



1. Introduction

Dundee is Scotland's fourth largest city, covering 6,300 hectares. It is geographically the smallest local authority area in Scotland and currently has a population of 145,570, 2.8% of the total Scottish population. Despite its small size it plays a crucial role as a regional centre for the wider area of Perth and Kinross, Angus and North East Fife and has a catchment population of approximately 400,000 persons. Most of the top ten commuter movements in the regional area are within or into Dundee City and mainly involve road transport.

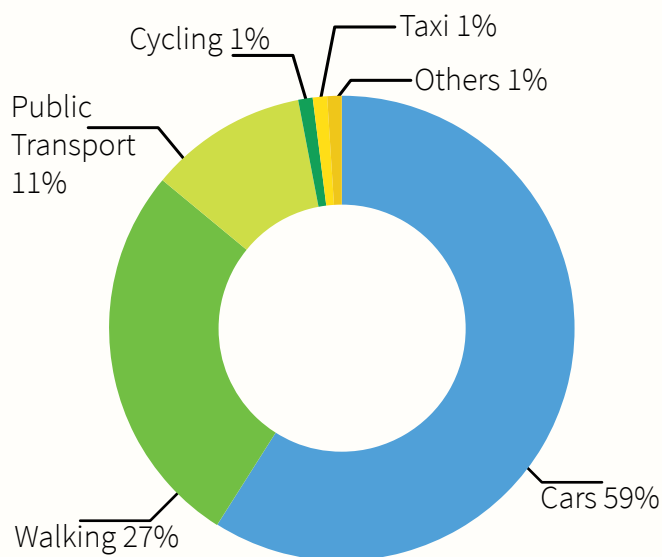
The structure of the population is a tale of two Cities. Whilst Dundee has a slightly higher than average proportion of elderly residents it also has the highest proportion of student population in Scotland, approximately 20% of the population are students.

Alongside the high number of students and ageing population Dundee also has areas of high unemployment and low income households. This manifests itself in low car ownership - roughly half of all households have no car. Therefore a large number of people in Dundee, of all ages, currently rely on public transport (mainly buses) to provide for their travel needs. These are generally short distance trips to work, shops and hospitals. Key destinations are the city centre and Ninewells Hospital, in the west of Dundee. As with the rest of Scotland, Dundee has an ageing population that are increasingly dependent on health and social care services and many local trips are for these purposes.

There is very little of the city area that has a 150m height difference, and by this Ecomobility Shift definition the city is deemed as not hilly.

The City Council controls land use through the planning system and has direct control over both parking policy and standards. The council can make transport investment as it has responsibility for the road network and public transport infrastructure (excluding bus and rail stations). Responsibility for managing and delivering the public transport network of bus, trains and taxi services lies with private sector organisations.

Scotland, part of the United Kingdom, has its own national transport strategy and this gives a clear vision and objectives on how transport should be taken forward through the country. On a regional basis Dundee City Council is a constituent member of the Tay and Central Scotland Transport Partnership (TACTRAN). Through the Council's membership of TACTRAN it has directly participated with the preparation of the Regional Transport Strategy (RTS) (and sub-strategies) which is a statutory document. The document sets out the transport vision and objectives for the Region and gives direction to its local authorities. Dundee City Council has its own Local Transport Strategy which gives direction and focus for the city's transport policies and projects. There is also a



Graph: Modal Split in Dundee

City centre parking strategy. The council is working on a Road Safety Plan with other external partners. The most important policy documents are all supported through committee approval which ultimately has support of management.

From the start, Dundee were very keen and motivated to be involved in the EcoMobility pilot scheme

“We (the City of Dundee) have an ongoing commitment to achieving a practical approach to sustainable mobility within the City and has, over a number of years, been very proactive in delivering and promoting sustainable modes of transport. The city was invited to be an EcoMobility SHIFT pilot assessment area, and accepted the invitation on the basis that this would give us (the Council) the opportunity to make some assessment of where it stands in sustainable terms and fresh direction on where best to use its limited resources in the future.”- Neil Gellatly, Head of Transport, Dundee City Council

2. The process

2.1 Preparing for the assessment

The working group was made up of representatives of a number of city (Council) departments, not just transport. Land use planning and corporate services were represented, as was the local bus operator which, although not part of nor controlled in any way by the Council, nonetheless enjoys a close working relationship. The level of seniority of the staff on the group was also high. From the point of view of the audit it was important to know that such a range of senior staff had been involved; the group could have benefited from perhaps slightly greater representation from staff handling environmental issues, but this is only a point to consider for the future. The working group was advised by David Scotney and Michael Carreno of Edinburgh Napier University.

