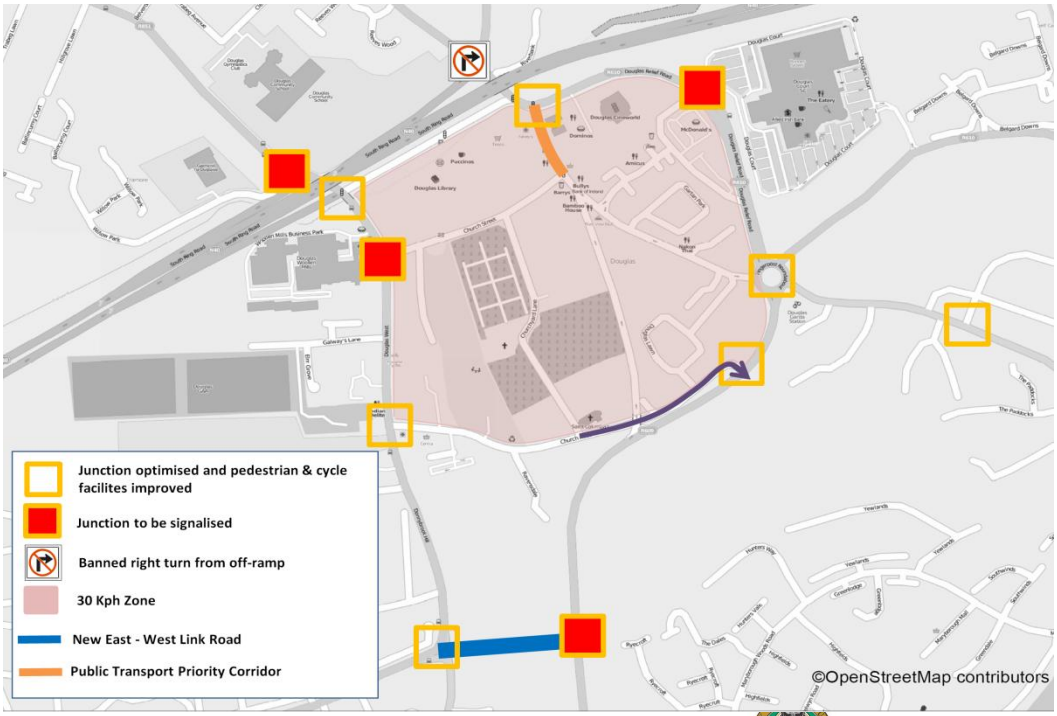
- Reduces traffic levels on Church Road;
- Provides a much safer environment for pedestrians and cyclists; and
- Greatly improves safety for pupils going to St. Luke's and St. Columba's schools.

Village Centre Traffic Management Measures:

10.8.8 To facilitate a rebalancing of road space in the village centre towards a more pedestrian and cycle friendly environment a number of interventions are proposed. Figure 10.13 below provides an overview of the measures planned to redefine vehicle movements in the village centre. These include:

- Public Transport Priority Corridor traffic management measures;
- Shared Space on East Douglas Street between Church Street and relief road;
- Banned Right Turn from N40 Off-Ramp at Douglas Road;
- Improved Traffic Signal Control Systems; and
- 30kph Zone in the Village Centre.

Figure 10-13 Village Centre Primary Traffic Management Measures



Public Transport Priority Corridor and Shared Space on East Douglas Street (Transport Policy T-02):

10.8.9 To support the vision for Douglas it is proposed to redesign the northern section of East Douglas Street to incorporate shared space design concepts. The shared space will extend from the junction with Church Street to the Douglas relief road, as shown in Figure 10.14 below. This area will provide a better public transport operating environment for buses and taxis through the provision of the public transport priority corridor traffic management measures described above. The concept of shared space and its benefits are discussed earlier in this chapter in Section 10.4. Essentially a shared space street is one where pedestrians, cyclists and vehicular traffic interact in a space that is not physically divided by kerb or level differences into areas for particular uses.

10.8.10 Figure 10.15 shows East Douglas Street as it is, followed by a photomontage in Figure 10.16 from the same point of view showing how the shared space proposals would look.

10.8.11 The photomontages demonstrate the improved environment for pedestrians and the reduced perception of priority for motorists. Although a small number of buses and taxis will still use the street in an unrestricted manner, the nature of the street design requires drivers to proceed with caution, in a manner that is self-enforced.

Figure 10-14 Proposed Shared Space on East Douglas Street

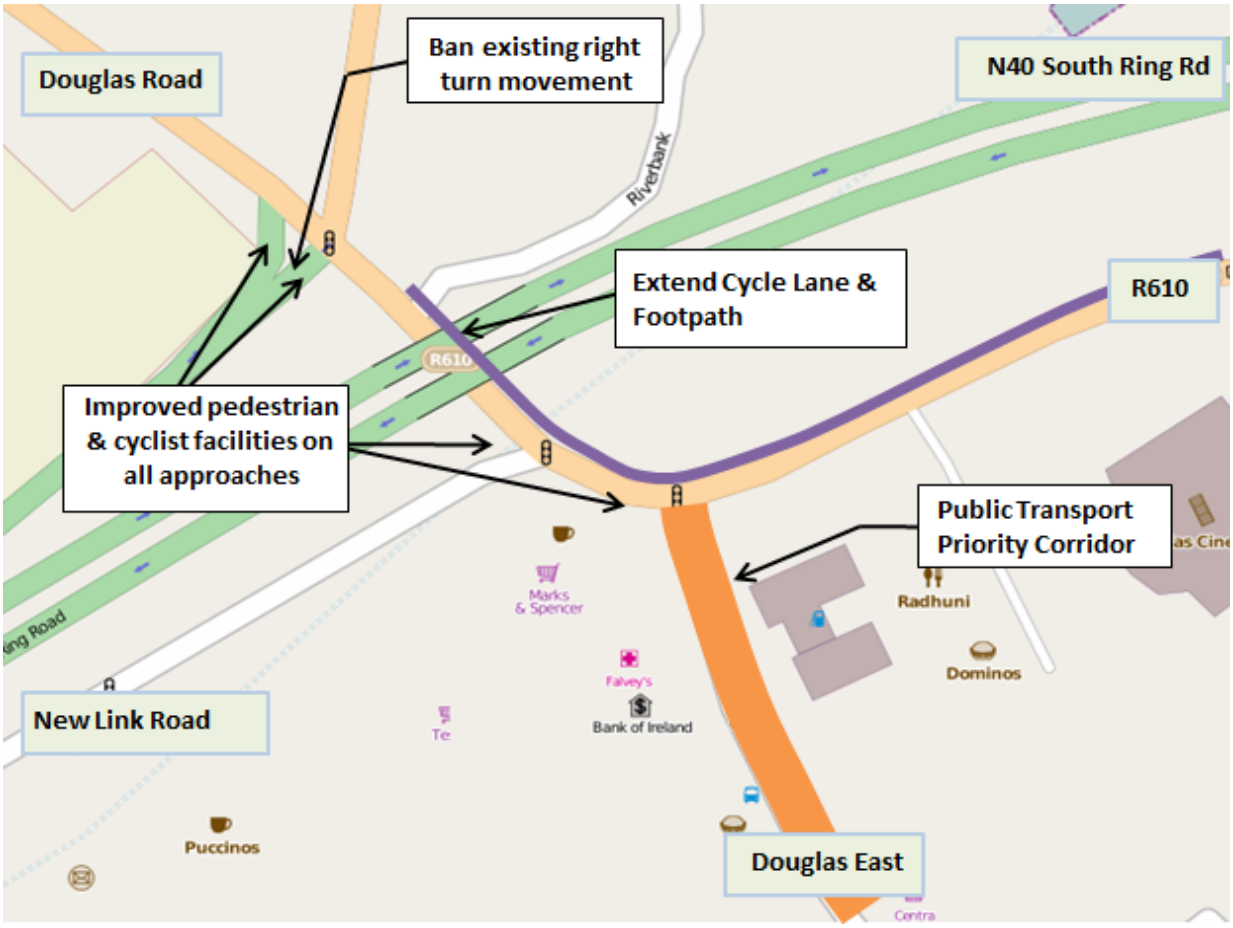


Figure 10-15 East Douglas Street looking North: Existing View

Figure 10-16 East Douglas Street Looking North: Shard Space Photomontage

10.8.12 At present East Douglas Street is used as a thoroughfare for relatively high levels of north to south and south to north traffic, for general parking and for loading and unloading. The area is not well regulated and during busy periods is heavily cluttered with mix of parked vehicles, set down activity and commercial delivery. The traffic lanes between these high activity areas are prone to intermittent congestion, especially during peak times. This creates a sense of pressure and vehicle dominance in the area and is highly detrimental to the pedestrian environment.

