

ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE

AGENDA

**Meeting to be held in the Civic Centre, Committee Room No. 1, on
Monday, 2nd April, 2012 at 5.30 p.m.**

Membership

Cllrs Bonallie, E. Gibson, Heron, Lauchlan, G. Miller, Porthouse, D. Richardson, I. Richardson, Scott, Tye, and A. Wright

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Report of the Chief Executive (copy attached)

E. WAUGH
Head of Law and Governance.

Civic Centre,
SUNDERLAND.

23rd March, 2012

At a meeting of the ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE held in the HETTON CENTRE on MONDAY, 27TH FEBRUARY, 2012 at 5.30 p.m.

Present:-

Councillor Miller in the Chair

Councillors Bonallie, E. Gibson, Heron, Lauchlan, D. Richardson, Scott and A. Wright.

Apologies for Absence

Apologies for absence were submitted on behalf of Councillors Porthouse, I. Richardson and Tye.

Minutes of the Last Meeting of the Environment and Attractive City Scrutiny Committee held on 16th January, 2012

Councillor A. Wright referred to Page 2, Paragraph 3 of the minutes and stated that it should read 'centralising/decentralising local government procurement'

1. RESOLVED that the minutes of the last meeting of the Committee held on 16th January, 2012 be confirmed and signed as a correct record subject to the above amendment.

Declarations of Interest (including Whipping Declarations)

There were no declarations of interest.

Change in Order of Business

The Chairman proposed the Committee consider Item 6 first as witnesses for Item 5 were delayed.

2. RESOLVED that Item 6 be considered first.

Low Carbon Vehicles in the Delivery of Public Services Review 2011/12: Fleet Carbon Reduction Analysis

The Chief Executive submitted a report, supplementary report and powerpoint presentation (copies circulated) to provide the Committee with background information in regard to the fleet carbon reduction analysis being undertaken for the City Council by Cenex.

(For copy reports – see original minutes).

Robert Anderson, Programme Manager and Brian Fothergill of Cenex presented the report and were on hand to answer Members queries.

Councillor T. Martin referred to the testing carried out on the electric vehicles and enquired as to what gradient these were performed on.

Mr. Anderson advised that the simulation pack did not use gradients but it was something that they could build in to the programme.

In response to Councillor T. Martin's enquiry, Mr. Anderson advised that vehicle performance was not affected by state of charge.

In response to Councillor Heron's enquiry, Mr. Anderson advised that the tests were performed based on the vans carrying a load of 500 kg and the more weight carried would increase the drain on the battery.

Councillor Heron commented on the costliness to replace the batteries and the drop off effect with electric vehicles, the length of the journey was not the prime factor, but the weight and inclination were, so there was a need for a cost analysis on this as well as omissions.

Mr. Anderson advised that the issue of battery life was something being looked at by manufacturers as new technology always created concerns over battery longevity and the need for replacement.

Mr. Fothergill referred to the second life of batteries, advising that they would still have worth financially, after being used on a vehicle, therefore they were an investment in one respect.

The Chairman commented that they were beginning to ask better more informed questions now and the Committee had carried out a great deal of work. There was a need to find a model best suited to Sunderland City Council specifically and felt that there would be strong opportunities to use the batteries second life.

The Chairman also commented that he was impressed with the level of detail contained within the excellent report which had identified an economic benefit of using electric cars, if not vans at the present moment.

Les Clark, Head of Street Scene, wished to echo the Chairman's comments on the report which he felt would provide a useful tool to make decisions on electric vehicles and had given an indication of where the Council could start. Although the line of enquiry may be narrow, there was a clear indication of scope to start small and grow and adapt over time.

The Chairman commented that the report would mean the Cabinet were better placed to make an informed decision when the time came and thanked Mr. Anderson and Mr. Fothergill for their presentation.

3. RESOLVED that the report be received and noted.

Low Carbon Vehicles in the Delivery of Public Services Policy Review 2011/12: Low Carbon Sector

The Chief Executive submitted a report (copy circulated) to provide the Committee with information in relation to the low carbon sector in the region. The report would contribute to the evidence for the Committee's policy review for 2011/12, Low Carbon Vehicles in the Delivery of Public Services.

(For copy report – see original minutes).

The Chairman introduced Mark Nailis of Inova Power who provided a presentation on the Hydrogen and Fuel Cell Co-operative and Chris Baylis of Avid Vehicles which produced specialist electric vehicles.

In response to Councillor T. Martin's enquiry, Mr. Baylis advised that the vehicles were pure 100% electric but they would be looking to work with developers on range extenders using petrol/diesel to top up the battery if needed.

Mr. Nailis referred to the earlier Cenex presentation and enquired if their findings had been carried out during the winter period, when heaters and such like would be used in vehicles. Mr. Fothergill advised that data had been collected on both summer and winter cycles.

The Chairman commented that the heating issue had been raised before.

Councillor T. Martin referred to the Hydrogen Technology and enquired if there were uses for the inert material and possible environmental consequences.

Mr. Nailis advised that the residue could be resold at £1,000 per tonne.

Councillor Scott enquired if range results differed between large and small vehicles through using the heaters, lights etc. Mr. Baylis advised that the range was dependent on the discharge rate.

In response to the Chairman's enquiry over Inova Powers links with Smiths Electrics, Mr. Nailis advised that they had been approached for the supply of 30 vehicles and they would be supplying some technology for Smiths to fit. They were also in talks with Nissan about range extension and removing anxieties.

Councillor Heron commented that he was glad to see the problems experienced over hydrogen vehicles being tackled.

Mr. Nailis advised that BMW had almost perfected the hydrogen vehicle and if could perfect, would have a winning project. Mr. Nailis also commented that the next EU laws may 'cripple' some car companies and Inova Powers products could help.

Councillor Heron enquired if there would be a single connector for charging vehicles.

Mr. Fothergill advised that there would be a standard connector with the infrastructure across the North East being upgraded to type 2 connectors.

The Chairman thanked Mr. Nailis and Mr. Baylis for their presentations.

4. RESOLVED that Members received and noted the report.

City Centre Quick Wins Proposed Fawcett Street Improvement Project

The Deputy Chief Executive and Executive Director of City Services submitted a report (copy circulated) to update the Committee on the proposed public realm, traffic and highway improvements to Fawcett Street.

(For copy report – see original minutes).

Mr. L Clark and Kevin Johnson, Principal Landscape Architect presented the report who advised that the paving at Fawcett Street had not lasted and had suffered from the cleaning machines which use the street. There was a need for the best materials such as granite from Spain/China in order to move forward and they were looking at a more contemporary design, but due to the size of Fawcett Street, this would also be expensive.

The Chairman commented that it was important to improve Fawcett Street and in the correct way as residents expected it to have a certain status. The Chairman also commented that this had been an ongoing issue for some time and a number of visits to the area had been carried out by this Committee.

Councillor A. Wright commented that he believed Fawcett Street to be a critical link between Sunnyside and the City Centre and there was a need for something to encourage people to visit the area so anything we can do to improve Fawcett Street would be a step in the right direction.

Councillor E. Gibson commented that there were a number of beautiful buildings on Fawcett Street, some of which were privately owned and enquired if anything could be done to work with these owners to improve the buildings.

The Chairman advised that the former Head of Planning had found it troublesome in trying to work with the private owners but requested that Mr. Clark investigate the findings on the matter further.

Councillor Heron commented that the traffic build up and the island on Burdon Road needed to be looked at. There was also the need to try and connect the two shopping areas through the middle and give consideration to improving the side streets as we needed to link up the City Centre better than it is at present.

Mr. Johnson advised that Fawcett Street needed revitalisation and removal of bus routes could mean using granite surfaces but if they were to remain, then tarmacing the area may be the best solution.

The Chairman commented that a City's Legal Sector usually provided a thriving area, yet Fawcett Street appeared to be more of a barrier than a resource.

Councillor Scott commented that it was a main thoroughfare and needed to be improved. Councillor Scott referred to a past trip to Cardiff to see their City Centre Management Team and improvements they had made and queried why our city's team were not following their example. Councillor Scott felt we needed to knuckle down with the appropriate Officers, rather than 'penny pinching' and tackle this long standing issue once and for all.

The Chairman commented that Fawcett Street had been lacking and starved of infrastructure but now the Council was in control of such sites as Vaux, it was hoped we could move forward.

Councillor A. Wright sympathised with Officers situation as he felt there was no short term solutions and that the pressure to develop the Vaux site could damage the growth of Fawcett Street and plans needed to be made now for future years when we could get back to a 'boom time economy'.

Councillor T. Martin felt that there was a severe lack of disabled parking/general parking on Fawcett Street, there was a need to simplify the taxi routes and enhancement at ground level of the area would be brilliant.

Councillor Heron commented that development of the Vaux site should help the surrounding areas as it would bring more people into the City but we still needed to keep the infrastructure of the City Centre moving forward.

Colin Clark, Head of Planning and Property commented that he empathised with much of what the Committee had raised and advised that a great deal of effort was going into the future planning of the City Centre, land acquisition, bringing in businesses and their spending power to help regenerate the City Centre.

They were seeking to create a business district, the likes of which we haven't seen before, but this would take time and the difficulty we face is the current economic climate which was not conducive to bringing businesses forward, but work was ongoing.

Councillor D. Richardson commented that the new Court buildings should attract legal business and barristers for example.

Mr. Colin Clark advised there were a number of plans being worked on such as Courts, Hotels, new public spaces, these were part of a whole host of opportunities being worked on by Officers during a difficult time and we had to keep planning for the future.

Councillor Scott enquired as to why the Doxford Park business could not have been brought into the City Centre instead.

The Chairman advised that funding had not been available for City Centre development but had been in place for out of town developments at that time.

The Chairman commented that he felt progress would not advance until developers knew what was happening to the Vaux site as projects such as Holmeside Triangle and Farringdon Row had stalled due to the uncertainty of Vaux and it was unfortunate that now we had control of the site we had entered an economic downturn.

The Chairman referred to paragraph 6.1 of the report and hoped that consultation would start this year when capital funding became available.

Les Clark advised that they were hopeful, should the funding be agreed.

5. RESOLVED that the report be received and noted.

School Travel Plans and Local Sustainable Transport Fund Key Components

The Chief Executive submitted a report (copy circulated) to advise the Committee of the role of School Travel Plans (STP) and the Local Sustainable Transport Fund (LSTF) Key Components, that assists with the overall approach, to sustainable school travel in Sunderland.

(For copy report – see original minutes).