The main politician for transport, Councillor Will Dawson, was present for the first audit meeting on 28th September. Councillor Dawson is Dundee City Council’s City Development

Dept convenor and is also the Chairperson of Tayside and Central Scotland Regional Transport Partnership (TACTRAN). Councillor Dawson was well informed on the Ecomobility process and it is clear that Dundee’s participation in the project enjoyed his active political support.

2.2 The self-assessment

In total 3 meetings were held over a period of three months, one introduction and two assessment meetings. At the introduction meeting, an overview of the indicators and required evidence were provided by the external advisors, and then responsibility for the collation of individual evidence for each indicator was allocated to different members of the working group, based on their knowledge/access to the relevant data required.

The initial decision regarded the area to be audited. Within the Ecomobility approach the city may choose the area that is covered by the assessment (regional or municipal boundaries); in this case, it was sensible for Dundee to choose its own municipal boundaries since it is within these that it has most control over the issues measured within Ecomobility. It was noted that these boundaries are drawn very tightly around the urban area, with “urban sprawl” – where it exists – occurring in neighbouring municipal areas, rather than in Dundee itself. However, this factor is taken into account in the audit process by means of the City Profile factors.

The main aim of the second progress meeting was to review draft indicator scores and supporting evidence collected to-date, and indicative indicator scores based on the evidence provided. Based on inconsistencies and gaps in evidence identified, in preparations for the third (and final) meeting, agreement was reached as to:

- Where further work was required (and who should prepare and develop it);
- Who should merge / develop complementary evidence; and
- Who should identify specific evidence sources;

At the third meeting, the draft EcoMobility Report was again reviewed with the working group and external advisors, and any final evidential requirements were discussed and the final audit report discussed. The draft Indicator ‘markings’ were reviewed on the Scoring Sheet. In all meetings, all decisions on indicators were unanimously agreed by the working group.

2.3 The external audit

The external audit took place on the 28th September and 1st October, 2012. All evidence provided by the city was reviewed, particularly that for those indicators where the auditor felt more evidence was needed or where the score did not appear to be entirely reasonable given the evidence presented. As well as meeting with members of the working group the auditor conducted 2 ‘site visits’:

- To assess quality of pedestrian environment, and degree to which sustainable transport has been integrated into new commercial and residential developments. There was some difficulty in finding recent large new developments, as most development in Dundee over the last 10 years or so has tended to be smaller, filling in “gap” sites.

- To assess quality of bus waiting facilities and information at stops. On previous occasions, the auditor had travelled by bus within the city. The site visit also helped to assess the quality and accessibility of the city centre pedestrian environment, pedestrian signage and so forth.

As a result of the external audit, only minor modifications were made to the self-assessment scores, in that three indicator scores were increased:

- E3: Personnel and resources: The council was able to supply considerable evidence of cross-departmental and multi-disciplinary working on projects and delivering services over a continuing period, as well as evidence related to the encouragement of training for employees, and the auditor viewed this as worthy of a 4, rather than the initial self-assessed 3.
- E4: Finance for ecomobility: The evidence provided by the city was reviewed and it was noted that a portion of the winter maintenance spend and road construction spend could be seen to provide facilities for Ecomobility and that therefore over 50% of the Council's budget for transport is spent on measures for Ecomobility. The initial self-assessment score of 3 was thus raised to 4;
- TSS5: Mobility management services supporting Ecomobility: After some discussion of the measures in place for city council staff (teleworking, flexible working) and the public in general (car sharing club), it was decided to increase this score to 3 (from the initial