10.8.13 Rebalancing street environments in favour of pedestrians, by reducing vehicle priority and reducing traffic, has been shown in many studies to significantly increase pedestrian activity. By this, footfall and retail potential are increased.

10.8.14 Limited short stay parking will be facilitated on East Douglas Street (to allow for drop off) and deliveries to/from businesses will remain unchanged.

Benefits of Public Transport Corridor and Shared Space on East Douglas Street:

- Improved priority for public transport in the village centre;
- Improved pedestrian and cycle environment in village centre;
- Improved pedestrian and cycle safety;
- Improved vibrancy and vitality in Douglas Village; and
- Reduce dominance of traffic flow created by through traffic.

Banned Right Turn from N40 Off-Ramp at Douglas Road (Transport Policy T-09):

10.8.15 Another Key proposal of the traffic management strategy is to ban the right-turn from the N40 off-ramp onto Douglas Road travelling in a southbound direction. At present the Douglas Road and Well Road arms of this junction experience significant levels of congestion during peak periods. The banned right turn at this point will encourage traffic on the N40 which is destined for Douglas to exit earlier (at the junction with South Douglas Road) or later (at the junction with Rochestown Road) helping to reduce demand on Douglas Road. The removal of this right turn from the signal phasing will also allow more green time to be allocated to the Douglas Road and Well Road arms of the junction and further help to relieve congestion at this point.

Benefits of banned Right Turn from N40 onto Douglas Road:

- Increased green time on Douglas Road and Well Road;
- Creates less complicated environment for walking and cycling;
- Reduced congestion on Douglas Road and Well Road; and
- Will lead to more efficient operation of downstream junctions

10.8.16 As mentioned previously, there is potential for increased efficiency to be achieved by installing demand responsive or linked traffic signal control systems at signalised junctions which operate on a fixed time staging basis.

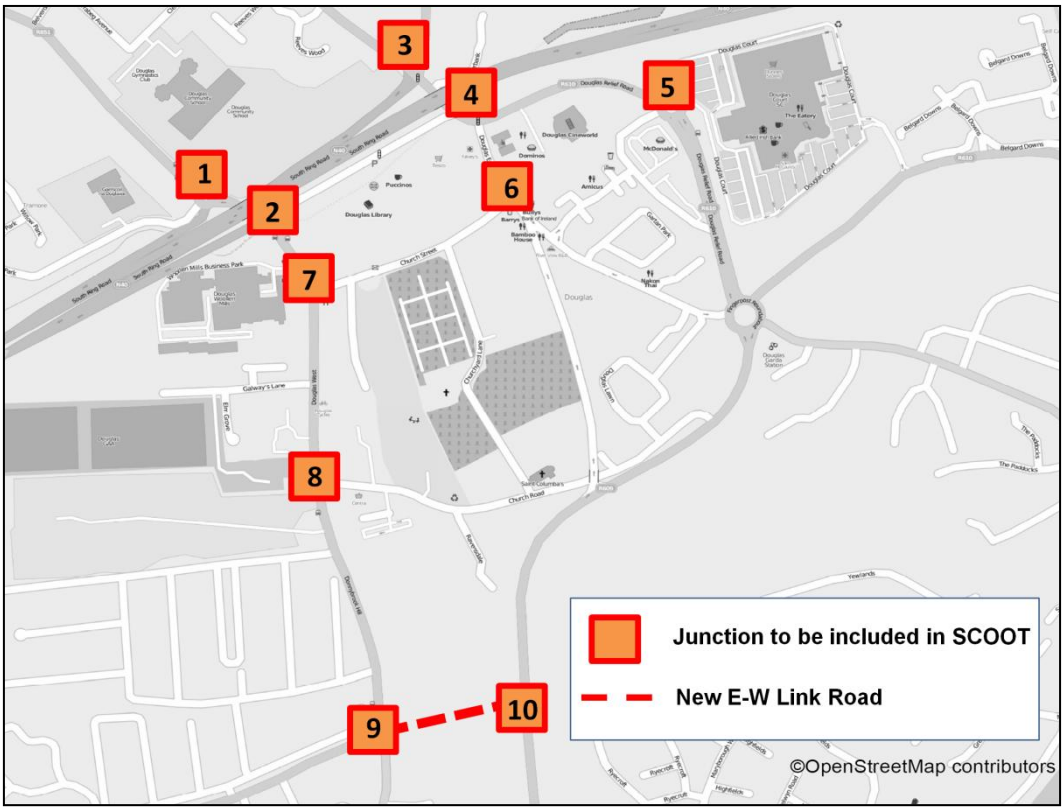
10.8.17 One such system is Microprocessor Optimised Vehicle Actuation (MOVA), which provides enhanced traffic responsive signal operation.

10.8.18 MOVA uses vehicle sensors buried below the road surface, but unlike traditional Vehicle Actuation it uses a computer to optimise the signal timings using data from all the approaches to the junction. MOVA is able to vary the maximum cycle time in response to actual traffic flows, rather than the flows assumed for that time of day. It can also adjust the individual timings for one approach in response to conditions around the junction. This system makes for a significantly more efficient control system, in particular for multi-lane approaches.

10.8.19 It is also proposed to include a number of junctions in Douglas Village into the Cork City SCOOT (Split Cycle Offset Optimisation Technique) UTC (Urban Traffic Control) system. This system is designed for managing and controlling traffic signals in urban areas. It is an adaptive system that responds automatically to fluctuations in traffic flow through the use of on-street detectors embedded in the road. SCOOT has been proven to be extremely effective in urban centres world-wide and can typically reduce traffic delay by an average of 20%.

10.8.20 The junctions to be included in the SCOOT system are shown below in Figure 10.17.

Figure 10-17 Junctions recommended to be included in Cork City SCOOT System



10.8.21 The replacement of existing, fixed stage, signals with MOVA signals and the inclusion of some signalised junctions into the Cork City SCOOT System should assist in improving flows and reducing congestion at junctions around Douglas. Improving the efficiency of signal system in the area will affect the network as a whole by easing congestion at trouble spots around the village that cause negative knock on effects elsewhere in the network.

10.8.22 To further protect the strategic road network we recommend that on the N40 South Douglas Road Off-Ramp and the N28 Rochestown Road Off-Ramp be fitted with a Double Loop Vehicle Detection system to ensure queuing does not back onto the N40 and N28 from the Off-Ramps and South Douglas and Rochestown roads respectively (i.e. if the queue formation on the off-ramp exceeded an agreed length, a 'hurry' call is introduced to 'Flush' the queue). It is also recommended that

some form of ramp-metering be applied at the Rochestown On-Ramp at the N28 to maintain the efficient operating capacity of the N28 at this point. It is further recommended that the operation of the traffic control system proposed for the Douglas area should work in tandem with future demand management policies and proposals envisaged by the NRA for the N40 and N28.

Benefits of inclusion in SCOOT System:

- Better managed road network leading to reduced congestion;
- Provides a means to manage traffic entering the strategic road network (i.e. National routes)
- Integration with Cork City SCOOT system; and
- More consistent journey times.

30 Kph Zone (Transport Policy T-11):

10.8.23 It is proposed to introduce a 30kph speed restriction on the streets making up the village centre in Douglas. The streets which will be covered by the 30kph limit are:

- Church Street;
- Church Road;
- The old Carrigaline Road;
- Church Yard Lane;
- Tramway Terrace;
- Douglas Street East; and
- Douglas Street West.

10.8.24 Figure 10.19 below illustrates the area to be covered by the 30kph speed restriction. The limiting of speeds where there are high levels of interaction between vehicular and vulnerable road users has obvious benefits for the safety of all road users. By reducing speeds the risk of accident and the severity of those accidents are greatly decreased. Lowering speeds in areas where on-street parking, set down parking and deliveries are in competition for space with pedestrians and cyclists will result in reduced levels of conflict and hazard for all road users.

10.8.25 Lower speeds will also provide environmental benefits by reduced traffic noise which benefits the local environment. The lower speeds also improve the perceived safety of the area which in turn makes it more attractive for walking and cycling.

Benefits of 30kph Zone:

- Make pedestrian movement easier;
- Improve safety for pedestrians and cyclists;
- Make it easier to move around; and
- Reduces dominance of vehicular traffic.

10.9 Junction Upgrades –An Overview of Measures for the Wider Network (Transport Policy T-12)

10.9.1 The DLUTS Baseline Traffic Evaluation Report identified a number of locations within the network that require attention in order to enhance the overall network performance. A number of infrastructural measures are proposed which aim to bring significant improvement to the operation of these junctions in terms of movement and safety for all road users. In total 23 junctions are identified for improvements in DLUTS.