The Chairman wished to thank Councillor T. Martin for attending the meeting as a representative of the Children, Young People and Learning Scrutiny Committee.

Les Clark presented the report and was on hand to answer Members queries.

In relation to paragraph 2.1 of the report, Councillor D. Richardson enquired which six schools had not taken part in the School Travel Plan project and stressed the need for them to participate in the scheme.

Mr Clark advised that he would feed back on the schools which had not taken part in the project.

In response to Councillor E. Gibson's query, Mr. Clark advised that there was a piece of work ongoing for a standard sound to be introduced on electric vehicles to help road safety in such environments close to schools.

In response to Councillor Scott's enquiry, Mr. Clark advised that the Authority had an extensive Health and Safety Programme in schools on educating children in road safety.

The Chairman commented that he was glad to see inconsiderate parking outside of schools being looked at as it was a real and growing issue. The Chairman also informed of a recent visit to a primary school in which he had witnessed the parking issues first hand.

Councillor T. Martin commented that people needed to be aware of their actions when taking children to school.

Councillor Heron felt that parents needed educating over how to safely drop their children off at schools.

The Chairman commented that he was in full support of this and felt we had to try and find a way to influence parents to act appropriately.

Councillor Scott commented that issuing warning letters before fining parents did help reduce instances of inconsiderate parking but unfortunately we did not have the capacity to enforce this at present.

6. RESOLVED that the report be received and noted with Members supporting the implementation of LSTF in Sunderland.

Work Programme 2011-12

The Chief Executive submitted a report (copy circulated) which was attached for Members' information, the current Work Programme for the Committee's work during the 2011-12 Council year.

(For copy report – see original minutes).

7. RESOLVED that Members noted the information contained in the Work Programme.

Forward Plan – Key Decisions for the Period 1st February, 2012 – 31st May, 2012

The Chief Executive submitted a report (copy circulated) to provide Members with an opportunity to consider those items on the Executive Forward Plan for the period

1st February, 2012 – 31st May, 2012 which related to the Environment and Attractive City Scrutiny Committee.

(For copy report – see original minutes).

8. RESOLVED that the Committee had considered the Executive's Forward Plan for the period 1st February, 2012 – 31st May, 2012.

The Chairman thanked everyone for their attendance and closed the meeting.

(Signed) G. MILLER,
Chairman.

At an Extraordinary Meeting of the ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE held in the CIVIC CENTRE on TUESDAY, 13TH MARCH, 2012 at 5.30 p.m.

Present:-

Councillor Miller in the Chair

Councillors E. Gibson, Lauchlan and Porthouse.

Also in Attendance:-

Councillor Tate

Apologies for Absence

Apologies for absence were submitted on behalf of Councillors Bonallie, Heron, D. Richardson, I. Richardson, Scott, Tye and A. Wright.

Declarations of Interest

There were no declarations of interest.

Low Carbon Vehicles in the Delivery of Public Services Policy Review 2011/12: Draft Final Report

The Chief Executive submitted the Policy Review report (copy circulated) detailing the evidence, research and conclusions drawn throughout the review process and asked the Committee to comment on this for relevance, clarity and accuracy.

The Policy Review into low carbon vehicles in the delivery of public services had clear links to the Council's Strategic Priorities of Attractive and Inclusive City and Prosperous City. The Review also links to the Council's Corporate Improvement Priorities, Delivering Customer Focused Services and Efficient and Effective Council.

(For copy report – see original minutes).

Helen Lancaster, Scrutiny Officer presented the report and requested Members feedback.

The Chairman commented that he had not been overly enamoured with the choice of Policy Review at the beginning but was now most glad to have been convinced to pursue it as this Review had turned out to be a valuable piece of work.

The Chairman wished to thank Councillor E. Gibson for her contribution and attendance at every meeting/site visit arranged and commented that there had been great engagement with external partners and he was very impressed with the response received.

The Chairman also commented that we now had an evidence base to show value in changing our fleet to electric cars, if not vans at the present time.

Councillor E. Gibson commented that she had been unsure over the Review also as she did not have a great knowledge of the subject, but felt as the process had moved along she had learned a great deal.

In relation to Page 13 of the report, Councillor Porthouse enquired if the key facts and figures were for the UK and if we could get Sunderland specific statistics.

Ms. Lancaster advised that the figures were for the UK and she would amend the final report to show this and would also look into obtaining Sunderland specific statistics.

Neil Cole, Lead Policy Officer for Planning advised that DEFRA used to collate emission data and the information was released in July every year but was two years behind. This could also be broken down regionally.

Ms. Lancaster commented that if the data was available in July, she could provide Councillor Porthouse with this separately or she could put the most current available information in the final report.

Councillor Porthouse referred to page 47 of the report and Sunderland's aim to reduce its emission by 29% by 2020 and 80% by 2050, commenting that we needed to know what our emissions were now so we had a starting figure to see how much we had to reduce by.

Councillor Porthouse also commented that he wouldn't object to the purchase of a couple of vans now to carry out tests.

Ms. Lancaster commented that during a recent visit to SASMI, they had advised that as soon as the new Nissan van was released, cost should reduce, so the view at the present time was to wait.

The Chairman referred to Recommendation (f) on page 43 of the report, advising that the 'watching brief' on developments of technology for low carbon vehicles would include vans.

Councillor Porthouse suggested that we purchase a couple of vans now, even if they weren't financially viable now, to help support the industry and wished to congratulate Officers on the report overall.

Ms. Lancaster advised that the report would come back to Committee once it had been to Cabinet so that Members could have further input.

Councillor Lauchlan also wished to echo Members comments that he had not been keen on the topic for the Review originally but had become more involved/informed and had enjoyed the work over the year.

The Chairman commented that this was a serious issue and he was pleased no one could say the Committee had paid 'lip service' in trying to achieve our targets.

Councillor Tate commented that the Fleet Manager would now be more informed to proceed on the way forward and with the cost of diesel rising and the positive effects electric vehicles would have on the environment, this would bode well for future generations.

1. RESOLVED that the Environment and Attractive City Scrutiny Committee had taken evidence from a variety of sources to assist in the formulation of a balanced range of recommendations. The Committee's key recommendations to the Cabinet were outlined below:-

- (a) that the Scrutiny Committee be informed of the outcome of the Fleet and Transportation Review and progress in regard to implementation;
- (b) that the Council considers implementing appropriate targets for the replacement of its current fleet cars with electric counterparts based upon the findings and recommendation of Cenex with a view to revisiting the cost benefit analysis for larger vans as capital costs change;
- (c) that the Council considers an electric car pool system for its staff and that the appropriateness of extending this to the wider community is investigated;
- (d) that the Council commissions a comprehensive training programme for drivers should electric vehicles be utilised within the fleet;
- (e) that the impact of efforts made to establish the city as a 'Low-Carbon City' be continually monitored to ensure tangible benefits to the city;
- (f) that the Council considers a range of innovative methods of reducing carbon emissions from all forms of transport and keeps a 'watching brief' on the developments of technology for low-carbon vehicles;
- (g) that the Council explores way in which to encourage partners to explore the use of low-carbon vehicles where appropriate;

- (h) that the Council collaborates with NEPO to present the business case to the region's local authorities and other public sector bodies, to gain the level of commitment required to progress this agenda;
- (i) that NEPO considers undertaking further research and analysis to ensure there is a clear business case for regional procurement;
- (j) that any procurement, whether regional or the Council acting as an individual organisation, maximises the opportunities available to local suppliers; and
- (k) that the Committee received specific progress updates on the improvements to public transport in regard to reducing carbon emissions as part of wider annual updates given by Nexus.

Sunderland City Council Local Development Framework: Annual Monitoring Report

The Deputy Chief Executive submitted a report (copy circulated) to inform the Committee of the Council's Local Development Framework Annual Monitoring Report (AMR) for 2010/11.

(For copy report – see original minutes).

Mr. Cole presented the report and was on hand to answer Members queries.

The Chairman referred to the Authority's performance on waste, which he believed was phenomenal and showed the City's dedication to recycling with the landfill disposal dropping down to 66%. This was fantastic and he looked forward to seeing those figures reduce further in the future and we should be proud of our performance.

The Chairman also referred to the paragraph on Renewable Energy and enquired if there were any plans in the pipeline to reach the 22MW capacity target.

Mr. Cole advised that there were plans which could not be disclosed at present.

In response to Councillor Porthouse's enquiry as to where the remaining turbines were situated, Mr. Cole advised that he did not have the details at hand. The Chairman advised that the report mentioned 'planned and installed' so not all turbines were actually in operation yet.

Councillor Porthouse commented that he had recently passed a property which had solar panels installed, this had appeared unsightly and suggested this could be a topic for a future Policy Review.

The Chairman commented that the Monitoring Report had improved year on year and wished to thank Mr. Cole for bringing it to the Committee.

2. RESOLVED that the Committee endorse the Annual Monitoring Report.

Sunderland City Council Local Development Framework: The Community Infrastructure Levy

The Deputy Chief Executive submitted a report (copy circulated) apprising the Committee of the background to the Community Infrastructure Levy (CIL) as a mechanism to secure contributions from developers towards new infrastructure. The report provided background as to how CIL would be developed in Sunderland.

(For copy report – see original minutes).

Councillor E. Gibson raised concerns over the possibility our CIL money could be used for projects outside of Sunderland and commented that it was worrying we would not know who controlled the money.

Mr. Cole advised that it was possible the Area Regeneration Boards could allocate the funds.

Councillor Porthouse queried the requirements of applications in terms of size that would have to pay CIL as he believed this should be aimed more at developers than residential applications.

Councillor Porthouse also commented that these costs would ultimately be passed on to the price of new developments/homes and agreed with Councillor E. Gibson's concerns in relation to CIL money being used outside of Sunderland.

The Chairman also echoed Members concerns that the monies could be pooled and who would make the decision on where it was distributed, whether this would be a Member decision or delegated to Officers. The Chairman also commented that at least with Section 106 money, there had been a semblance of funding going towards the particular Ward in question.

Mr. Cole advised that Member involvement would be fundamental to the process.

The Chairman commented that if more income could be generated through the levy, then fine, as it could prove useful so long as Members had an input.

Councillor Tate commented that it needed to be both Members and Officers that made the decisions.

4. RESOLVED that the report be received and noted.

The Chairman thanked everyone for their attendance and closed the meeting.

(Signed) G. MILLER,
Chairman.

ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE

2 APRIL 2012

LOW CARBON VEHICLES IN THE DELIVERY OF PUBLIC SERVICES 2011/12: FINAL REPORT

REPORT OF THE CHIEF EXECUTIVE

Strategic Priority: SP5 - Attractive and Inclusive City

Corporate Priorities: CI01, CI02, CI03, CI04

1. PURPOSE OF THE REPORT

- 1.1 This report provides members of the Scrutiny Committee with the final report for its Policy Review, Low Carbon Vehicles in the Delivery of Public Services (**Appendix 1**).

2. BACKGROUND

- 2.1 At its meeting on 13 June 2011 the Committee agreed to focus on Low Carbon Vehicles in the Delivery of Public Services as the Policy Review for 2011/12 and agreed the aim of the review and terms of reference at its meeting on 25 July 2011.
- 2.2 The Committee received a wide range of evidence from September 2011 until February 2012, both through its formal meeting and during a range of task and finish activities which were very well attended by members.
- 2.3 At an extraordinary meeting on 13 March 2012 members of the Scrutiny Committee received the draft final report for the Policy Review, Low Carbon Vehicles in the Delivery of Public Services.

3. CONCLUSION

- 3.1 The Scrutiny Committee is presented with a final draft copy of the policy review document, for comment and amendment with the aim of agreeing the report for presentation and approval by Cabinet.

4. RECOMMENDATION

- 4.1 That the Environment and Attractive City Scrutiny Committee agree the final report and that it be presented to the Cabinet for approval at its meeting of 20 June 2012.

5. BACKGROUND PAPERS

- Outlined in the draft Low Carbon Vehicles in the Delivery of Public Services Final Report

Contact Officer: Helen Lancaster, Scrutiny Officer
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APPENDIX A: ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE POLICY REVIEW 2011/12: LOW CARBON VEHICLES IN THE DELIVERY OF PUBLIC SERVICES – DRAFT FINAL REPORT

1. PURPOSE OF THE REPORT

- 1.1 This report provides the findings, conclusions and recommendations of the Environment and Attractive City Scrutiny Committee's Policy Review 2011/12: Low Carbon Vehicles in the Delivery of Public Services.

2. INTRODUCTION

- 2.1 On 13 June 2011, the Environment and Attractive City Scrutiny Committee agreed to conduct a scrutiny review into 'Low Carbon Vehicles in the Delivery of Public Services in Sunderland' for 2011/12 and at a further meeting of the Committee on 25 July 2011 it agreed the approach to the review and the terms of reference.

- 2.2 In order to ensure maximum value of the review the Committee decided to narrow the scope of its efforts within the agreed terms of reference to focus in the main on services delivered by the Council and public transport.

- 2.3 The approach to work planning for the Policy Review involved evidence received in the formal committee setting and task and finish activities. All members of the Committee were invited to all of the arranged activities. The advantages to considering evidence both within the formal committee meeting and off-site were seen to;

- (a) Enable the progression of the investigation more quickly and outside of the confines of the Committee's formal meetings; and
- (b) Allow for greater investigation of the issue by members.

3. AIM OF THE POLICY REVIEW

- 3.1 To consider the city's current and future plans for the utilisation of low-carbon vehicles in the delivery of public services.

4. TERMS OF REFERENCE

- 4.1 The agreed terms of reference for the review were:-

- (a) To examine the role and responsibilities of the local authority with regard to climate change and energy;
- (b) To consider national and European policy in regard to the use of low-carbon transport in the delivery of services;

- (c) To investigate the progress made to date and future plans in the Council and across partners in regard to the introduction of low-carbon vehicles to deliver public services;
- (d) To explore the financial and non-financial future implications of the increased use of low-carbon vehicles in the delivery of council services;
- (e) To consider appropriate targets for the introduction of electric vehicles into the Council's fleet.
- (f) To consider the extent of the council's role as a leader in the use of low-carbon vehicles to deliver public services in the city; and
- (g) To consider to what extent future technologies will enable the council and partners to increase the use of low-carbon vehicles.

4.2 Although the Terms of Reference refer to low-carbon technologies, it will become obvious throughout the Review that the Committee placed more of an emphasis on the investigation of electric vehicles in recognition of it as a key driver for growing the city's economy.

5. MEMBERSHIP OF THE SCRUTINY COMMITTEE

5.1 The membership of the Environment and Attractive City Scrutiny Committee consisted of Councillors Miller (Chair), A Wright (Vice Chair), Bonnalie, Heron, E Gibson, Lauchlan, Porthouse, D Richardson, I Richardson and Tye.

6. METHODS OF INVESTIGATION

6.1 The following methods of investigation were used for the Review:

- (a) Desktop research (including consideration of best practice from other local authorities and the private sector);
- (b) Consultation with residents of the city through the City Council's Customer Services Network;
- (c) Evidence from Julie Elliott MP, Sharon Hodgson MP and Bridgette Phillipson MP;
- (d) Evidence from Smith's Electric Vehicles
- (e) Evidence from the University of Sunderland's Automotive and Manufacturing Advanced Practice;
- (f) Evidence from Gateshead College's Skills Academy for Sustainable Manufacturing and Innovation;
- (g) Evidence from the City Council's Officers;
- (h) Evidence from Cenex; and
- (i) Evidence from the low-carbon vehicle sector.

7. FINDINGS OF THE ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE

7.1 Sections 8 to 14 outline in detail the findings of the Policy Review – Low-carbon Vehicles in the Delivery of Public Services.

8. SETTING THE SCENE

8.1 Climate change is an issue people are very well aware of; its continued and prominent presence in the media serves to remind us that it is one, if not the most serious environmental threat facing the world. The impact of climate change is, and will continue to be felt globally as temperatures steadily increase, sea levels rise and patterns of drought and flooding change.

8.2 Rising greenhouse gas (GHG) concentrations from human activity (such as burning natural gas, coal and oil) have been attributed to the rapid warming of the earth through their enhancement of the natural 'greenhouse effect'. The impact of climate change in the UK is likely to include rising temperatures; changes to sea levels; extreme weather; threats to the survival of plants and animals; increased disease and a reduction in the availability of a variety of foods.

Climate Change Act (2008)

8.3 In 2008, legislation passed in the UK introduced the first legally binding framework to tackle the dangers of climate change. The Climate Change Act created a new approach to managing and responding to climate change in the UK. Its two key aims were to:-

- Improve carbon management, helping the transition towards a low-carbon economy in the UK; and
- Demonstrate UK leadership internationally.

8.4 The Act contains many provisions to reduce the effects of climate change, including:-

- A legally binding target of at least an 80% cut in GHG emissions by 2050;
- A reduction in emissions of at least 34% by 2020;
- A carbon budgeting system that caps emissions over five-year periods, with three budgets set at a time, to assist with monitoring against the achievement of the 2050 target; and
- Powers for Government to require public bodies and statutory undertakers to carry out risk assessments and address the issues accordingly.

8.5 The latest data in regard to emissions highlights the extent of the task faced by the Government and the enormous risks to the UK, both financially and environmentally, should the target be missed. In 2009, there was a reduction in emissions of 9%, however this was largely attributed to the recession, rather than an indication of any real progress to implementing necessary changes and the progress update published by the Committee for Climate Change (CCC) in June 2011 reports an *increase* in economy-wide emissions of 2.9% for 2010 (largely attributed to the cold weather).

8.6 In March 2011 the Government published the Carbon Plan setting out the plan of action on climate change for domestic and international activity. The

Plan sets out department by department, actions and deadlines for the next five years; as would be expected the Department for Transport (DfT) is a key contributor.

Policy Drivers – Transport

8.7 The CCC is clear that domestic transport is a significant contributor to the UK’s emissions and therefore a risk to achieving the prescribed reductions in carbon emissions. In an annual report to Government in 2011, it called for a ‘step change’ to the pace in the development of decarbonising the transport industry over the next decade, in order for the UK to have any real impact in meeting its targets.

Key Facts and Figures

- **Surface transport emissions accounted for 22% of total CO2 emissions and 21% of GHG emissions in 2010**
- **Cars have the largest share of surface transport CO2 at 61%**
- **Surface transport emissions fell by almost 4% in 2009 remained at the same level in 2010 as they were in 1990**
- **New car emissions fell to 144.2gCO2/km in 2010**

Figure 1

The chart below gives a breakdown of surface transport CO2 emissions by mode in 2009:

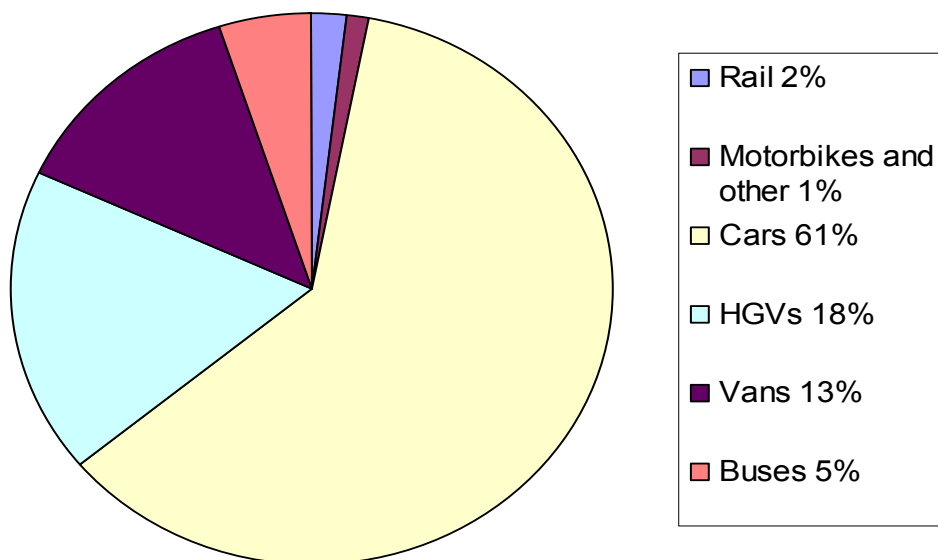


Figure 2

8.8 Cars and larger vehicles including those that are also used in the delivery of public sector services make up 97% of CO2 emissions.

- 8.9 All except 10 local authorities (98 per cent of all authorities) experienced a decrease in emissions from the road transport sector between 2008 and 2009. The North East is one of the better performing regions for the amount of carbon dioxide emissions it produces, particularly in regard to road transport which stands at 5 million tonnes (the highest being the South East at 19 million tonnes), however this can probably be attributed to regional economies, growth areas and population.
- 8.10 The table below highlights Sunderland's carbon emissions which have steadily declined since 2005. The city compares favourably with the rest of the North East Region in regard to road transport emissions, particularly when the results are given per capita (per head of the population).

