

IMPROVING ACCESS TO GROWTH AREAS

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1. INTRODUCTION

1.1 The Context

Travel movements within and to Edinburgh are no longer just concentrated on movements to the City Centre. Within the last decade there has been considerable growth in employment areas closer to the periphery of the city, in locations such as Edinburgh Park and parts of North Edinburgh. In addition, further major expansion is planned for the Waterfront area. Similarly, there has been a major expansion in retail and leisure functions as demonstrated by the South Gyle and Fort Kinnaird centres. Health facilities are also moving away from the city centre, with the recent opening of the New Edinburgh Royal Infirmary.

The development of these growth areas, which continues apace, brings with it significant transport challenges. At the very time that the fruits of significant investment, through past Public Transport Awards and other sources, are being realised with increasing public transport use into the City Centre, recent years have seen patterns of very high car usage emerging for people travelling to the growth areas for employment, shopping and health services.

Further major transport initiatives are currently being progressed in Edinburgh and the surrounding areas, with heavy rail schemes, and preparatory work on tram lines for north and west Edinburgh. These new schemes whilst giving benefits to growth areas predominantly cater for radial movements. With many initiatives for radial movements now in place or being progressed, the City of Edinburgh Council recognised that it was now necessary to address the increasing dominance of the car in travel to the new growth areas and the lack of realistic alternatives. Without investment in improved public transport, cycling and walking, it was recognised that the car will continue to dominate what are ever increasing levels of movements and make the achievement of the Councils targets for road traffic reduction very difficult.

Given this background, in 2001 the City of Edinburgh Council identified the need to improve public transport access to three emerging growth areas on the periphery of Edinburgh:

- South Gyle/Edinburgh Park (referred to as West Area)
- North Edinburgh including Ocean Terminal and Victoria Quay and the new Waterfront area (referred to as North Area)

- The New Edinburgh Royal Infirmary and Fort Kinnaird (referred to as East Area)

Jacobs Babbie and Steer Davies Gleave were appointed to assist the City Council in developing and delivering this strategy, known as “Access to Growth Areas”.

1.2 Structure of Paper

This paper describes the development of the strategy, which was used to support a submission to the Scottish Executive’s Public Transport Fund. It then outlines the principal components of the package and how these measures tackle the issue of accessibility, particularly from areas of social need. Finally the paper details the implementation programme, with a particular emphasise on the consultation process adopted. The specific sections in the remainder of the paper are:

- the development of the “Access to Growth Areas” strategy;
- the details of the strategy;
- the implementation programme; and
- Current status

2. DEVELOPMENT OF THE ACCESS TO GROWTH AREAS STRATEGY

2.1 Introduction

The City Council has outlined its transport vision, which represents where it aspires to be in transport provision and how it sees transport contributing to the achievement of wider policy goals. In setting the framework for achieving this, the Local Transport Strategy outlines a number of aims, as follows:

- to improve safety for all road and transport users;
- to reduce the environmental impacts of travel;
- to support the local economy;
- to promote better health and fitness;
- to reduce social exclusion; and
- to maximise the role of streets as the focal point of our local communities, where people can meet, shop, and, in appropriate circumstances, children can play.

These aims outlined the overall framework for developing the Access to Growth Strategy. However it was necessary to identify more specific objectives that could not only inform the specifics of the strategy but also establish the fundamentals of the appraisal framework.

2.2 The Specific Objectives

The City of Edinburgh Council has a strong vision for the future of the city and clear objectives and targets including demanding road traffic reduction and mode split targets. The key objectives for this strategy were therefore developed from the vision and objectives in the Local Transport Strategy and an analysis of problems and opportunities. They can be summarised as:

- to improve accessibility to employment/growth areas;
- to reduce pollution;
- to reduce congestion; and
- to make the transport system safer, more secure and more attractive.

Table 1 below highlights the strong links between the broad aims contained within the Local Transport Strategy and the more specific objectives identified for this particular strategy.