10.9.2 Figure 10.18 below shows the locations of these junctions and Table 10.1 indicates the modes that will benefit from the improvements to be made at each junction.

10.9.3 Proposed changes to the wider network include the provision of traffic calming on Inchvale Road and a new pedestrian crossing point on the Grange Road.

10.9.4 Figure 10.19 gives an overview of the junction and network proposals for the Douglas DLUTS Area. A more detailed description of the upgrades to be carried out at each junction is contained within Appendix 4 of this report which details the enhancements on a junction by junction basis.

Benefits of Junction Upgrades:

- Enhanced pedestrian and cycle facilities;
- Enhanced public transport;
- Enhanced efficiency of traffic movement; and
- Reduced levels of congestion.

Figure 10-18 Junctions to be upgraded

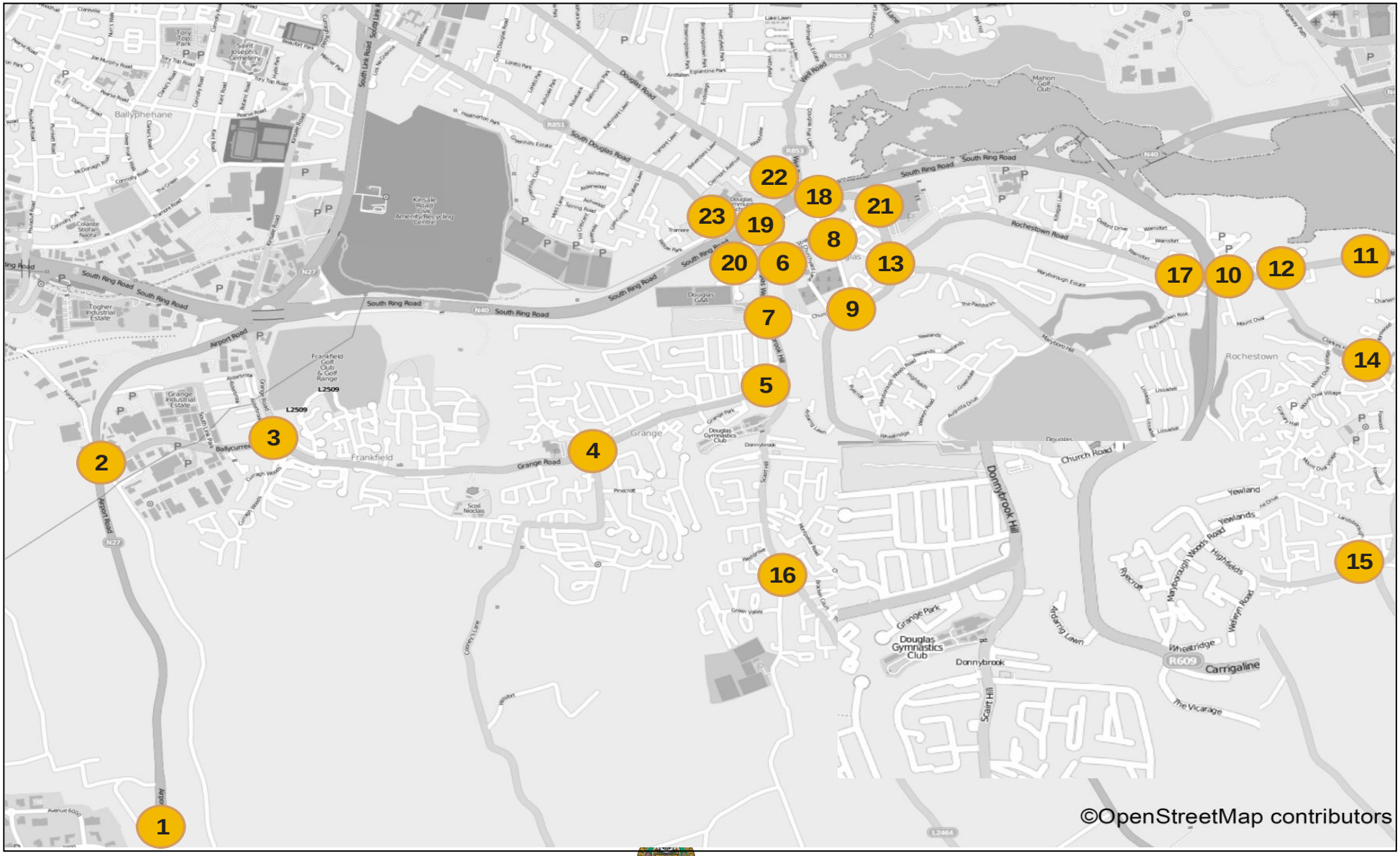


Table 10.1 **Modes affected by Enhancements**

Location				
Jct 1. Airport Road /Amberley		✓		✓
Jct 2. Forge Hill / Ballycureen Road	✓	✓	✓	✓
Jct 3. Grange Road / Ballycureen Road	✓	✓	✓	✓
Jct 4. Grange Road / Cooneys Lane		✓		✓
Jct 5. Grange Road / Donnybrook Hill	✓	✓	✓	✓
Jct 6. West Douglas St. / Church St	✓	✓		✓
Jct 7. West Douglas St. / Church Road/ Donnybrook Hill	✓	✓	✓	✓
Jct 8. Church St / East Douglas St	✓	✓	✓	✓
Jct 9. Junction at Dry Bridge				✓
Jct 10. St. Patrick's Roundabout	✓	✓	✓	✓
Jct 11. Rochestown Rd. / Coach Hill		✓		✓
Jct 12. Rochestown Rd. / Clarkes Hill	✓	✓		✓
Jct 13. Rochestown Rd. / Maryborough Hill		✓		✓
Jct 14. Coach Hill / Clarkes Hill		✓		✓
Jct 15. Clarkes Hill / Ballyorban Road	✓	✓		✓
Jct 16. Scairt Cross on Donnybrook Hill		✓		✓
Jct 17. On Ramp N28 / Rochestown Road	✓	✓	✓	✓
Jct 18. New Link Road / East Douglas Street	✓	✓	✓	✓
Jct. 19. New Link Road / West Douglas Street		✓		✓
Jct 20. St Patrick's Mills / West Douglas Street		✓		✓
Jct 21. Douglas Court Shopping Centre Roundabout	✓	✓	✓	✓
Jct 22. N28 Off-Ramp / Douglas Road	✓	✓	✓	✓
Jct 23. South Douglas Road / Willow Park	✓	✓	✓	✓