Year	Industry and Commercial (kilotonnes of CO2)	Domestic (kilotonnes of CO2)	Road Transport (kilotonnes of CO2)	Total (kilotonnes of CO2)
2005	850	696	493	2,039
2006	841	681	491	2,013
2007	769	654	492	1,915
2008	728	648	475	1,851
2009	633	578	454	1,665

Figure 3

- 8.11 The Carbon Plan gives responsibility to the DfT to reduce emissions and thereby tackle climate change by:-

- (a) Supporting new low emission vehicle technologies;
- (b) Progressing high speed rail and rail electrification;
- (c) Developing a framework for sustainable aviation and shipping;
- (d) Promoting the use of sustainable biofuels;
- (e) Encouraging travel behaviour change to reduce emissions; and
- (f) Supporting technical standards for electric vehicle (EV) charging systems.

- 8.12 In accordance with these responsibilities the DfT implemented a multitude of strategies, projects and activities, collaborating across Government departments and with the public and private sectors. Some such initiatives include:-

- **Plug-In Car Grant**

- 8.13 The Government's Plug-In Car grant has been available to consumers for some time, giving a considerable discount on electric vehicles. At the

beginning of 2012, the Government announced funding to extend the Grant to vans which will offer up to £8000, or 20 per cent off the original purchase price, questions do however remain as to whether the Government has given enough support to attract consumers to purchase.

- **Plug-In Vehicle Infrastructure Strategy**

8.14 In 2011, the Office for Low-carbon Emissions (OLEV) published an infrastructure strategy. The strategy outlines the commitment to growing the market in plug-in vehicles due to the contribution they, and other low and ultra-low emission technologies, can make across the economic and environmental priorities of:-

- Climate change;
- Green growth;
- Energy security;
- Decarbonising the electricity system; and
- Air quality.

8.15 There is an assertion within the strategy that ultra-low emission vehicles are a major component in meeting the targets set out in the Climate Change Act.

- **Plugged-In Places Programme**

8.16 The Plugged-In Places programme is the key mechanism for the roll-out of recharging infrastructure in the UK and providing learning to inform the future development of a national network.

8.17 The Government initially accepted and expanded upon the previous government's policy in regard to low carbon vehicles by providing £30m in matched funding to support the development and delivery of an infrastructure of charging points. However in June 2011, it appeared to reduce its emphasis on charging points and is now promoting home re-charging as the preferred option. The view of manufacturers of electric vehicles is that this will not pose any significant problems to the growth of the electric car industry as most consumers would charge the vehicles at home the majority of the time; however Ms Elliott MP stated that:

'...this undermines the importance of giving consumers confidence they would not be caught out with a flat battery and no way of getting home'

8.18 Nevertheless, Sunderland now has 20 charging points across the city and there are plans for a further 13 (20 actual bays). The 300th charging post was recently installed in the region. To date, there are only 100 known users of electric vehicles across the North East; unfortunately the exact figure cannot be determined for Sunderland.

- **The Low-Carbon Vehicles Innovation Platform**

8.19 The Government's programme of research and development for low-carbon vehicle technologies is delivered through the Technology Strategy Board's Low-carbon Vehicles Innovation Platform (LCIVP). This was launched in

September 2007 and has delivered a number of research projects targeted at low and ultra-low vehicle technologies. The programme's aims are:-

- To reduce carbon emissions arising from vehicles in domestic and international markets;
- To accelerate the introduction of low-carbon vehicle technologies; and
- To help the UK automotive sector benefit from growing demand for low-carbon vehicles.

- **The Ultra Low-Carbon Vehicle Demonstrator Project**

8.20 An individual strand of the LCVIP is the Ultra Low-Carbon Vehicle Demonstrator Project. This is a large trial over 340 electric and plug-in-hybrid cars in eight locations around the UK. The trial will provide data on the real world use and performance of electric vehicles, driver behaviour and recharging issues to assist in the future roll out of electric cars. Sunderland City Council has three vehicles in its pool from this project, the Nissan Leaf, the Peugeot iOn and the Avid.

- **The Low-Carbon Vehicle Public Procurement Programme**

8.21 The Government's Low Carbon Vehicle Public Procurement Programme supports a trial of over 200 electric and low emission vans in a range of public sector fleets. One of the programme's van suppliers for phase one was Smiths Electric Vehicles, based in Sunderland. The trial is collecting data about the performance and usage of the vehicles which will help drive ongoing technological development; as well as providing an understanding of the existing capabilities of the vehicles. Last year, as part of this programme, the council introduced two Nissan Leafs for use as pool vehicles by Building Control and Parking Enforcement.

8.22 A full evaluation is expected from Cenex in March 2012, however quantitative data from some of the local authorities involved in the programme is referenced in section 9. Phase two of the programme will commence from April 2012, with only one of the original manufacturers being chose to provide the low carbon vehicles (which are hybrid). Up to 500 vehicles will be made available to purchase through the programme. Whilst Phase one was restricted to Panel Vans, phase two has been extended to include Chassis Cabs, Dropsides and Tippers. Sunderland City Council has expressed an interest in being involved in this programme.

8.23 Although the Government has made a commitment to the low-carbon transport agenda, given the reductions in available monies some policy changes have already taken place in the latter part of 2011, and it is questionable how sustainable this will be in the Government's view in the longer term. The stage is now being reached whereby the Government requires a return on the heavy investment it has made; which won't happen until consumer demand increases and organisations across all sectors begin to seriously consider utilising the technology available. Any perceived reduction in Government support for this agenda could prove to be a negative factor in success.

The Local and Regional Context

- 8.24 As previously referenced, Sunderland are involved in a number of national initiatives and there are several other local and regional policy drivers and initiatives to consider as part of a review into low-carbon vehicles and it is important that this agenda is considered as part of a wider economic, financial and environmental picture for both the council and its partners, the city as a whole and the region.
- 8.25 Sunderland has made a firm commitment to reduce the city's carbon emissions by 80 per cent by 2050, along with an action plan to manage and reduce emissions over the coming years.
- 8.26 Several public commitments have been made by Sunderland to tackling climate change through the Nottingham Declaration (signed in November 2001); the EURO CITIES Declaration on Climate Change (signed in November 2008); and the EU Covenant of Mayors (signed in January 2009).
- 8.27 The Sunderland Strategy 2008-2025 details a commitment to reducing the city's transport carbon emissions by developing more sustainable modes of transport. This objective cuts across the key aims of prosperous city; attractive and inclusive city and healthy city.
- 8.28 The Sunderland Economic Masterplan is also a key policy driver for the city over a 15 year period. Aim 2 of the Plan is that Sunderland will be;
- 'A national hub of the low-carbon economy by using the opportunities offered by new low-carbon technologies to stimulate economic activity in Sunderland. This Aim emphasises the city's national potential and the need to showcase projects such as electric vehicles'.*
- 8.29 This will provide Sunderland with a platform to influence national policy and showcase electric vehicles and other low-carbon technologies. These opportunities should stimulate economic growth in the city and thereby promote the city; enhancing its reputation and attracting international investment.
- 8.30 The Local Transport Plan 3 (2011-2021) (LTP3), of which Sunderland sits within states that the intention in regard to climate change is;
- 'To reduce carbon emissions produced by local transport movements, and to strengthen our networks against the effects of climate change and extreme weather events'*
- 8.31 The LTP3 illustrates the scale of the task ahead for the region. By 2050 it must reduce road transport CO₂ emissions from a projected level of 5,591,032 tonnes down to 1,107,857 tonnes – less than a quarter of present-day levels. Emissions are actually predicted to rise over the period 2005-2050, if things remain as they are.
- 8.32 The recently formed North Eastern Local Enterprise Partnership (NELEP) sets out its vision to be;

'Recognised as the....European leader in the production of electric vehicles.'

- 8.33 In recognition of the progress the region has made to date, and in acknowledgement of the importance of a strong manufacturing base in the area to grow the economy, bringing investment and jobs, it sets out an ambition to be a leader in low-carbon industry, utilising its growing reputation in this field to secure greater competitive commercial advantage through new investments across a range of low-carbon technologies.

Fleet and Transportation in the City Council

- 8.34 The council operates a fleet of over 600 vehicles, involved in refuse collection, street cleaning, highway maintenance and in the delivery of many other services. A breakdown is given overleaf:

By Directorate	Vehicle Number	%
Chief Executive	26	4%
Corporate Services	5	1%
City Services	443	69%
Childrens Services	71	11%
HHAS	101	16%
Total	646	100%
By Vehicle Type	Vehicle Number	%
Bus	96	15%
Car	31	5%
light commercial vehicles with a maximum gross weight of 3.5 tonnes	277	43%
Large Goods vehicles over 3.5 tonnes	115	18%
Sweepers	20	3%
Tractors, Plant, platforms etc	107	17%
Total	646	100%

- 8.35 As part of the 'Sunderland Way of Working' the Fleet and Transportation Service is being reviewed. A Fleet Transport Manager was recruited in 2011 to manage a review of the transport and fleet activity across the 79 departments of the council where there is a budget for transport or fleet.
- 8.36 A research partnership has been formed between the council, the University of Sunderland, and other interested organisations to undertake a 3 -5 year research and development project. The areas of work are as follows:-
- Fleet analysis and assessment;
 - Fleet monitoring with tracking and telemetry;
 - Data collection and analysis to assess the efficiency of use and charging of the fleet;
 - High level analysis of vehicle costs and environmental impacts;
 - Assessment of maintenance schedules for the vehicles and availability/reliability;

- User/passenger satisfaction assessment; and
- Assessment of fleet and the development of a business case for improvements.

8.37 Part of this research project will be to pilot route optimisation software which will assess the current routes in delivering services such as refuse and recycling collections and determine whether these are the most effective in lowering emissions and reducing costs.

8.38 This project is longer term and has a wide remit that will consider all available low-carbon vehicle technologies, as well as a range of other methods to reduce carbon emissions. It will enable the council to take an informed, longer term decision around reducing carbon emissions in its fleet. The Scrutiny Committee's conclusions and recommendations from this Policy Review will be considered as part of this.

9. PARTNER TAKE-UP OF LOW-CARBON VEHICLES

9.1 Under the terms of reference for the review, the Committee had expressed a wish to discover to what extent public sector partners were utilising or planned to utilise low carbon vehicles; however in light of the already sizeable scope of the investigation it agreed to concentrate on public transport in light of its crucial position in contributing to reducing carbon emissions for the city and region.