Table 1: Consistency between Planning Objectives and CEC aims

City of Edinburgh Council aims	Planning Objectives			
	improve accessibility to employment/growth areas	reduce pollution	reduce congestion	make transport system safer more secure and attractive.
improve safety for all users			interaction depends on measures / areas	strong interaction
reduce environmental impacts of transport		strong interaction	strong interaction	
support the local economy	strong interaction depending on areas	interaction depends on measures / areas	strong interaction	
promote health and fitness		strong interaction	interaction depends on measures / areas	interaction depends on measures / areas
reduce social exclusion	strong interaction – need to target areas			strong interaction
maximise role of streets as places to meet	interaction depends on measures / areas	interaction	strong interaction	interaction

2.3 The Strategy

As outlined earlier the “Access to Growth Areas” strategy focussed on improving access to the following key growth areas as shown in Figure 1:

- South Gyle/Edinburgh Park (referred to as West Area)
- North Edinburgh including Ocean Terminal and Victoria Quay and the new Waterfront area (referred to as North Area)
- The New Edinburgh Royal Infirmary and Fort Kinnaird (referred to as East Area)

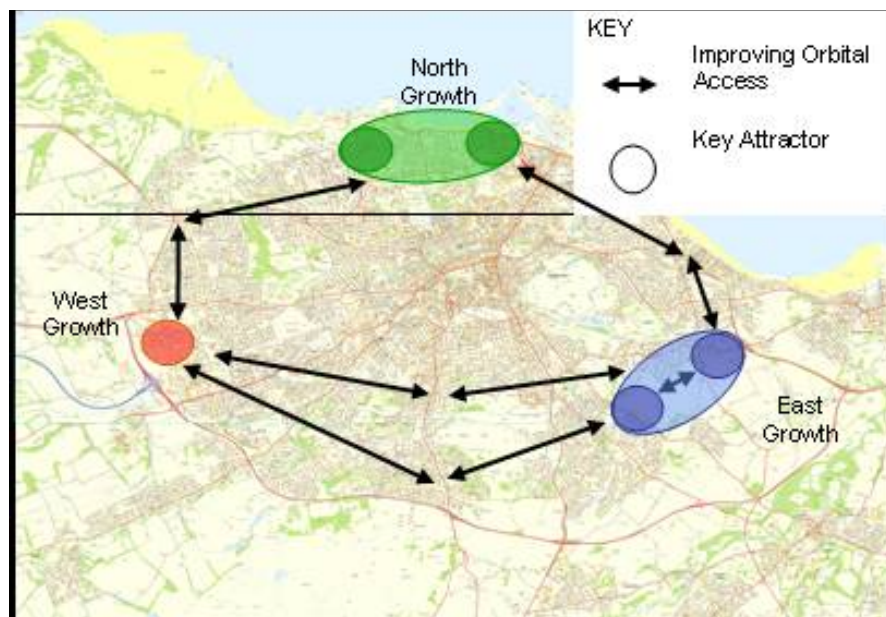


Figure 1: The “Access to Growth Areas”

An assessment of the existing travel patterns and provision in the vicinity of these areas was undertaken. This assessment highlighted some similarities but also important differences. It identified the very strong current reliance on cars, particularly in the Western and Eastern areas. The continuing rapid growth of these areas and the impact of this on congestion levels was also highlighted.

Existing transport issues can be summarised as:

- lack of journey options from many residential areas;
- long journey times and unreliable services away from key radial corridors;
- lack of information on departure points, stop locations, journey durations or destinations served;
- unacceptable distances to walk to services;
- poor access by walking and cycling; and
- poor quality journey experience arising from inadequate boarding and waiting facilities.

From the above, strategic themes were developed which can be seen as underpinning the planning objectives and thus the aims of the LTS :

- *Developing new sustainable transport links*: to open up bus services and cycling and walking options for more people.
- *Improving journey time and reliability*: to make travel by sustainable modes and particularly by bus a more attractive option for those with car access and extend the areas within realistic journey times of the three growth areas.
- *Promoting travel awareness*: to change travel choices by presenting potential users with appropriate information on accessibility by more sustainable modes and related marketing and awareness raising.
- *Improving the quality and image of sustainable modes*: building on the high investment in new buses and on infrastructure on radial corridors to raise the quality and image of bus travel on other routes into the growth areas. Enhancing the image and quality of provision for cyclists and pedestrians.

Moving to the next level of detail a range of potential measures were considered under these strategy themes, taking account of the many different existing and future travel needs of people working within or accessing services in the growth areas. This includes travel to work, access to education and training, shopping, healthcare and leisure related travel.