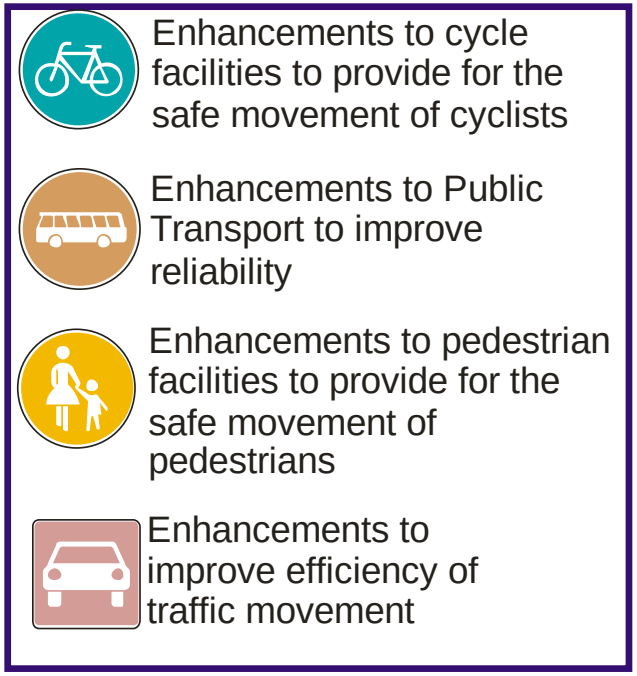
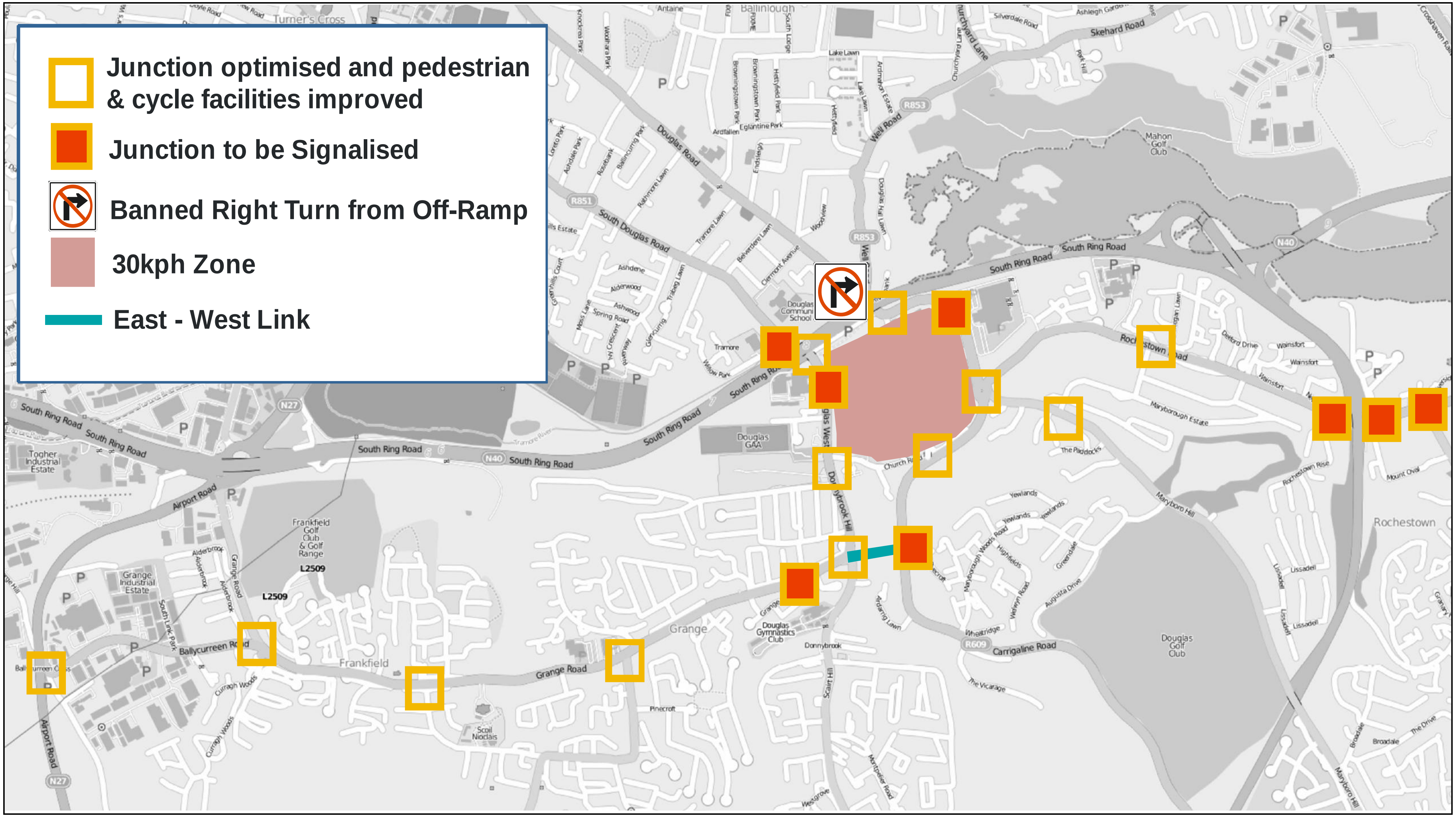


Figure 10-19 Junction and Network Proposals overview



11 Implementation of DLUTS

11.1 Introduction

11.1.1 This chapter makes recommendations on the delivery of the DLUTS Strategy in terms of the key aspects of strategy management that contribute to successful programme delivery and the timeline for implementation of the specific recommendations presented earlier in this report.

11.1.2 Also presented are recommendations regarding mechanism to manage the delivery of DLUTS implementation.

11.2 DLUTS Delivery Timeline

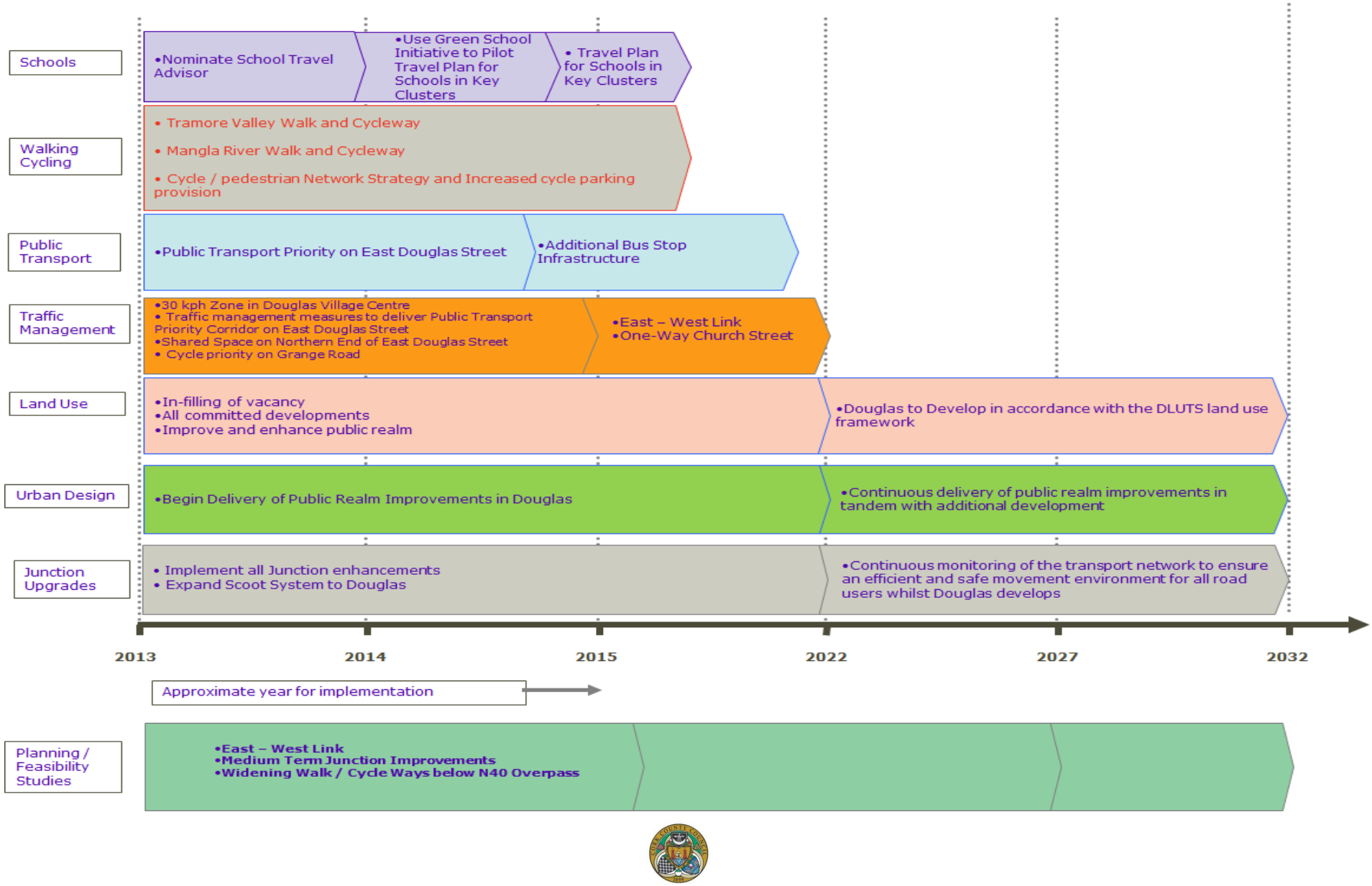
11.2.1 Figure 11.1 shows the timeline for the implementation of the DLUTS measures. This timeline is indicative only, mainly serving the purpose of identifying interdependencies among key measures. Certain proposals included in the strategy may only be implemented following the completion of others, for example converting Church Road to one-way requires the construction of the East-West Bridge.

11.2.2 The implementation of measures is broken into two 10-year delivery streams, namely:

- 2013 to 2022 Strategy Measures; and
- 2022 to 2032 Strategy Measures.

11.2.3 A phasing strategy has been developed for each of the key recommendations of the DLUTS. The recommendations are broken up by transport mode. As detailed earlier in the report, DLUTS recommends that the transport strategy proposals aimed at increasing the mode share for sustainable modes are front loaded in the implementation plan (e.g. Schools Plan and improvements for walking, cycling and public transport). This will then be followed by general road network improvements.