Low-Carbon Public Transport

9.2 A key objective of the Economic Masterplan is to encourage public sector partners to utilise low carbon vehicles in the delivery of public services and the strategy will seek to extend the plans for low-carbon public transport. The Committee therefore sought evidence from Nexus and the city's main bus operators Stagecoach and Go NorthEast.

9.3 The Committee learnt that under European legislation, the positive environmental impact rating for public transport is based on a 'Euro' rating system, ranging from 0-5, demonstrating how much pollution any particular vehicle causes. Over three years there has been a substantial shift towards using greener, less polluting vehicles across Tyne and Wear, Figure 3 demonstrates the percentage of buses operating at the various Euro standards in 2010/11 from 2007/8. Progress is being made in larger numbers of buses as Euro 3 or higher:

'Euro' Rating of Tyne & Wear bus fleet

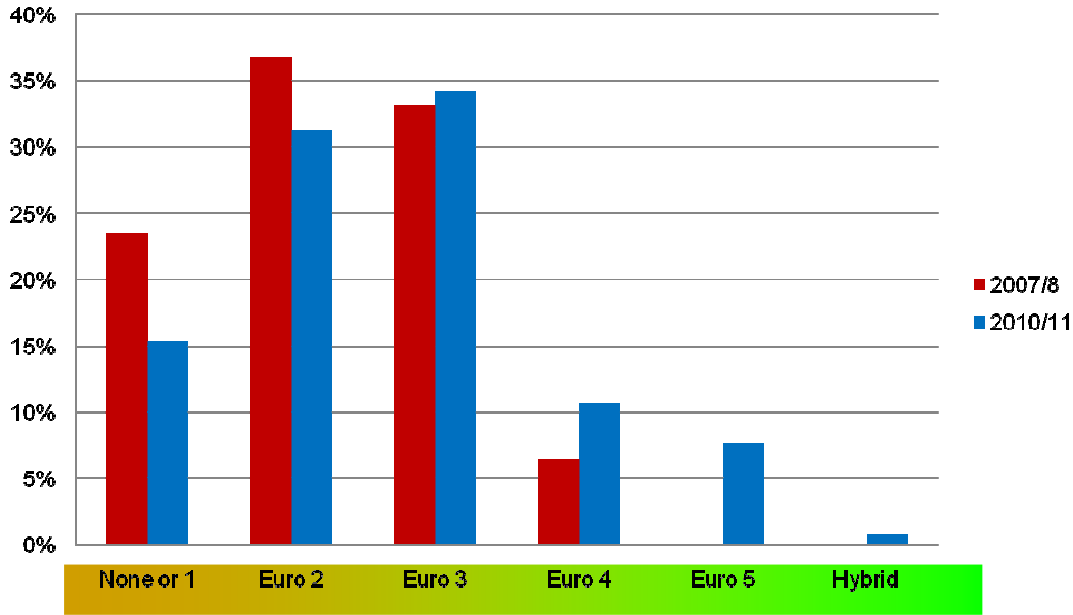


Figure 4

9.4 Figure 4 shows the distances travelled (by KM) of buses in Tyne and Wear and the relative CO2 emissions from the fleet:

Distances travelled and total CO2 emissions

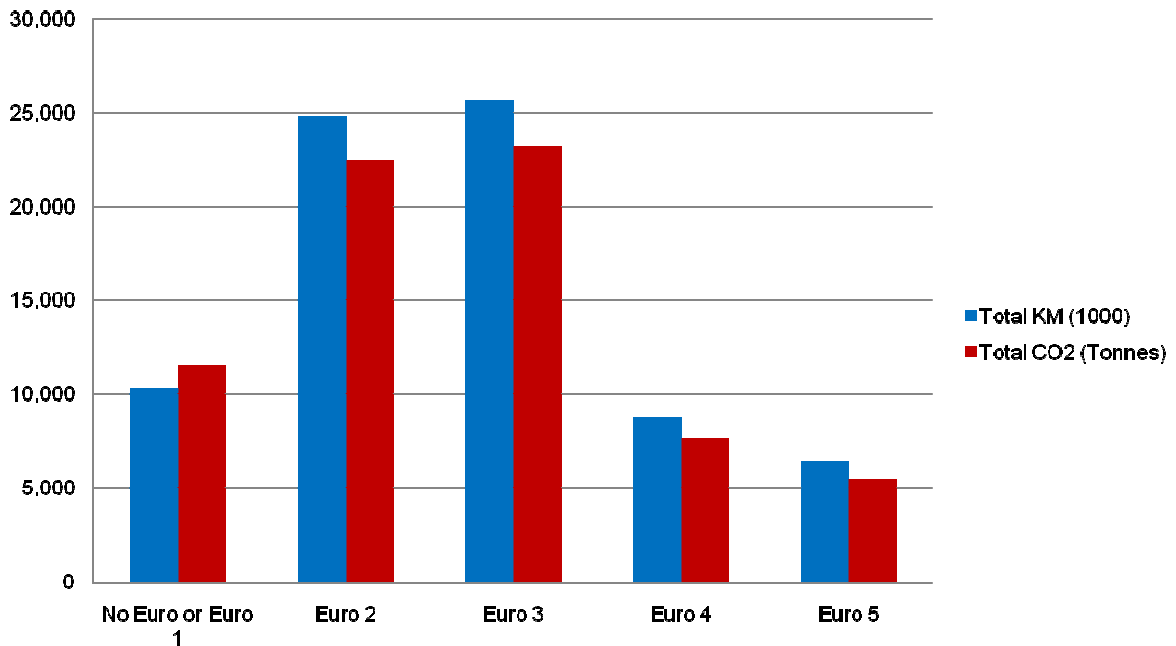


Figure 5

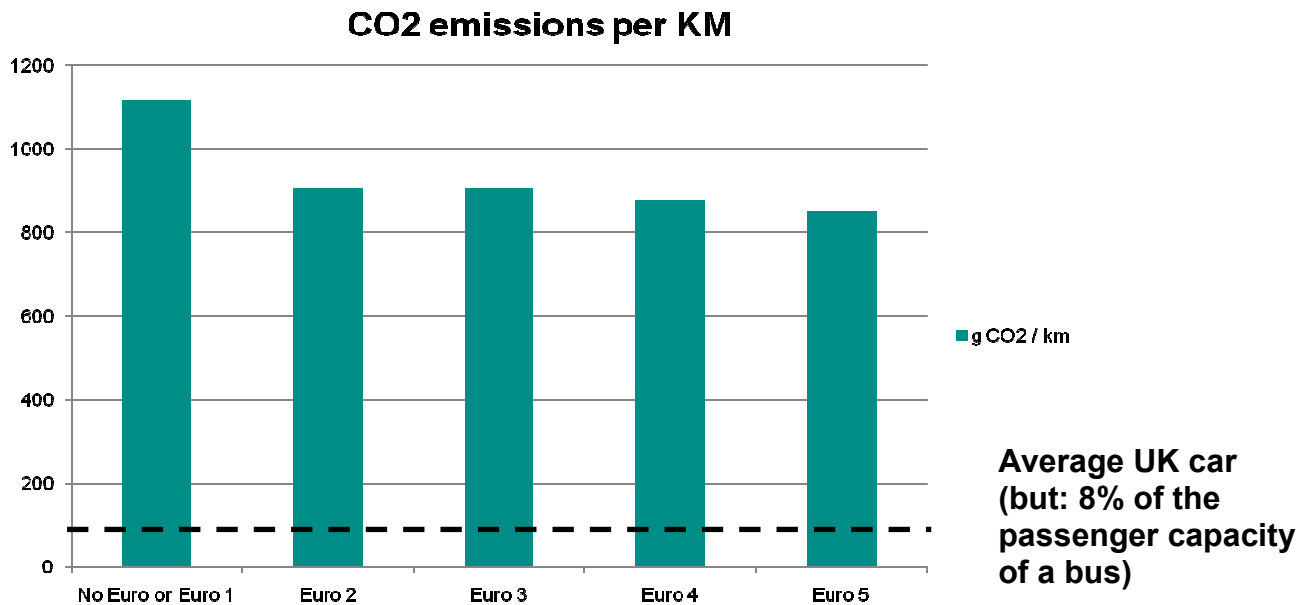


Figure 6

9.5 Figure 5 outlines bus CO2 emissions per KM. Clearly, CO2 emissions are significantly higher in comparison to cars. This is explained in part, by the loadings of buses and cars which have a significant effect on emissions; CO2 per passenger per KM is significantly lower. If a Euro 3 bus has 30 passengers each passenger will account for 30g CO2, compared to 25g CO2 in car.

Investment in Reducing Carbon Emissions

9.6 Go NorthEast and Stagecoach both reported a commitment to reducing carbon emissions. Within the last twelve months Go NorthEast has increased the quantity of Euro 5 vehicles and is now operating its first hybrid diesel/electric buses in partnership with Sunderland City Council, Nexus and the University of Sunderland. The 'Connect' service consists of two hybrid buses running between the University campuses, the city centre and the hospital. The initial performance on emissions from these buses has exceeded the specification.



9.7 Stagecoach have deployed 26 hybrid electric buses in Newcastle in 2011, as part of a £2.25m Green Bus Fund grant together with a capital investment of £5m of its own.

- 9.8 At present Go NorthEast's policy is to purchase new vehicles to the latest European standards with emissions to Euro 5 specification, and Euro 6 from January 2013. Fleet replacement timescales are lengthy, due to the high capital costs and the length of use needed to recover the investment. The emphasis this year and in future years will be for the Group to achieve a 20 per cent reduction in CO2 per passenger journey by 2015, through a combination of investment, new technologies, improving fuel usage, monitoring driver performance through vehicle telematics, reducing site energy and increasing passenger numbers.
- 9.9 Stagecoach continues to invest in modern vehicles with improved environmental performance. This investment is part of its drive to replace older vehicles and reduce the average age of the fleet. In 2012, 19 or so vehicles will be brought to the North East which will replace the older vehicles in the Sunderland fleet. This will positively impact both on the age profile and the emission standards of buses operating within the city.
- 9.10 The Committee was interested to note fleet replacement with higher Euro Standard buses was driven by legislation rather than cost as 'greener' vehicles actually use more fuel.