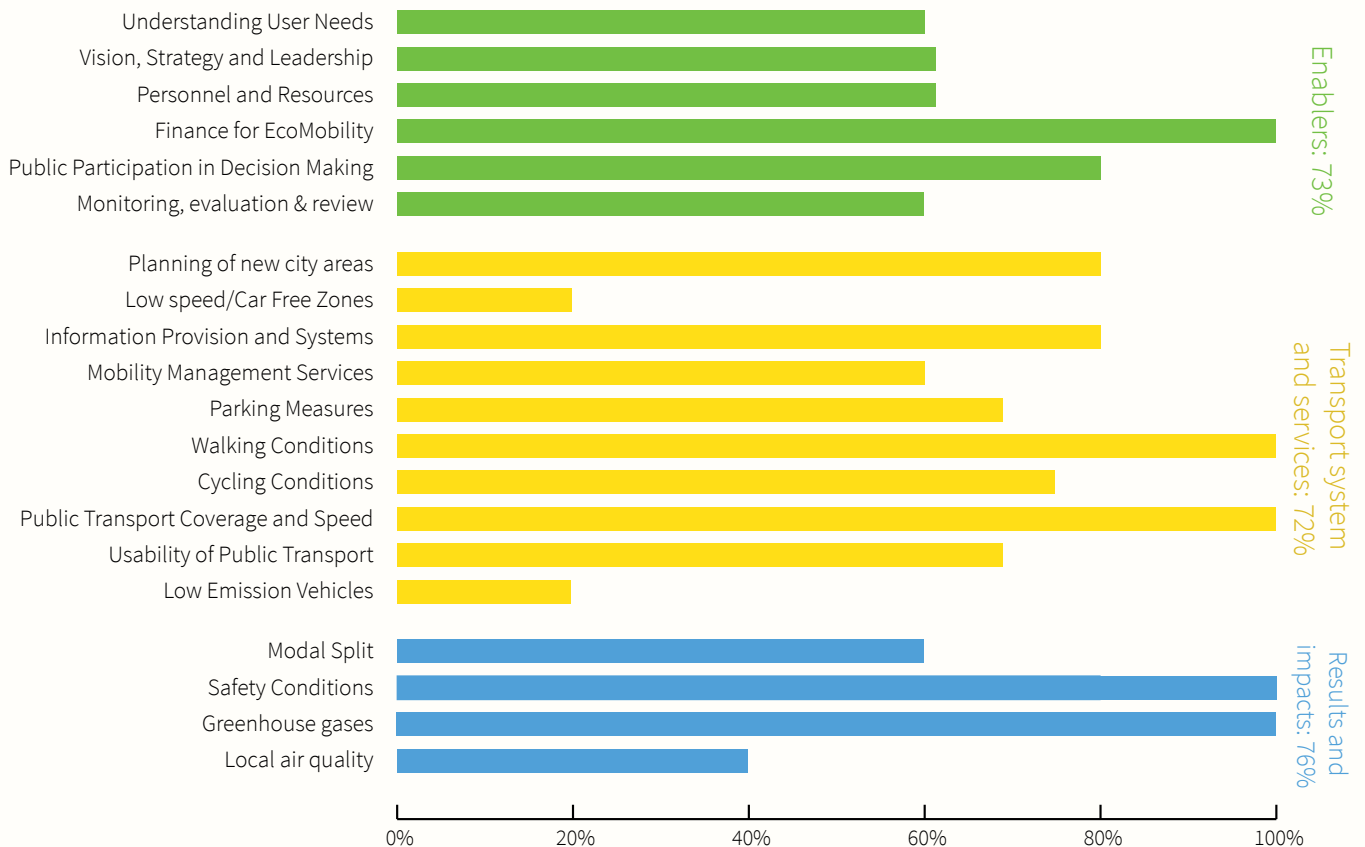
self-assessed 2. This is because there is more than one measure, all are not pilots, and they have been in place for some time and are well-used.

Two indicators were reduced:

TSS9: Cycling infrastructure: The definition of the indicator was discussed in the group and it was obvious that it was unclear; it had been applied only to roads with a speed limit of more than 30mph (50kph), which is almost exclusively outer urban dual carriageways with wide verges and segregated facilities. The indicator should be applied to all roads with a speed limit equal to or more than 30 mph. Therefore, Dundee's score should be lowered, as few roads with a 30mph limit have segregated facilities. However, this is also the fault of the poor wording of the audit, so the reduction will be limited to 2 points, keeping the city at 3 points for this indicator;

TSS2: Planning of new city areas: After reviewing the evidence, it was clear that development is guided to the most accessible areas in preference to other areas; and that good cycling, PT and walking access to developments is secured as much as possible. However, there is a mix of parking standards used (max and min), and there is no policy to encourage developments at nodes in the public transport system (except the city centre); and (for other good planning reasons unrelated to transport) there is no specific policy to increase density. Travel plans are secured by condition rather than planning agreement; national guidance suggests the agreement to be more effective for securing mode share targets and financial contributions. Accordingly, the auditor

EcoMobility SHIFT Result for Dundee, UK



reduced the initial score of 5 to a 4.

Suggestions for the scores for the City Profile Factors had already been provided by the advisor. The auditor checked these through based on his knowledge of the government and regulatory system for transport in the Dundee area, together with the evidence provided. Only one factor was changed by the auditor, relating to the degree to which Dundee is a city whose profile either supports or militates against active travel; the auditor felt that there were fewer factors supporting active travel in Dundee than did the advisor. The compilation of the audit report was done in parallel to the validation of the assessment. As each indicator was assessed, a description of proof and reason for choosing / agreeing on a certain level was written in the report. New descriptions were written rather than verification being copy and pasted from the assessment report. Any changes were presented to the working group and the final descriptions were checked with the advisor and main contact person in the city.