Figure 11-1 Indicative Implementation Timeline



2013 – 2022 Strategy Measures

11.2.4 Obtaining the best return from upfront, early investment in DLUTS is important. It is proposed, therefore, that the implementation of all elements of the strategy begin as soon as possible.

11.2.5 Between 2013 and 2022 it is hoped that the following elements of the study will be completed;

- Full implementation of Pedestrian and Cycle Strategy;
- Full implementation of Public Transport Strategy;
- Full implementation of Schools Strategy;
- Improvements to Public Realm in Douglas;
- Infilling of vacancy in village centre retail units;
- All traffic management proposals; and
- All junction Upgrades

11.2.6 The implementation of the above set of strategies and junctions upgrades will lead to significant improvement to vibrancy and appearance of Douglas, as well as increasing the operational efficiency and safety level of the Douglas road network, and therefore the completion in full of these elements of the strategy should be made a priority.

2022 – 2032 Strategy Measures

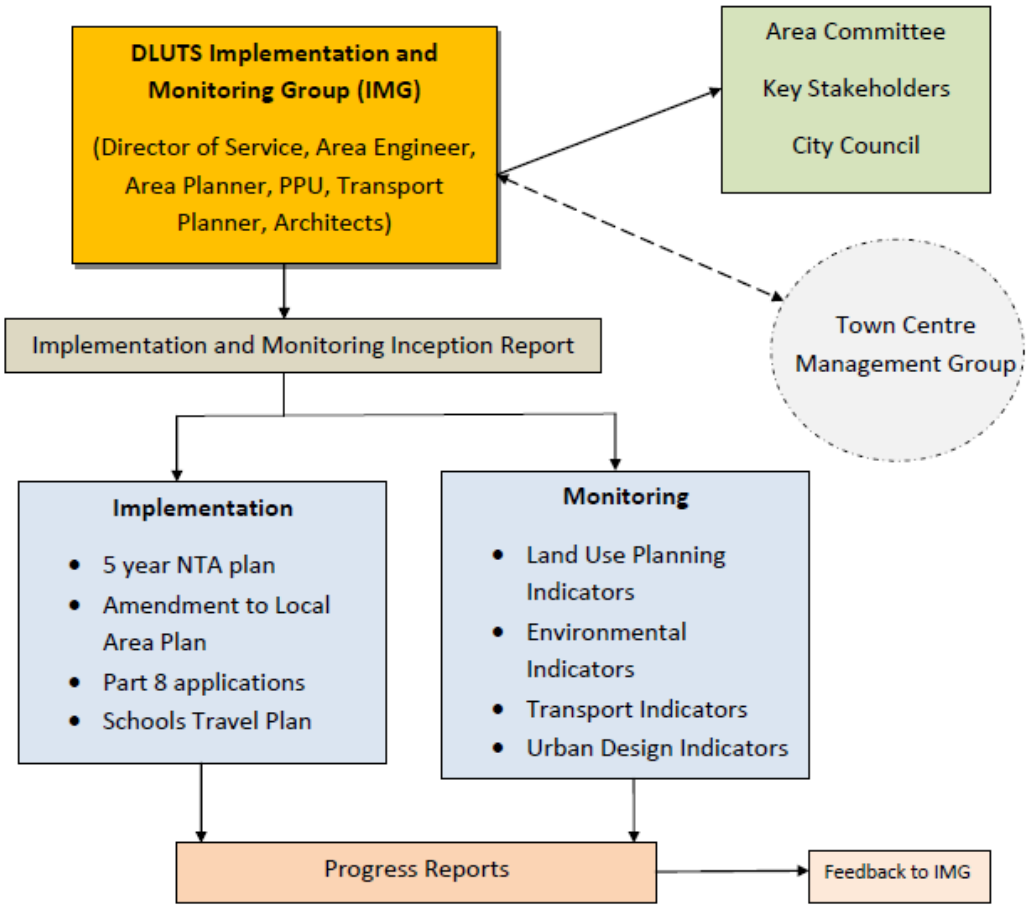
11.2.7 The strategy measures for the years 2022 – 2032 involve the development of Douglas in accordance with the Land Use strategy outlined in Chapter 8 of this report. This "smart mix" strategy will involve a mixed development approach which supports smarter travel initiatives. It will consolidate the existing land uses and provide a balanced mix of development that enhances the profile of the centre.

11.2.8 The 2022 – 2032 strategy measures also involve the continued improvements to urban design and public realm as outlined in Chapter 9 of this report.

11.3 Implementation and Monitoring Strategy

11.3.1 The DLUTS is a 20 year programme of multi-disciplinary actions covering sustainable land use planning, urban design and transportation. In order to appropriately manage this programme, it is necessary to introduce an Implementation and Monitoring Group (IMG), that will co-ordinate both the programme of works and monitor its progress in relation to its overall vision. Figure 11.2 below describes the mechanism for delivering the strategy in terms of implementation and monitoring.

Figure 11-2 DLUTS Implementation Strategy



Structure of Implementation and Monitoring Group (IMG)

11.3.2 The Implementation and Monitoring Group (IMG) will be set up within the Cork County Council, reporting directly to the Assistant County Manager (ACM) and comprising the following persons:-

- Director of Service (Chair of the Group and Champion of the Project)
- Area Engineer – Carrigaline
- Development Management Planner
- Planning Policy Unit
- Architects Department
- Transport Engineer

Function of IMG

11.3.3 The first function of the IMG will be to prepare an Inception Report of work to be carried out. In principle, the following functions will need to be included in the Inception Report:-

- Preparation of the Amendment to the Carrigaline Local Area Plan.
- Implementation of the programme of works in association with the NTA.

- Implementation of Sustainable Schools Travel Plan
- Statutory Planning Processes (Part 8)

11.3.4 The IMG will meet bi monthly and will inform the Carrigaline Area Committee and the Key Stakeholders regularly. Consultation with the City Council will be necessary on cross boundary issues. Once the Town Centre Management Group is set up, it will provide the IMG with information on current issues being faced in Douglas.

11.3.5 The second function of the IMG will be to identify indicators for monitoring the progress of the project. These indicators can be divided into:-

- land use planning (land availability, retail vacancy, employment surveys, planning applications)
- urban design indicators (public realm improvements and new buildings)
- transport indicators (to include pedestrian counts at key locations to monitor footfall, transfer to other sustainable modes, improvements to public transport journey times, queuing and car journey times on the road network, increases in walking and cycling network, number of junction improvements)
- environmental indicators (habitats, water quality, population and human health, air quality, cultural heritage, landscape and material assets).

11.3.6 Key stakeholders will include representatives from the National Transport Authority, National Roads Authority and Cork City Council.

Outputs of IMG –

11.3.7 The output of the IMG will be to report progress made on the above.

12 Conclusions and Recommendations

12.1 Summary of the Process

12.1.1 To conclude, this chapter highlights briefly the key conclusions drawn from each of the preceding chapters, and brings together the key recommendations. The DLUTS Strategy is an integrated land use, urban design and transport strategy. The Vision Statement for the Douglas Land Use and Transport Strategy is:

DOUGLAS VISION STATEMENT

"To secure a successful vibrant urban centre with a more efficient transport network for Douglas, that provides an improved public realm, reduces congestion, encourages greater levels of walking & cycling, and improves the quality of life for the community, thereby enabling sustainable future growth."

12.2 DLUTS Requirements

12.2.1 The DLUTS requirements incorporate Land Use, Urban Design and Transport objectives and can be summarised as follows:

- to provide a framework for future planning decisions;
- to encourage sustainable travel by walking, cycling and public transport;
- the need to reduce the number of short distance car-based trips within the DLUTS Area, particularly those relating to Douglas Village as a destination;
- the need to provide for improved service reliability for bus services operating through Douglas Village;
- to make more efficient use of the transport network;
- to provide a guide to the investment in transport infrastructure;
- to identify the capacity of the town centre for additional retail and other development;
- Public Realm Improvements and the creation of a stronger commercial focus within Douglas Village;
- to inform the future of two areas zoned 'Special Policy Areas' (Douglas Town Centre X-03a and the lands described as Douglas Golf Course X-03b) in the Carrigaline Electoral Area Local Area Plan (2011), shown in Figure 1.6 below; and
- to make Douglas a more competitive and vibrant urban centre in the metropolitan area of Cork.

12.3 DECLG Spatial Planning and Transport Guidelines - Land Use and Transport Planning checklist

12.3.1 The Land Use and Transport Planning checklist contained within the DECLG Spatial Planning & Transport Guidelines has been used to guide the development of DLUTS. Table 12.1 below provides an overview of DLUTS compliance with this checklist.