Different transport interventions ranging from major infrastructure projects to softer measures were assessed to see how they could contribute to the above strategies and thus the objectives. One particular consideration was the likelihood of implementation within the three year funding context of the Public Transport Fund.

From this exercise, the following key components of the strategy emerged:

- providing new bus links and priority measures;
- creation of new transport interchanges;
- upgrading bus stop infrastructure;
- selective Vehicle Detection and Real Time information;
- public transport information; and
- improved walking and cycling links.

3. DETAILS OF THE STRATEGY

3.1 The Components

Having identified the core principles of the strategy, it necessary to develop this further, focusing on the particular areas of concern. In many cases it was also evident that there were a number of potential options that could, to varying degrees, provide benefits to the public transport users.

Detailed consultations with the bus operators and other stakeholders were held as the preferred options were developed. The following paragraphs summarise the details of the measures that were proposed in each of the three growth areas.

East Growth Area

The measures identified within the East Growth Area package are aimed at increasing public transport accessibility levels with hopefully consequential benefits to the local employment and retail markets. Locations of key measures identified include;

- bus priority on Portobello High Street;
- bus priority on Newcraighall Road;
- bus priority on Niddrie Main Road;
- the provision of a new public transport/cycle/emergency link road between Greendykes and the New ERI;
- enhancing the southern section of the orbital bus routes;
- implementation of Selective Vehicle Detection;
- bus stop infrastructure upgrade;
- walking and cycling measures; and
- provision of Real Time Information.

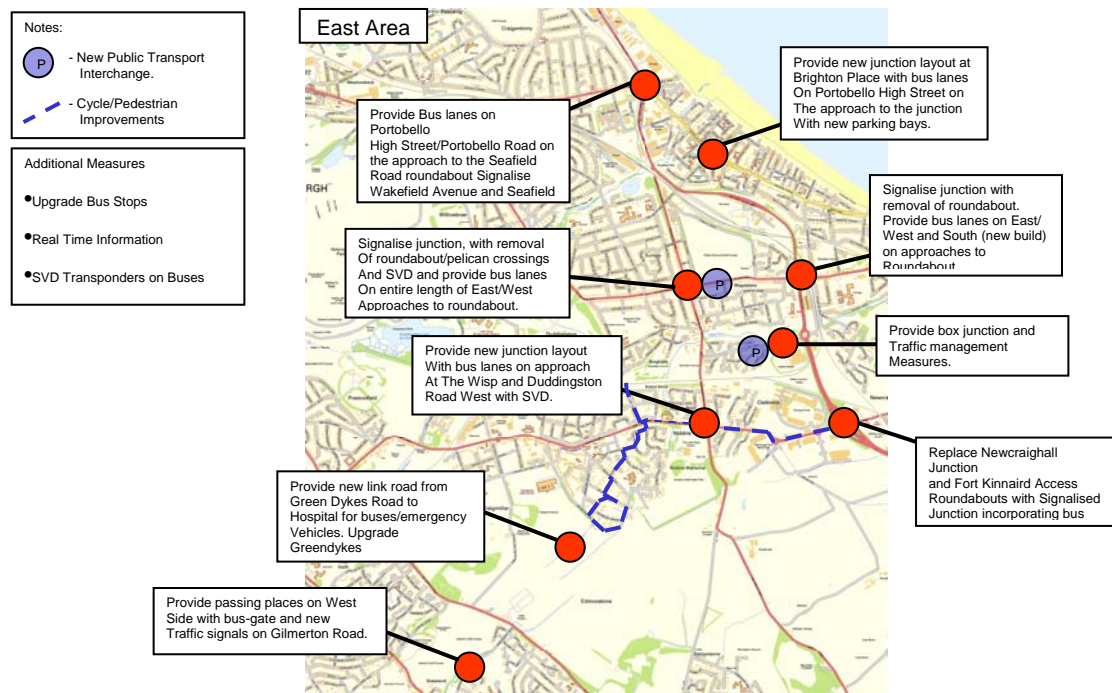


Figure 2: The preferred Package (East Area)

The measures identified within the West Growth Area package were aimed at increasing public transport accessibility levels and therefore encouraging a modal shift. Location of key measures identified include;

- improving bus priority on South Gyle Broadway;
- bus priority on Drumbrae Road North and South;
- bus priority at the Maybury and Barton junctions;
- providing new public transport link roads between Sighthill Industrial and Edinburgh park rail station;
- enhancing the western section of the orbital bus routes;
- implementation of Selective Vehicle Detection;
- bus stop infrastructure upgrade;
- walking and cycling measures; and
- provision of Real Time and Information.