Alternative Technology/Fuels

- 9.11 Go NorthEast informed the Committee of its continuing investigation into technologies and alternate vehicle fuels which may provide low-carbon and more fuel efficient operation. Some examples of this would be gas buses (CNG), fuel cells, hybrids (diesel/electric), electric drives, bio-fuel 70/30 blend, fuel additives and ethanol. Trials are ongoing or about to start on a number of these initiatives within the wider Group.
- 9.12 Similarly, Stagecoach are involved in a number of projects testing more sustainable alternative energy sources, including 100 per cent of recycled biofuel manufactured from used cooking oil and other food waste; biomethane manufactured from waste; and hybrid electric engines. It is also investigating the potential of hydrogen fuel cells and other technologies.
- 9.13 Throughout discussions the Committee found that the high capital cost of all-electric/hybrid buses was deterring bus companies from purchasing these types of vehicles, however it was impressed with the range of innovative measures being taken to reduce carbon emissions from public transport in other ways.
- 9.14 The Committee also learnt from Smiles Engineering Emissions Control Systems that it was promoting the use of engine repowers to bus companies across the UK. The ability to remove a Euro 3 or below engine and repower with a Euro 4, 4+ or 5, gives bus operators huge potential in terms of providing an economical alternative to purchasing a brand new bus and comply with European legislation. Engine repowers can improve fuel consumption by up to 80 per cent, with the lowest improvement at 15-20 per cent.

Fuel Reduction

- 9.15 Go Northeast reported a significant reduction in CO2 of 3 per cent per passenger journey achieved since 2007/08 as a result of reductions in idling, more frequent tyre pressure checks, and driver monitoring. It now aims to reduce consumption by 2 per cent in the coming year by actively exploring measures such as:-
- Tyre technology for improvement in rolling resistance;
 - Wheel/axle alignment;
 - Automatic idle shut off;
 - Acceleration limiter fitment;
 - Vehicle performance matching route topography;
 - The installation of a spill free fuel system;
 - An evaluation of hybrid technologies and new engine cooling systems;
 - Reviewing fuel specifications and their energy content; and
 - Reducing vehicle weight through the application of composite materials - a long term process working with manufacturers.
- 9.16 The Committee was interested to note that akin to other low-carbon vehicles, the driver is a key component in maximising the performance of low-carbon technologies/vehicles. A lack of driver awareness can significantly lower the performance of a vehicle/increase fuel consumption. To address this, Go NorthEast have installed telematics equipment to buses to monitor engine idling, over-revving, harsh acceleration, harsh braking and speeding, recording individual performance. Stagecoach is also deploying a similar system to improve safety, reduce fuel costs and cut carbon emissions. The system monitors speed, braking, acceleration, lane handling and turning.
- 9.17 Stagecoach Group also reported investing millions of pounds (internationally) each year in the training of its bus driving team which includes its Safe, Skilled and Fuel Efficient Driving programme. All of the company's 14,400 drivers are required to complete the course as part of a Certificate of Professional Competence.

Increasing the Use of Public Transport

- 9.18 Go NorthEast alluded to the intention to grow passenger numbers as part of its strategy to reduce CO2 emissions per passenger, and the Committee continue to view this as a key driver in reducing carbon emissions from cars.
- 9.19 Ms Phillipson MP stated that:
- 'Introducing low-carbon buses will be a great help in reducing emissions from public transport. However, by incentivising and ensuring commuters use these services those reductions can be magnified'*
- 9.20 Whilst the remit of the Policy Review does not include an investigation of the preferences and behaviours of residents the Committee felt it important to note its agreement that the longer term goal must be to encourage the use of public transport by increasing its accessibility and suitability for commuters.

10. FINANCIAL IMPLICATIONS

- 10.1 Woven throughout the Policy Review is the thread of value for money in the context of significant budgetary pressures. The Committee therefore felt strongly that a robust analysis was required to provide sound evidence of potential costs and savings in order to strengthen the evidence of the Policy Review. It agreed to utilise its dedicated budget to commission Cenex to undertake a detailed and expert analysis of the implications and impact of the council adopting electric vehicles into its fleet.
- 10.2 Cenex is an independent, not for profit company. It was chosen by the Committee to undertake this work due to its leading expertise in understanding the market opportunities for low-carbon vehicles and fuels and the measures required to aid market transformation.
- 10.3 Cenex used its fleet carbon reduction tool to identify the costs and environmental benefits of operating electric powered cars and 3.5 tonne vans used for typical loading and unloading operations within the council's fleet operation. It sought to undertake a host of analysis including drive cycle creation (based upon the council's key stats in Figure 5); payload profile; vehicle and drivetrain model creation; and simulation.

Sunderland drive cycle key stats		
Distance	38	miles
Avg speed	20	mph
Town driving	96	%
A/B road driving	0	%
Motorway driving	5	%

Figure 7

- 10.4 The electric vehicles chosen as part of the analysis were the Smart ED (car) due to its similarity to the Nissan Leaf; and the Allied Boxer ED due to its being used by other local authorities for typical council services.
- 10.5 Two existing drive cycles were selected for analysis, the FTP72 cycle being the most representative of the council's vehicle usage. The Artemis Urban was also selected to show how heavy urban usage impacts on environmental and cost of ownership.

Electric Car Comparison Results

		Smart fortwo ED											
		Current Energy Prices						Linear Rising Energy Prices					
Mileage Scenario	Drive Cycle	90% Peak			90% Off Peak			90% Peak			90% Off Peak		
		Year 3	Year 5	Year 7	Year 3	Year 5	Year 7	Year 3	Year 5	Year 7	Year 3	Year 5	Year 7
Base mileage	SCC - FTP72	525	369	330	446	289	250	392	146	18	312	67	-61
	SCC - Artemis Urban	361	204	165	262	105	66	167	-119	-287	68	-218	-386
Increase mileage	SCC - FTP72	389	233	194	278	122	83	155	-134	-307	36	-253	-426
	SCC - Artemis Urban	159	3	-36	21	-136	-175	-182	-532	-765	-331	-681	-914

Figure 8

- 10.6 Figure 6 shows the costs and savings to the council with various differing factors. At the current mileage of 10,000 and 90 per cent peak charging time there would actually be an additional cost to the council of between £330 to £525 per vehicle; however small savings of £175 per vehicle can actually be achieved based on current fuel costs, 90 per cent charging off-peak over a 7 year period.
- 10.7 When rising diesel and electricity prices are taken into account cost savings are demonstrated from a £61 marginal saving up to a significant saving of between £426 and £914 per vehicle.
- 10.8 The Committee viewed any saving as being of benefit to the council, and therefore its residents. If the council chose to replace ten of its cars this could bring savings of between £2,530 and £6,810 over a five year period and £4,260 and £9140 over a seven year period.

Electric Van Comparison Results

Mileage Scenario	Drive Cycle	Electric Panel Van (no PIVG)											
		Current Energy Prices						Linear Rising Energy Prices					
		90% Peak			90% Off Peak			90% Peak			90% Off Peak		
		Year 3	Year 5	Year 7	Year 3	Year 5	Year 7	Year 3	Year 5	Year 7	Year 3	Year 5	Year 7
Base mileage	SCC - FTP72	8569	5329	4071	8381	5140	3882	8231	4765	3280	8042	4576	3092
	SCC - Artemis Urban	8209	4969	3711	7983	4743	3485	7739	4186	2614	7513	3960	2388
Increase mileage	SCC - FTP72	8221	4981	3723	7957	4717	3458	7747	4191	2616	7483	3927	2352
	SCC - Artemis Urban	7718	4477	3219	7401	4161	2902	7059	3381	1684	6743	3065	1367

Figure 9

- 10.9 Figure 7 shows a very different picture to that of electric cars, this is solely due to the capital costs of larger electric vehicles at the present time. The Allied Boxer costs £64,000. Additional costs to the council range from £1367 to £8569.
- 10.10 The Committee considered that in light of these less positive results, at the current time the council should not consider adopting electric vans into its fleet. Nevertheless it is vital that the council should revisit this as the market evolves. Nissan are now in the final development phase for the EV200 van and it is believed that this vehicle and other coming onto the market will significantly lower the price, providing great opportunities for the council in the future.

Gauging Resident's Views

- 10.11 The Committee very much wanted to understand more about the views of residents in regard to the council using electric vehicles in its fleet. It was particularly concerned about the perceptions of residents due to higher capital costs, although it had been determined that should the council purchase electric vehicles this would be part of the normal replacement programme. A public consultation was therefore undertaken (Appendix 1) over a two week period at the Customer Service Centre in the city centre. The very small sample size (of 67) gives a snapshot of public opinion, however it is important to contextualise this against the total population of the city. The following question was therefore asked;

To what extent do you agree or disagree that the council should replace its vehicles with electric vehicles when they are due to be replaced?

10.12 55 per cent of respondents felt this was very important, whilst 33 per cent felt it was fairly important. This tentatively suggests support from residents for electric vehicles to be used within the council fleet when the time comes to replace older vehicles and goes some way to assuaging the Committee’s concerns that the council would be viewed as ‘wasting’ money in times of austerity. Interestingly, those who answered ‘strongly disagree’ or ‘tend to disagree’ were mainly from the 18-24 age group.

The Opportunities and Challenges for Regional Procurement

10.13 The Committee were informed by Smith’s that an audit of vehicle usage across the 12 North East local authorities found that the average daily mileage of each type of vehicle was 67 miles or under validating the use of electric vehicles to cover the average daily mileage required.

Case Study – Fleet Analysis for 12 local authorities in North-East England

	Panel Van	Tipper	Minibus	LGV	HGV	OTHER	TOTAL
Total North-East Fleet	1016	653	572	324	381	2404	5350
% of total fleet	19%	12%	11%	6%	7%	45%	100%
Av daily mileage	31	45	67	22	55	N/A	N/A

*OTHER includes cars, small vans, tractor units, refuse vehicles, street cleaning vehicles and gritters

Figure 10

10.14 The Committee found there was evidence of a common interest in at least some of the region’s local authorities in the collaborative procurement of electric vehicles and the associated support infrastructure with the aim of reducing and sharing costs to meet objectives for reduced carbon commitments and to support a developing industry in the region. Authorities like Gateshead and Newcastle have made some inroads into adopting low-carbon vehicles into fleet operations; however in the main this has been through funding from programmes like the LCVPP and the risk is that the initial capital costs deter local authorities from setting appropriate targets for introducing electric vehicles into their own fleets. It was reported that this was largely due to a lack of evidence in terms of financial and environmental benefits.

10.15 The Committee considered the evidence base provided by Cenex would prove useful in convincing local authorities and other public sector partners, suppliers and contractors of the merits of using electric vehicles. It applauded the council for the efforts it had made so far and felt there should be a continuation of Sunderland as the lead authority, working with NEPO, to gaining buy-in and commitment from the region to progressing this.