12.4 Current Land Use, Urban Design and Transport Characteristics and Emerging Themes

12.4.1 An extensive baseline evaluation highlighted some of the following emerging themes in terms of the land use, urban design and transport characteristics of the DLUTS Area are:

- There has been high population growth in Douglas (12.2% since 2006);
- Development in the Village Centre is uncoordinated and piecemeal;
- There are barriers to connectivity between land uses and a lack of pedestrian permeability;
- Douglas Village experiences poor vibrancy due to lack of daytime population;
- High vacancy rates contribute to loss of vitality;
- There is no sense of place for the Village Community;
- The motor car has priority of Place in Douglas;
- Pedestrian desire lines are not catered for;
- Very low mode share by sustainable modes;
- High levels of through traffic during peak times;
- Car mode share to schools is very high;
- Pedestrian and cycle facilities are very poor; and
- Some areas, especially close to schools, experience congestion during peak times.

12.4.2 [Please refer to Chapters 3, 4 and 5 for more information on the characteristics of the DLUTS Area].

Table 12.1 DLUTS Compliance with DECLG Land Use and Transport Planning Check List

DECLG Land Use and Transport Planning Check list		
Checklist Guideline	**Achieved by DLUTS**	**Explanation**
General:		
1. Will the plan encourage sustainable land use and transport infrastructure development while also allowing the transport network to function as effectively as possible	✓	DLUTS proposes an integrated approach to land use, urban design and transport which focusses on sustainable land use and transport initiatives
2. Is the plan consistent with the National Spatial Strategy, Smarter Travel, Regional Planning Guidelines and other relevant official policy documents	✓	DLUTS is consistent and has been informed by relevant policy and guidance documents
3. Will the plan protect existing and any proposed national roads and the wider transport network from adverse direct and indirect effects of development provided for by the plan	✓	DLUTS promotes the use of sustainable modes and has land use and transport policies which will reduce the need to use the wider national road network
4. Does the plan provide for future transport infrastructure development, including upgrades to existing routes and junctions and the cumulative impact of existing and permitted development	✓	DLUTS reduces the need for significant transport infrastructure development by focusing on policies & interventions that will increase sustainable modes
Mode Shift:		
5. Will implementation of the plan reduce car dependency and encourage a shift towards use of other transport options including measures to support the achievement of the Government's targets for modal split under the Smarter Travel strategy	✓	DLUTS will deliver a significant shift towards walking, cycling and public transport.
6. Does the plan make provision for integration of transport networks? Has provision for public transport networks needed now or in the future (e.g. rail extensions) been considered	✓	DLUTS provides for better integration of public transport in the Village area and also provides much better connectivity for walking and cycling with public transport.
Access:		
7. Will the plan ensure the provision of suitable non-national roads to provide access to areas of land where new development is proposed and to connect development generated traffic to the non-national road network and public transport system	✓	DLUTS land use strategy ensures more efficient use of the existing transport network and maximizes use of sustainable modes such as walking, cycling and public transport
8. Are the policies and methods for managing access included in the planning document consistent with maintaining high levels of safety and road function	✓	DLUTS proposals are consistent with maintaining high levels of safety and road function
Environmental Effects:		
9. Have environmental sensitivity issues (noise, air pollution, greenhouse gases, congestion, etc.) been adequately addressed so that the future operation of the transport system can be sustained and amenities protected	✓	DLUTS evaluation framework includes an environmental evaluation which examines the impact of the strategy on environmental sensitive issues. A strategic environmental assessment has also been undertaken on DLUTS.
10. Are there appropriate objectives concerning impact mitigation measures, such as noise barriers, set back landscaping and/or buffer zones between areas of land where development is proposed and existing and proposed national roads, the cost of which should be borne by the developer	✓	DLUTS recommends a noise barrier on the portion of the N40 overlooking Douglas Village
Funding & Delivery Mechanisms:		
11. Are there appropriate phasing and funding policies and mechanisms in place to ensure that developers pay for mitigation of the adverse effects of their developments on transport infrastructure	✓	DLUTS recommends that developers pay for mitigation of any adverse effects of the developments on transport infrastructure.

12.5 Guiding Principles

12.5.1 This chapter present the guiding land use, urban design and transport principles used in developing DLUTS. Figure 12.1 below Outlines these principles.

12.5.2 [Please refer to Chapter 6 for more information on DLUTS guiding principles].

Figure 12-1 DLUTS Principles

12.6 Vision and Objectives and Evaluation of DLUTS

12.6.1 Evaluation objectives were developed for the Douglas Land Use and Transport Strategy. These were developed to support and implement the Vision for DLUTS, which is a statement that enables clear understanding of the rational for pursuing the recommended Land Use and transport schemes for Douglas. The Vision Statement gives a sense of wider purpose to the strategy, in that transport and land use have such a significant effect on all aspects of life.

12.6.2 The Evaluation objectives were incorporated into an Evaluation Framework which was used to evaluate various land use, urban design and transport options for DLUTS.

12.6.3 [Please refer to Chapter 7 for more information on the Vision, Objectives and Evaluation of the Douglas Land Use and Transport Strategy].

12.7 DLUTS Land Use Strategy

12.7.1 The overall land use strategy for DLUTS indicates that there is a priority for infilling of vacancy in the short term coupled with a modest growth in comparison and convenience retail facilities in line with the local demand and current commitments. However, in the medium and longer term, there are proposals for considerable redevelopment of key sites within a consolidated town centre between St Patrick Woollen Mills and Douglas Court, which will restore vitality and vibrancy into the village as well as promote a more diverse retail function that increases competitive advantage for Douglas. It is envisaged that over a 20 year period, an additional 25,000m2 of floor space could be constructed in Douglas Town Centre; the majority being office accommodation to increase daytime population.

12.7.2 The focal point of the redevelopment programme should be on a new urban quarter at the Cinema site, which will be on improving the pedestrian connectivity between different land uses and promoting high order mixed use development on a more compact site. As a complimentary redevelopment programme, it is envisaged that the Woollen Mills would be a diverse mixed use development, also focussing on connectivity with the Douglas Village Shopping centre and improved public realm. An opportunity exists, if the market permits, for the provision of a municipal car park in conjunction with office accommodation and limited commercial development on the currently vacant Barry's field. Connectivity between the community park and the established town centre uses will be paramount.

12.7.3 Central to the redevelopment programme will be the establishment of a town centre management partnership, that will provide guidance to retailers, co-ordinate town marketing campaigns, special events and aim to achieve "purple flag status", an indicator of a good night out. The partnership will attempt to attract a wider patronage and increased footfall that will lead to increased spending.

12.7.4 The existing community facilities such as the three primary schools, GAA playing fields and golf course should remain in their current locations. Any future schools should be provided close to existing residential areas. There is an urgent need for multi-purpose leisure facility to cater for sports clubs, community organisations and leisure facilities. If possible, these facilities could be located in close proximity to existing facilities in the town centre, preferably west of the existing GAA pitches.

12.7.5 The recreational facilities along the Mangla and the community park should be enhanced through improved connectivity (walkway/cycleway), public lighting, and other recreational equipment and

Douglas must be connected to the proposed Tramore Valley park through improved pedestrian/cycle facilities from the Grange/Frankfield and through land south of Inchvale Lane and Alden Road.

12.7.6 [Please refer to Chapter 8 for more details on the land use strategy].

12.8 DLUTS Urban Design Strategy

12.8.1 Urban design is the process of shaping the setting (or public realm) for life in the town or village in order to provide a link between the built form and the transport network so that the residents can use the space more efficiently and effectively. In Douglas the general policies to enhance the public realm will seek to increase permeability from both the outlying residential areas and within the village centre, through widening footpaths, raised paved areas at major intersections, improved access to cycleways and improved landscaping and streetscape. Douglas has a number of important gateways, areas through which people pass to get into the village. These gateways at the underpasses of N40 from the city, the Finger Post Roundabout and West Douglas Road at Daly's corner need to have public realm measures that will enhance the connectivity.

12.8.2 Specific urban design policies have been provided along East Douglas Street, which is the heart of Douglas and could benefit from increased pedestrian usage, improve streetscape and a public transport corridor. At the end of this road, Barry's corner could become the restaurant quarter for Douglas with improvements to the pavements, streetscape and furniture and connectivity. The land between Douglas Village Shopping Centre and Douglas Court Shopping Centre has the potential for comprehensive redevelopment with key pedestrian linkages and public squares through the new development where public events can take place and greater permeability between the shopping centres. Public realm improvements to the connectivity between the Douglas Village Shopping centre and Woollen Mills will be key to the success of the redevelopment potential of the Woollen Mills.