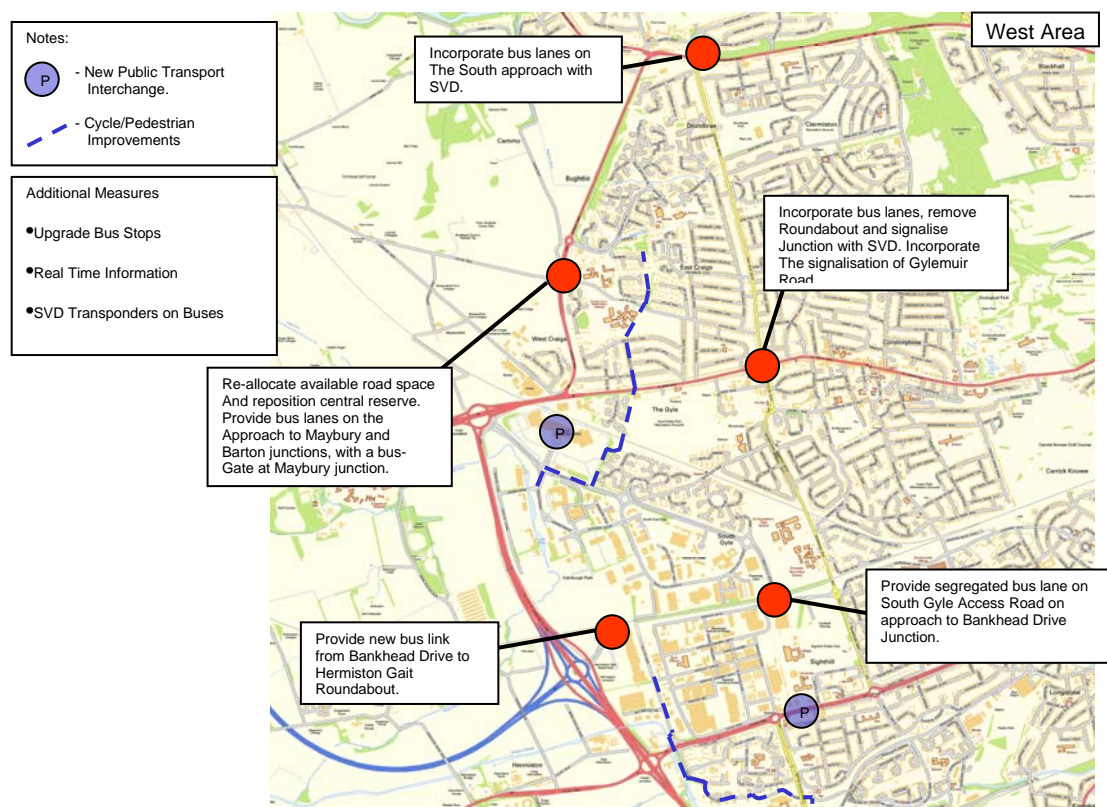


Figure 3: The preferred Package (West Area)

The measures identified within the North Growth Area package are aimed at increasing public transport accessibility levels, reliability and quicker journey times. Areas identified include;

- bus priority on Groathill Road North and Ferry Road;
- upgrading of Crewe Toll Roundabout, with bus priority;
- bus priority on Inverleith Row with Ferry Road;
- bus priority to the main Victoria Quay and Ocean Terminal development access;

- enhancing the northern section of the orbital bus routes.
- implementation of Selective Vehicle Detection;
- bus stop infrastructure upgrade;
- walking and cycling measures; and
- provision of Real Time and Information