10.16 A regional solution could deliver:-

- Sustainable and innovative solutions for procuring electric vehicles to provide services to the community, sharing ideas about what is capable of being delivered and to share the resulting risks and benefits;
- Focused support by the public sector for suppliers based in the region subject to the EU competition regulations, bringing forward innovative products and services which could then be marketed outside the region; and
- Commercial benefits in reducing unit costs and sharing investment by suppliers in infrastructure and support.

10.17 If the region's public sector expenditure is to have the maximum impact on job creation and economic development; investment and commitment from the region as regards procurement would provide a stronger base for expansion of regional business into other markets with the benefit of experience in winning and delivering a public sector contract as a point of reference. Other economic benefits include a standard approach to the market; in consultation with suppliers and the ability to build in social/supply chain dimensions to procurement processes.

10.18 The Committee was concerned that any investment in electric or low-carbon vehicles should benefit the local economy and bring investment and jobs for its residents but thought a significant risk to the success of such an approach was the rules around public sector procurement, which cannot discriminate in favour of local suppliers.

10.19 Consideration would need to be given to:-

- Developing a service based specification for the procurement, leasing and support of electric vehicles through a managed service provider who would then be at greater liberty to procure vehicles of choice;
- Making use of probable changes to Government policy in the next year after the decision to award the Crossrail rolling stock contract to Siemens rather than Bombardier as well as the existing ability to take into account social considerations in procurement; and
- The Department for Business Innovation and Skills' "Forward Commitment Procurement – Practical Pathways to Buying Innovative Solutions". This policy advocates a process to engage with supply markets to develop solutions for unmet needs, consistent with the Public Procurement Regulations. These principles of supplier consultation and engagement, developing a business case and governance arrangements before engaging in a formal procurement process could be well suited to this developing requirement.

10.20 The Committee stressed the importance of undertaking further investigation to properly weigh up the potential versus the risks of regional procurement, particularly as in this instance there would be very little in the way of best practice that could be consulted. It was pleased that NEPO could use its network of contacts outside of the region to establish what others are doing and determine whether regional procurement would be more cost effective and beneficial than local authorities 'going it alone' and questioned whether the NELEP have a role to play in this.

11. ASSESSING THE ECONOMIC IMPACT - SUNDERLAND AS A LOW-CARBON CITY WITHIN A LOW-CARBON REGION

Economic Masterplan (EMP)

- 11.1 Aim 2 of the EMP seeks to establish Sunderland as a leading UK city for low-carbon technology and production and to support the wider region in developing a sustainable, low-carbon economy. The Committee's view was that Sunderland City Council therefore has an indirect responsibility to promote and improve consumer take-up of low carbon vehicles, particularly EVs and support those developing and selling low-carbon vehicles and technologies
- 11.2 In 2009, Nissan announced its intention to invest in a new facility to pioneer electric vehicle battery production, and the Government announced that the UK's Low-carbon Economic Area (LCEA) for Ultra Low-carbon Vehicles would include Sunderland. The Committee agreed with Ms Hodgson's view that success could be measured in terms of cleaner air, however the real success indicator would be retaining and attracting those in the low-carbon industry to the area, thus stimulating economic growth and employment.
- 11.3 Ms Phillipson MP considered that:
- 'Sunderland City Council, Sunderland University, Nissan and other partners have led the way in the development of ultra-low-carbon vehicles and infrastructure with charging points across the city. We should be proud of all that has been achieved so far...'*
- 11.4 Being part of the LCEA provides the city with a significant opportunity to place itself at the front of national policy, which will enhance the reputation and image of the city and attract prospect of international investment.
- 11.5 This was demonstrated recently through the launch of the zero-emissions vehicle test track. Gateshead College are investing heavily in low-carbon vehicle technology. The test track at the Nissan plant is the only publicly accessible test track in the UK. It has been leased by the College for 20 years and over £1m has been invested in the development of the track.
- 11.6 Originally built by Nissan the track is a 2.8 kilometre, oval, low speed test track with multiple variable surfaces available for vehicle and infrastructure testing and research and testing of supporting technology.
- 11.7 The Committee agreed with the view that visits to the test track, Nissan and other companies in the area would substantially increase as the low-carbon vehicle industry builds and the test track becomes more widely promoted nationally through the DfT.
- 11.8 The Committee noted again that Nissan and the low-carbon vehicle agenda was fundamentally linked to the success Sunderland's economy now and in the future. This was illustrated by the fact that production of the batteries for the Nissan Leaf, as well as plans to produce the batteries for the Nissan EV200 and Renault Kangoo would have a tremendously positive impact on

the city, not only in the creation of 300-400 jobs, but also to the various suppliers of Nissan.

- 11.9 Similarly, the suppliers the Committee engaged within during the Review each play an important role in both the city's economy and profile, and the Committee felt that all low carbon vehicle businesses should be supported through any means available to the council.

Brand/Showcasing

- 11.10 Ms Phillipson MP stated that Sunderland was leading the way in EVs and that:

'Other cities will need to follow Sunderland's example'

- 11.11 This was echoed by Ms Hodgson MP who commented that:

'Sunderland already has a reputation as...the leading city in the UK in this respect, and the council's commitment to that so far has obviously been instrumental in the decision by Nissan to site production of the Leaf and battery plant here. If we are to attract further investment, I believe that it is of vital importance that this reputation is maintained and strengthened, and again the council has a leading role to play in that'

- 11.12 SASMI was very keen to stress to the Committee the importance they placed upon partnership working across the region to continue to strengthen its low-carbon brand and give it a unique footing in the market. Sunderland is very much a part of regional partnerships, as part of the LEP and particularly as Nissan and Smith's are based in the city. The Committee advocated this view, and felt there was 'strength in numbers', however it was conscious that it wanted the city to retain a distinct brand of its own.

- 11.13 The Committee referred to a previous policy review from 2010/11 Sunderland the Place, in which it was identified that there was a need to showcase Sunderland more effectively, and 'badge' it in no uncertain terms as a low-carbon city sitting within a low-carbon region. The need for better advertising of the city's brand was discussed to ensure that visitors to Sunderland are quickly aware that they are in a city home to the automotive and low-carbon sectors.

- 11.14 The council's role in leading the economic agenda for the city and region is paramount, Ms Hodgson MP supported the view that the council should 'lead by example' by committing itself to ensuring that;

'as far as possible, any new vehicles paid for by the council...are low-carbon, or even electric. It should be a matter of civic pride that we are thought of as a centre for low-carbon vehicles, and moving towards a low-carbon fleet would be a powerful symbol of that.'

- 11.15 The council has made significant progress in promoting itself as a low carbon city with a strong automotive industry. It has been actively involved in national activity including Phase One of the Low Carbon Vehicle Procurement Programme and the Ultra Low Carbon Vehicle Demonstrator Project.

Currently it has vehicles in its pool including the Nissan Leaf, the Peugeot iOn and the Avid.



- 11.16 Sunderland also has a significant number of 20 charging points across the city and there are plans for a further 13 (20 actual bays), installed as part of the Plugged in Places Programme.
- 11.17 The Committee noted that other local authorities had already captured this sentiment, for example similarly to Sunderland, Coventry City Council is actively promoting itself as a "living test bed" for low-carbon ventures such as Intelligent Transport systems and low-carbon transport. To support this a total of 15 per cent (52 vehicles) of Coventry City Council's fleet are low-carbon vehicles and the City Council is promoting low carbon vehicles wherever possible.
- 11.18 Gateshead Council and Newcastle City Council have also purchased electric vehicles for use within their fleets; ranging from motorcycles to commercial vehicles. They are used for a variety of purposes such as specialist vehicles for street sweeping, rubbish tipping and coffin carrying, and multi-purpose vehicles such as repairs and maintenance, school transport and general pooled use.
- 11.19 The Committee recognised the progress made by Sunderland and believed that the other local authorities mentioned above had also taken the right approach to supporting the economy of the area by the simple means of raising the profile of low-carbon vehicles through its own use of them and felt this was a strong reason in itself to consider the utilisation of more electric vehicles in the council.

Research and Development

- 11.20 Throughout the evidence gathering the Committee were pleased to note that efforts are being made to foster innovation and progress. The Committee learnt that the research and development unit for Automotive and Manufacturing Advanced Practice (AMAP), which is part of the University of Sunderland, supports the region in being a leader for low carbon vehicles. The Research and Development function is about to start implementing the

findings from its research and integrating the technologies into vehicles. The rationale for this work programme is;

- To ready the region for low-carbon vehicles;
- To learn vital lessons regarding conversions;
- To transfer knowledge to low-carbon businesses within the region;
- To develop training courses to develop the next generation of engineers and technicians; and
- To encourage entrepreneurs and innovators to invest.

11.21 An example of the type of work undertaken by AMAP was given as the Zero Emissions Project, which gives consideration to all types of low-carbon vehicles and how to develop the region as a low-carbon hub. AMAP has worked with a range of business partners to deliver this project.

11.22 AMAP aren't the only educational establishment working progressing research and development; SASMI's Skills Academy includes an Innovation Centre, home to SME's, academics and research staff aiming to encourage collaboration and generate commercial ideas.

Training and Skills

11.23 The Economic MasterPlan gives a requirement for the current and future workforce within Sunderland to be appropriately skilled in low-carbon technologies; therefore the Committee deemed that educational establishments such as schools, Colleges and Universities in the city, as well as across the wider region, are essential partners in progressing and achieving low-carbon aspirations. The Committee also made the indirect links to Aim 1 of the EMP as the University will play a key role in encouraging innovation and entrepreneurship in this field.

11.24 The Committee found that the growth of the low-carbon industry has led to a number of academic and research opportunities ranging from NVQs through to a PHD. SASMI are working in partnership with the University to deliver qualifications to support this. Qualifications include routine maintenance and repair; hazard management; electric vehicle and battery manufacture and hydrogen safety. In addition SASMI is working with Nissan to deliver a programme aimed at unemployed people, whereby upon successful completion of a 5 week programme, there is a guaranteed opportunity to take the trial for Nissan for a job within the plant. The Committee considered this to be a practical and innovative solution to providing unemployed people with skills and the chance of stable employment.

Low-Carbon Vehicle Industry

11.25 The Committee found a growing low-carbon industry in the North East region and the Committee felt it important to highlight the types of technology being developed and delivered. Four case studies are given at Appendix 2.

11.26 The Committee was impressed by some of the innovation as part of this review and considered that the council has an indirect obligation to promote

and improve consumer take-up of low carbon vehicles and support those developing and selling low carbon vehicles and technologies in the region.