12.8.3 Daly's corner will become a more cycle and pedestrian friendly junction where school children can be safer in their movements, through enlarged footpaths, raised paved areas and improved crossing points. The visual appearance of the community park will need to be improved through improved measure of surveillance, lighting and connectivity

12.8.4 The urban design policies include design guidance to developers on an agreed set of material for treatment of surfaces, street furniture, lighting trees, public art and animation.

12.8.5 [Please refer to Chapter 9 for more details on the land use strategy].

12.9 DLUTS Transport Strategy

Summary of Pedestrian and Cycle Strategy

12.9.1 The DLUTS Walking and Cycling Strategy has been developed through detailed analysis of local issues and opportunities which were identified in the production of the Baseline Traffic Evaluation Report. This report identified underlying strengths in the DLUTS transport network such as the compact, permeable structure of the village centre that provides good connectivity opportunities for walking and cycling.

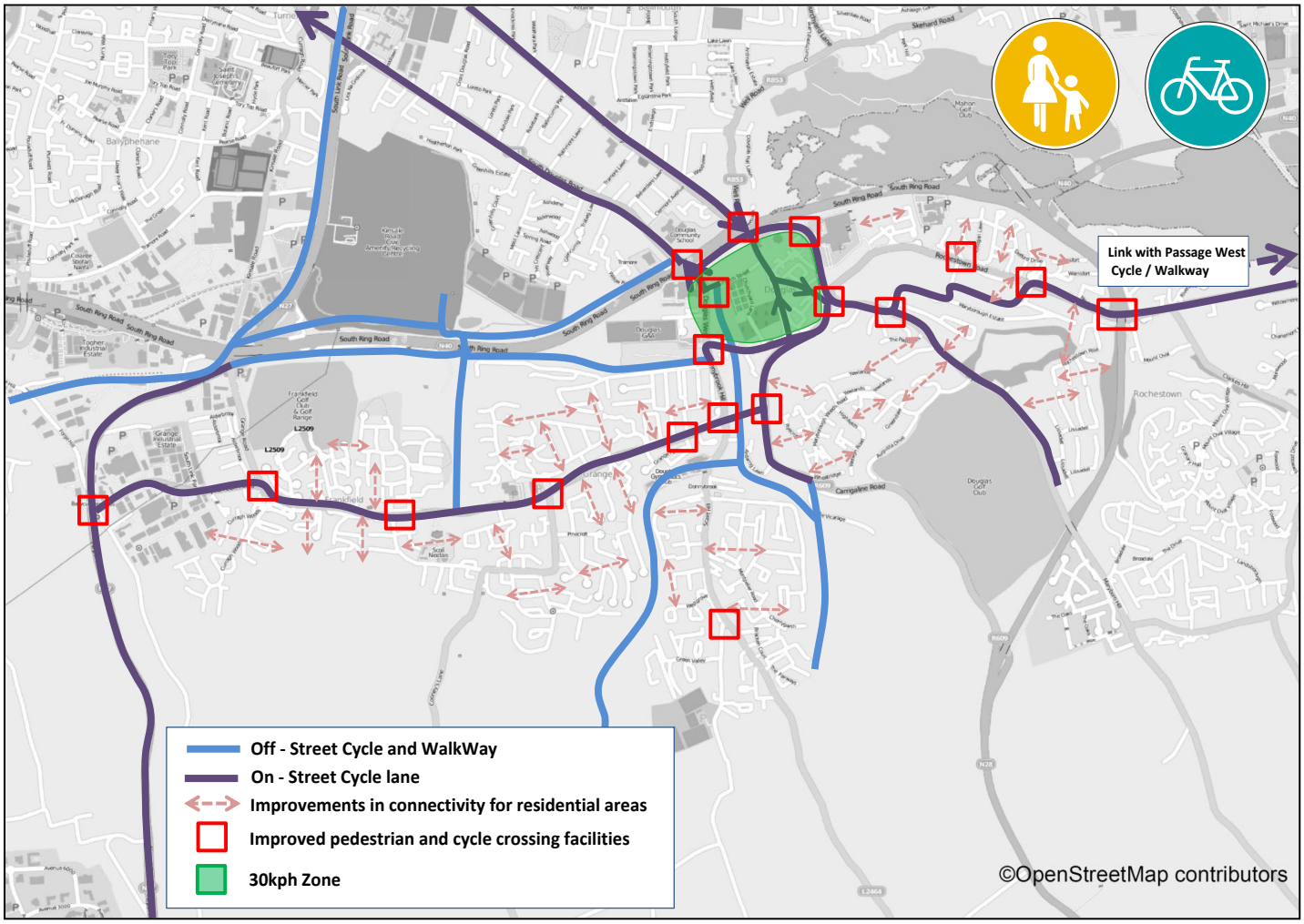
12.9.2 Some of the key elements of the DLUTS walking and cycling recommendations are:

- Additional on- street Cycle Lanes;
- Additional off-street walk and cycle ways;
- Junction upgrades / enhancements;
- Residential estate connectivity;
- Shared Space on East Douglas Street; and
- 30kph zone in village centre.

12.9.3 The full pedestrian and cycle network proposed for Douglas is shown in Figure 12.2 below.

12.9.4 [Please refer to Chapter 10 for more information on the pedestrian and cycle Strategy].

Figure 12-2 DLUTS Pedestrian and Cycle Network



Summary of Public Transport Strategy Recommendations

12.9.5 The focus of the DLUTS public transport strategy is to support the continued operation of public transport services in Douglas and to integrate with other transport initiatives to assist in achieving a viable mode shift away from private car use towards sustainable modes of transport.

12.9.6 The following recommendations form the future strategy for public transport in Douglas for the short to medium term. It is recommended that:

- East Douglas Street becomes a public transport priority corridor providing priority access for buses and taxis from the north and south of East Douglas Street;
- adequate supporting public transport infrastructure is provided, especially the provision of sheltered bus stops in suitable locations and adequate Taxi ranks and/or set-down areas;
- pedestrian and cycle connections to public transport are improved to enhance accessibility;
- public transport is promoted through the dissemination of public transport information, for example at bus stops, in public buildings and through school and workplace travel plans; and
- new developments accommodate public transport, both buses and taxis.

12.9.7 [Please refer to Chapter 10 for more information on the Public Transport Strategy].

Parking Management

12.9.8 DLUTS recommends an optimisation of the use of whatever parking is provided and in doing so, reducing the overall requirement for parking. This will be important as the overall quantum of commercial development increases over time.

Summary of DLUTS Schools Strategy Recommendations

12.9.9 There is a high concentration of schools within the Douglas Village area and school transport is a significant generator of demand. The DLUTS schools strategy is designed to support and encourage sustainable transport to school. The overall strategy will significantly improve pedestrian and cycle infrastructure within Douglas and this in turn will benefit access to schools.

12.9.10 To further support sustainable transport to schools, School Travel Plans should be prepared, implemented and maintained. School Travel Plans will include a variety of measures to be tailored for the individual schools involved. These plans should be prepared by the schools in conjunction with input from the County Council and An Garda Síochána. The role of a School Transport Advisor within Cork County Council should be developed to support and liaise with schools in preparing their Travel Plans.

12.9.11 In assessing school transport demand, two school clusters have been identified. The schools within the Donnybrook Hill and North Douglas Clusters cater for a very large number of students. The Douglas Land Use and Transportation Strategy includes measures which will directly benefit these schools, including junction upgrades with improved facilities for pedestrians and the development and improvement of the cycle network. The local authority should make specific efforts to develop links with these schools, through the School Travel Advisor, with a view to highlighting improvements that will support sustainable access.

12.9.12 Through the implementation of the strategy for school transport, support will be given to more sustainable transport options and car dependency will be reduced in the short, medium and longer term.

12.9.13 [Please refer to Chapter 10 for more information on the School Strategy].