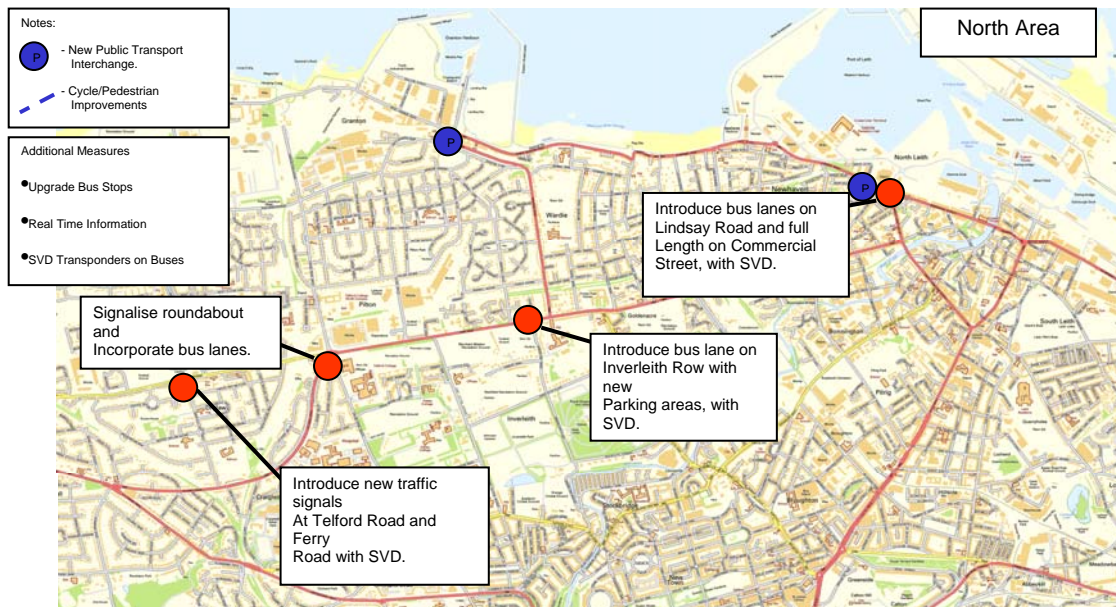


Figure 4: The preferred Package (North Area)

3.3 Appraising the Benefits

The next stage was to appraise the three area packages in accordance with a STAG. The purpose of the appraisal was two-fold. Firstly, it demonstrated that the individual components of each area package complement each area in a coherent manner. Secondly it demonstrated that the preferred area packages would provide the most cost-effective solution.

Following the completion of the Part 1 Appraisal and a confirmation of the details of the individual elements of the strategy a detailed appraisal was undertaken, following the principles of the STAG Part 2 methodology. The principle of the STAG Part 2 Appraisal is the need to ensure that the scheme/strategy being proposed was consistent with the government's appraisal criteria of environment, safety, economy, accessibility and integration. As outlined previously, the over arching objective of this strategy was to improve accessibility to the growth areas by improving the provision of sustainable modes of transport. Therefore it was important to develop a methodology that would demonstrate the benefits of such measures. In this regard much emphasis was placed on the use of GIS techniques to demonstrate the distributional benefits of the package of measures.

Linked to this, and also making use of GIS, an appraisal of the Economic Activity and Locational Impacts (EALI) was undertaken. The purpose of this

was to demonstrate the increased accessibility of job opportunities in the three growth areas resulting from the transport improvements.

Notwithstanding the importance of accessibility, an attempt was also made to quantify the economic benefits arising from the package of measures. A sub model of the Central Scotland Transport Model covering the Edinburgh area was used to undertake this element of the appraisal. A qualitative approach to determining the safety benefit was also undertaken. This has focused on the improvements for existing users of the bus services as well as cyclists and pedestrians.

The vast majority of measures proposed, could be constructed within the existing road boundary and involve reconfiguring existing links or junctions. As such, the environmental impact of the measures is considered minimal. The environmental appraisal therefore was limited to a qualitative assessment. This is considered appropriate for the type of schemes proposed.

Integration appraisal consists of two parts: physical and policy. A qualitative assessment was undertaken outlining the principal benefits of the package.