3. The results

3.1 Overall result

Overall, the City of Dundee achieved a total EcoMobility index score of 74% - which resulted in a recommendation for a Bronze award. For the different categories the city achieved:

- Enablers: 73 % of the maximum score.
- Transport system and services: 72 %;
- Results and Impacts: 76 %.

A more detailed analysis of the three category scores is provided below.

3.2 The Enablers: internal municipal processes

Dundee scored relatively high on Public participation (80%), which is reflective of the extent to which they actively encourage public participation in transport decision making. For all other indicators, Dundee scored over average (60%) which whilst commendable, also highlighted scope for improvement in these areas.

3.3 Transport Systems & Services: the measures taken

Dundee scored maximum points for PT coverage, which is reflective of the extensive bus network operation within the city boundaries. For other bus related indicators (speed, affordability and ease of use) they scored relatively lower, particularly in relation to cost, although this is likely to be due to the fact that fares are typically higher in the UK by EU standards and wages are typically lower in Dundee from the UK average. The usability of Dundee buses was let down due to the lack of integrated fares (two companies operate buses within the city) and lack of fare information and ticketing purchasing options.

They also scored highly on 'Accessibility to services' and 'Planning of new areas' (both 80%). This was due to Dundee's efforts on ecomobile oriented and accessible land use planning. They also scored highly on information systems due to the high levels invested by the city (RTPI at bus stops) as well as the quality of information provided by the local bus operators. Similarly for both accessibility for people with reduced mobility and walking conditions, Dundee scored

highly, both 80%. This again is due to the high levels of investment made by the city in improving walking areas and public transport facilities, the latter in conjunction with the local public transport operators.

They did score relatively less on mobility management services, parking policy, car free/low speed zones and cycling conditions, all of which pulled down the overall score for this indicator grouping, although, highlighted the need for improvement in these areas.

The lowest score related to green vehicles, although, this was in part due to the city been unable to find evidence related to public ownership of low emission vehicles, as such data is not currently available.

3.4 The Results & Impacts: the long term effects

Dundee scored highly on 'Overall safety' and 'Greenhouse gasses', both 100%, and to a lesser extent to 'Energy efficiency'. Prior to undertaking the audit the working group expected that Dundee would do poorly on these environmental measures as cars are still a dominant mode of transport. However it transpires Dundee has performed well in European Terms in this regard which was unexpected -

"I think that there was an assumption or view that other European countries are more 'green' than us in Scotland... but this is not the case" Ewan Gourlay, Traffic and Transport Team Leader, Dundee City Council

For 'Modal share' and 'PT trips per capita', whilst Dundee scored above average on both indicators, the two areas were highlighted as areas where the city could make improvement. The lowest scores related to 'Safety- vulnerable road users' and 'Local air quality'. Both of these indicator scores were discussed in some depth at the audit, and in both cases whilst the scores were accepted, it was noted that it would be hard for many city to achieve high scores on these indicators which may suggest a need to revise the scoring criterion.

It should be noted that it was not possible for the auditor to collect independently data to verify the results and impacts data presented by the city. However, a check of calculations was carried out and it was found that the scores provided in the assessment report were correct on the basis of the survey, safety and air quality monitoring data provided.

4. Evaluation

Overall the whole Ecomobility process was viewed very positively by Dundee. This is best explained by Dundee representatives themselves:

"At present the Council has many processes and methods on how it plans, finances and implements improvements to the transport system in the city. There is no clear method of making an assessment of how well (or not) the city is doing in EcoMobility terms. The main benefit for the council is that this gives an analysis of how the city is performing and gives a steer on what to do to improve... This assessment can contribute substantially to future Local/ Regional Transport Strategy and delivery." Neil Gellatly, Head of Transport, Dundee City Council