Village Centre Measures

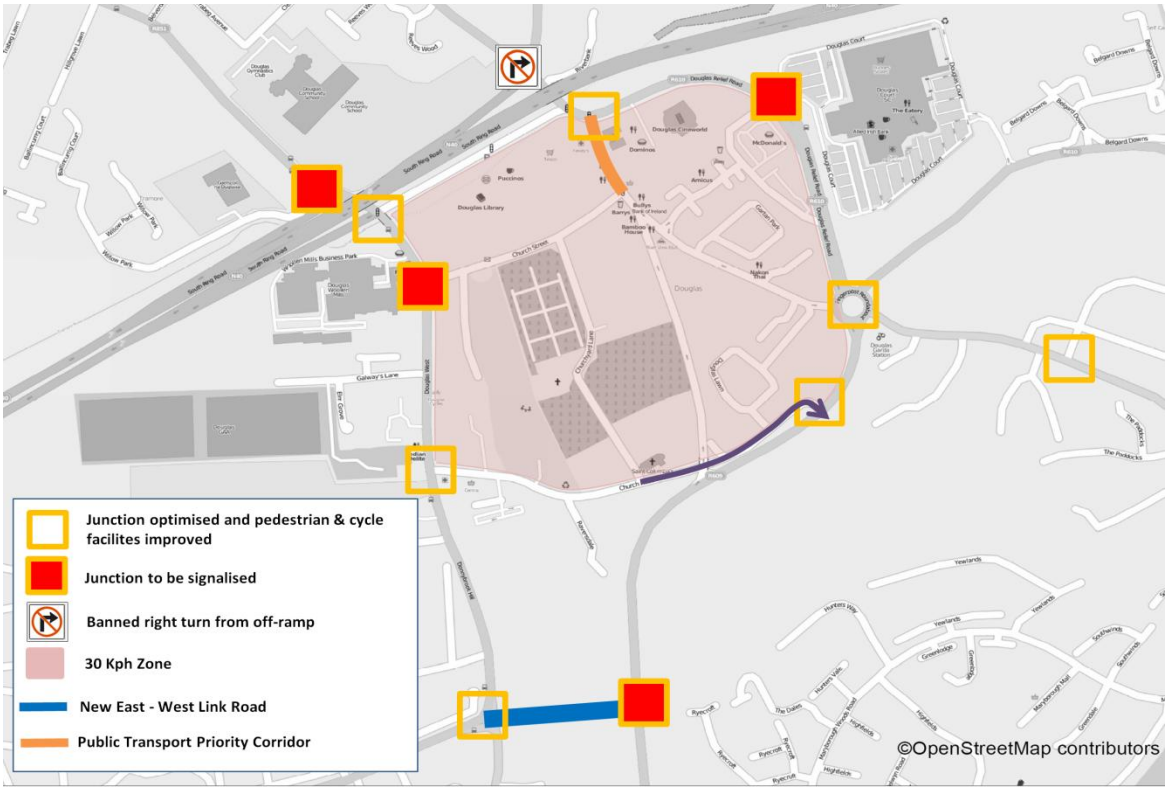
12.9.14 The key Village centre measures include:

- Public Transport Priority Corridor traffic management measures;
- Shared Space on East Douglas Street between Church Street and relief road;
- One way traffic only on the eastern section of Church Road;
- Banned Right Turn from N40 Off-Ramp;
- New East – West link road joining Carrigaline Road and Grange Road;
- Parking management; and
- 30 kph Zone in the Village Centre.

12.9.15 Figure 12.3, below, presents the proposed village centre traffic measures.

12.9.16 [Refer to Chapter 10 for more information on the Village Centre Measures].

Figure 12-3 DLUTS – Douglas Village Centre Primary Traffic Measures



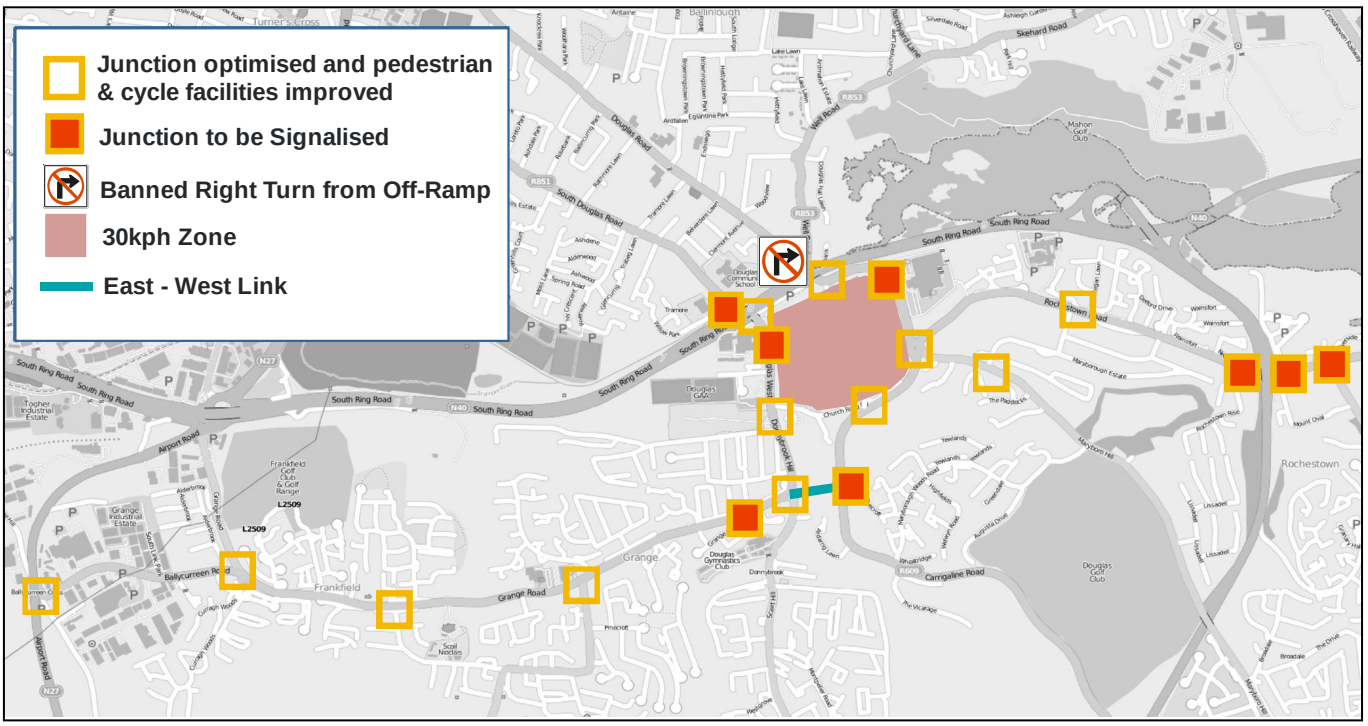
Junction Upgrades –An Overview of Measures for the Wider Network

12.9.17 A number of infrastructural measures are proposed to a number of junctions within the DLUTS area which aim to bring significant improvements to their operation in terms of movement and safety for all road users.

12.9.18 Figure 12.4 below gives an overview of the types of measures proposed for selected junctions in the wider network.

12.9.19 [Refer to Chapter 10 for more information on the Junction upgrades in the DLUTS area].

Figure 12-4 DLUTS Wider Transport Network Proposals



MVA Consultancy provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.
A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.mvaconsultancy.com

Abu Dhabi
AS Business Centre, Suite 201, Al Ain Road, Umm al Nar, P.O. Box 129865, Abu Dhabi, UAE
T: +971 2 510 2402 F: +971 2 510 2403

Birmingham
Second Floor, 37a Waterloo Street
Birmingham B2 5TJ United Kingdom
T: +44 (0)121 233 7680 F: +44 (0)121 233 7681

Dublin
First Floor, 12/13 Exchange Place
Custom House Docks, IFSC, Dublin 1, Ireland
T: +353 (0)1 542 6000 F: +353 (0)1 542 6001

Edinburgh
Second Floor, Prospect House, 5 Thistle Street,
Edinburgh EH2 1DF United Kingdom
T: +44 (0)131 220 6966 F: +44 (0)131 220 6087

Glasgow
Seventh Floor, 78 St Vincent Street
Glasgow G2 5UB United Kingdom
T: +44 (0)141 225 4400 F: +44 (0)141 225 4401

London
Seventh Floor, 15 Old Bailey
London EC4M 7EF United Kingdom
T: +44 (0)20 7529 6500 F: +44 (0)20 7529 6556

Lyon
11, rue de la République, 69001 Lyon, France
T: +33 (0)4 72 10 29 29 F: +33 (0)4 72 10 29 28

Manchester
25th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 236 0282 F: +44 (0)161 236 0095

Marseille
76, rue de la République, 13002 Marseille, France
T: +33 (0)4 91 37 35 15 F: +33 (0)4 91 91 90 14

Paris
12-14, rue Jules César, 75012 Paris, France
T: +33 (0)1 53 17 36 00 F: +33 (0)1 53 17 36 01

Woking
Dukes Court, Duke Street, Woking
Surrey GU21 5BH United Kingdom
T: +44 (0)1483 728051 F: +44 (0)1483 755207

Email: info@mvaconsultancy.com

Offices also in
Bangkok, Beijing, Hong Kong, Shenzhen and Singapore

mvaconsultancy