The results of this final appraisal, which demonstrated the synergy between the areas as well as are specific benefits can be summarised as:

- the package would meet all the planning objectives;
- the package would complement the City of Edinburgh's on-going improvements to public transport provision throughout the city
- the population within a 30 minute bus journey of the east growth area would rise from 99,400 to 115,000 (a 15% increase);
- the population within a 30 minute bus journey of the west growth area would rise from 63,700 to 95,400 (a 50% increase);
- the population within a 30 minute bus journey of the north growth area would rise from 105,000 to 108,600 (a 3% increase);
- there is clear evidence of distributional impacts, particularly for Social Inclusion Partnership areas;
- the package would provide a safer environment for bus users through the upgrading of bus stop infrastructure the Net Present Value would be £4.684m (over a 10 year evaluation period); and
- the package would provide significant time savings for existing bus users and has only a marginal impact on non-users.

4. THE IMPLEMENTATION PROGRAMME

4.1 Introduction

In October 2002 The Scottish Executive awarded the City of Edinburgh Council £10.5m towards the Access to Growth Area Strategy from the Public Transport Fund.. The allocations covered the areas of bus priority, bus stop upgrades and improved cycle/pedestrian links as summarised below.

Bid element	Bid (£M)	Award (£M)
Bus priority linkages	9.91	7.50
Bus (stop) Infrastructure	1.89	1.89
Cycle/pedestrian links	1.10	1.10
Total	12.9	10.49

It should be noted that the additional elements in the strategy relating to select vehicle detection and real time passenger information were taken forward in parallel under existing Council projects

4.2 Implementation Programme

The programme encompassed a range of cycleway measures along planned routes, including an off road cycleway running close to the West of Edinburgh Guided Busway. Along the on-street sections of route measures also include toucan crossings and on-street cycleways, but to provide continuity in residential areas only basic route signage was often required.

The bus stop infrastructure programme was based on a survey of existing stops and a revaluation of positions and the requirements for upgrading. This important exercise was conducted with the help of the bus companies. Designs were worked up to a new standard in accordance with the Council's Bus Stop Design Guide. Bus stops outwith the locations of the bus priority schemes were dealt with via two separate major contracts.

The bus priority schemes account for the majority of investment. One of the schemes, a bus only road, linking the new Edinburgh Royal Infirmary to the planned major redevelopment of Craigmillar constitutes a major road scheme in its own right. The need for planning consent and land purchase being a prerequisite for progressing the scheme. The other bus priority schemes range in scale but include, a number of junction improvements with some major roundabouts being replaced with traffic signals, and significant route corridors incorporating bus lanes. The schemes also focus on the needs of pedestrians with improved crossing facilities and cyclists are provided with advanced stop lines at junctions. All traffic signals are being upgraded to provide for selective bus detection.

4.3 Approach to Consultation

One of the challenges in delivering the schemes within the strategy was the need to engage with the stakeholders and wider community through the implementation stage. These was complicated by the fact that the schemes were located throughout the city and as described above, were often taken forward as individual measures rather than as a complete package.

The approach used to engage the various bodies included three specific stages and is outlined below.

Level 1 – overview information to city-wide population

This stage introduced the implementation of the PTF measures to as wide an audience as possible by (where possible). It comprised of:

- an article in the Council's Outlook magazine;
- information hosted on the CEC website; and
- a leaflet to be distributed on buses, and at key community facilities (e.g. libraries).

All these included a map of proposed locations and details of more specific consultations to be held later. They also invited feedback from readers.

Level 2 – consultation with key stakeholders

Discussion on both the outline and detail of schemes were held with key stakeholders. This included:

- presentations on the detail of schemes to all relevant Local Development Committees; and
- stakeholder workshop session for each of the three growth areas.

Level 3 – consulting with local people

Consultation were undertaken with those local people most affected by the proposed schemes. This was delivered through:

- leaflets delivered to local households. These, where appropriate, advertised events and give details of a number of schemes in close geographical locations
- public exhibitions, held at 2 – 3 locations per growth area. These targeted areas of high footfall at convenient locations within the communities affected; and
- attendance at community council meetings.

5. Current Status

Through the strategy over 100 bus stops have been upgraded and a number of key pedestrian and cycle schemes links to the growth areas have been substantially improved. Many of the bus priority schemes have now been designed and progressed through the statutory processes. During the course of 2006 it is anticipated that these schemes will be implemented, bringing significant benefits to public transport users in the city.