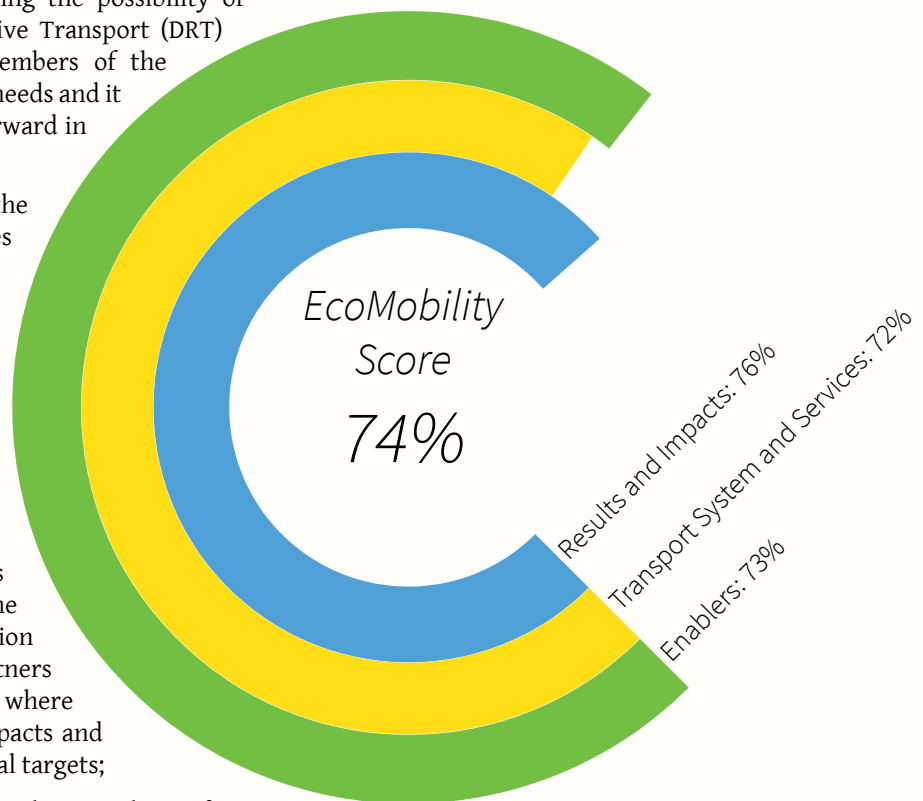
The EcoMobility framework gives a robust process which brings together a working group with different expertise that can give a better picture of what is actually occurring in the city. Staff sometimes focus on one or two aspects of transportation with little realisation on its wider impacts to EcoMobility. The collaborative nature of the working group gave a better understanding of how the city was performing in EcoMobility terms. The additional benefit for the Council is that the EcoMobility process also gives an indication of how the city compares with other cities in the EU. This gives the officers and the local politicians a better understanding of where the city stands which can also be used as a lever or tool to obtain additional resources for the areas where the city is weak. Ewan Gourlay, Traffic and Transport Team Leader, Dundee City Council

Based on the weaknesses identified in the EcoMobility audit, Dundee has formulated an action plan focussing on the following areas:

- The Council has been considering the possibility of introducing a Demand Responsive Transport (DRT) service to assist vulnerable members of the community to meet their travel needs and it is proposed that this is taken forward in the near future;
- Where appropriate consider the introduction of 20 mph zones in the city although this will require support from the Police and, where accidents and speed justify, speed reducing measures;
- Overall Road safety in the city is good, although accident statistics have indicated that vulnerable road users are a concern, The Council with its partners should consider the development of a Road Safety Action Plan, this would allow all partners to focus their efforts in areas where they will achieve the largest impacts and improvements to achieve national targets;
- It is acknowledged that there are low numbers of greener vehicles on the roads of Dundee - although the Council has little impact on the purchase and registering of greener vehicle it can show leadership and encourage their uptake - the Council will consider purchasing and using greener vehicles where appropriate for its functions, to benefit air quality, and will also install electric charging points in car parks to encourage the uptake the use of electric / hybrid vehicles; and
- To improve air quality in the city requires the Council to take forward actions in the air quality action plan that has been developed for the Council.

5. Sources of information

Dundee was able to provide high quality evidence for the majority of indicators based on the guidance provided in the Ecomobility SHIFT advice documents and also via advice from the external advisors. In part the ease to which required data was produced was due to the composition of the working group.



About EcoMobility SHIFT

EcoMobility SHIFT is a total quality management scheme for cities, with an assessment and an external audit. During the assessment stage, 13 criteria are assessed using 28 indicators. A municipal stakeholder group evaluates the effectiveness of a city's sustainable transport policies and actions in terms of environment, accessibility, safety and equity. It is the first scheme of its kind to include all of the following three elements: the policy environment (Enablers), the actual measures (Transport Systems & Services) and the effects of these on the transport system (Results & Impacts). For each indicator, descriptions of performance levels on a scale of 1 to 5 help the group to discuss and decide using quantitative and qualitative information. The resulting 28 levels of municipal performance are given a weight and grouped into criteria before being added up to an EcoMobility score.

For more information on EcoMobility SHIFT:

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