Future Delivery of Public Services

11.27 The Committee was aware that Government policy and legislation advocates that local authorities are not always necessarily the right public service provider and considered that this policy shift, coupled with the efficiencies the council is required to make over the coming years will increase the number of public services commissioned and procured by the council. In this instance the council should be mindful that where possible it advocates and encourages service providers to utilise low-carbon vehicles.

12. ENVIRONMENTAL IMPACT

12.1 The Committee felt the environmental impact of introducing electric vehicles into the fleet was an enormously important consideration. It therefore commissioned Cenex to undertake some specific environment analysis in addition to cost benefits. Well to Wheel (WTW) emissions were measured in the comparisons.

Electric Car Comparison

12.2 WTW CO2 Emissions (kg CO2 per annum):

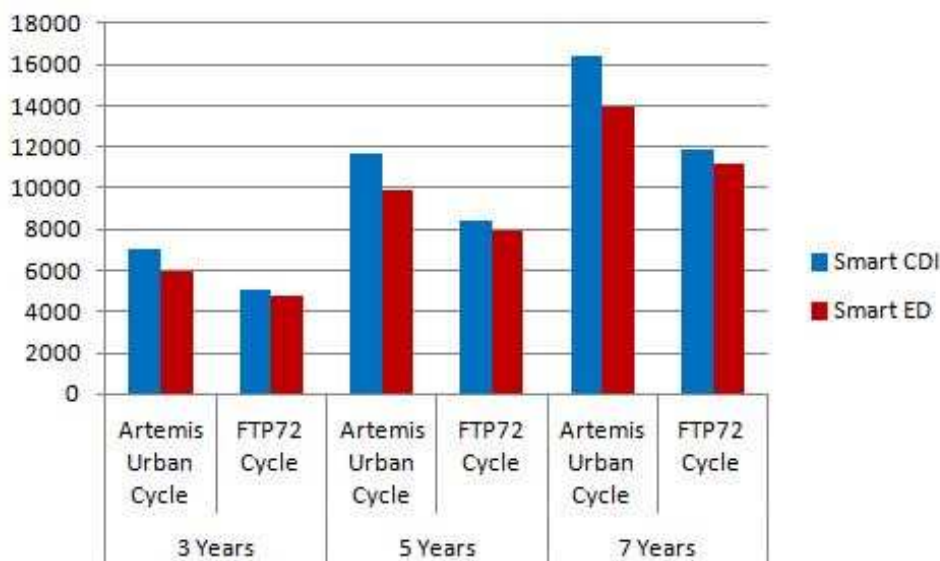


Figure 11

12.3 CO2 emissions are more pronounced when driving ‘around town’, i.e. stopping and starting the vehicle at regular intervals (as would be the majority of use by the council). Emission reductions for the council would range from 9 per cent to 15 per cent per vehicle.

Electric Van Comparison

12.4 WTW CO2 Emissions (kg CO2 per annum):

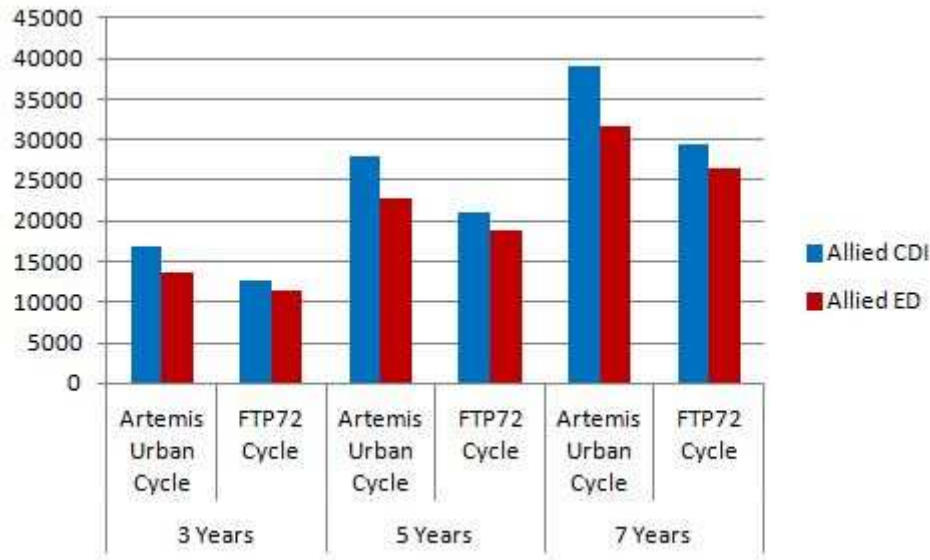


Figure 12

12.5 Again, the results demonstrate that CO2 emissions are more pronounced when driving 'around town'. Emission reductions for the council in this instance would range from 10 per cent to 19 per cent per vehicle.

12.6 Whilst a relatively small saving in the context of the wider emissions of the council and city as a whole, the Committee viewed these results very positively in terms of the impact the vehicles' CO2 reductions could make, to both the councils targets for reducing emissions and to the air quality of the city and the health of residents. Nevertheless, this serves to reemphasise the need for a range of measures to complement a strategy of utilising electric vehicles in the fleet.

Gauging Resident's Views

12.7 The public consultation undertaken by the Committee (Appendix 1) included some questions to seek resident's views about the environment and the role the council plays in this. Resident's were asked;

1. *How concerned are you about the effect of transport on climate change?*

12.8 There was a mixed response to this question. A third of respondents were very concerned about the effect of transport on climate change, whilst almost half said they were fairly concerned. One fifth did not show much concern.

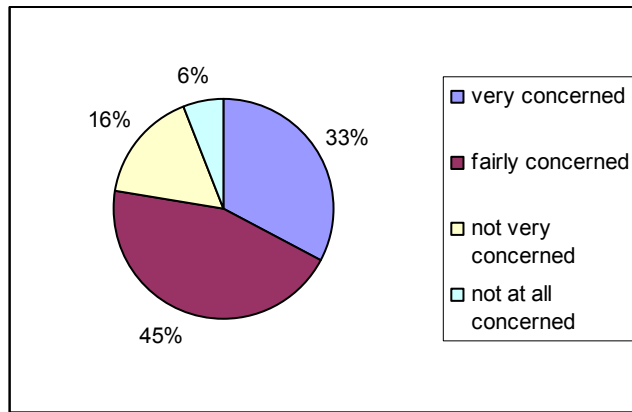


Figure 13

2. *How concerned are you about exhaust fumes from traffic?*

12.9 An overwhelming 59 per cent of respondents said they were very concerned about exhaust fumes from traffic and 24 per cent of people were fairly concerned.

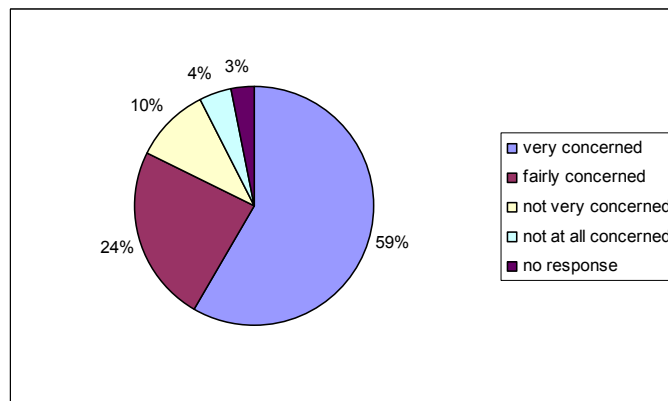


Figure 14

12.10 More respondents showed concern about exhaust fumes from traffic than the effect of transport on climate change. Three out of four of the respondents who said they were not at all concerned about the effect of transport on climate change said they were fairly concerned about exhaust fumes from traffic. This would indicate that the issue of climate change is more remote and intangible whereas the health issues caused by the effects of exhaust fumes are important issues. Perhaps there also is a lack of knowledge around how climate change will impact upon the city in the future. The age group data has shown a trend in a lack of concern from the younger age groups (18-24 and 25-34). The trend also shows that the higher the age group, the more likely they are to be concerned about the effect of transport on climate change and the effect of exhaust fumes on traffic.

3. *Sunderland is aiming to cut its carbon emissions by 29% by 2020 and 80% by 2050 and has an action plan to achieve this for the city. How important do you think it is for Sunderland City Council to contribute to this by reducing its own carbon emissions?*

12.11 61 per cent of respondents felt this was very important, whilst 33 per cent felt it was fairly important, demonstrating that there is support for the council in making a contribution to the reduction of carbon emissions.

- 12.12 Once again, those who felt it was not at all important or not very important were all from the 18-24 age category. This might suggest that younger people do not see the reduction of carbon emissions as a priority, or have a more limited knowledge or understanding of the council's role.

Manufacturing Emissions

- 12.13 The Committee wanted to explore the carbon footprint of manufacturing EVs due to the contention that the vehicle is not truly zero emissions until the manufacturing process and the source of electricity to charge the vehicle are also zero emissions. Whilst it is true that Electric vehicles produce more emissions than conventional cars in production, they still have a far lower carbon footprint over their lifetimes.
- 12.14 Smith's Electric Vehicles confirmed that currently there is no industry standard against which to measure emissions as each manufacturer has very different operations, supply chains etc. That being said some targets are expected from OLEV in 2012. As a responsible manufacturer Smith's continuously monitors its carbon footprint; to make the Washington plant carbon neutral it needs to produce 200 vehicles or more per year - currently, the plant produce in excess of this amount. In addition, Smith's works with its supply chain to encourage further reductions in emissions.

Commitment to Cleaner Air

- 12.15 The Committee found that other local authorities have set out a clear intention to reduce carbon emissions to improve the health of its residents. When Liverpool was declared a city-wide Air Quality Management Zone, the City Council amended its vehicle replacement programme to have regard for emissions other than carbon dioxide (CO₂) such as particulate matter (PMs) and nitrogen oxide (NO_x) which are harmful to human health. Diesel vehicles emit lower CO₂ emissions than petrol vehicles, but significantly higher PMs and NO_x.
- 12.16 The savings made by having low carbon vehicles in the council's fleet have been marginal; however the City Council wants to make a clear statement of intent to reducing emissions in the city. It has extended its commitment to reducing emissions from transport by arranging for 240 employees to attend free 'smarter driving' training which will save 82 tonnes CO₂ / year when the acquired driving skills are transferred to domestic cars. In addition, a corporate Drivers Handbook has been produced which contains tips on clean driving. The handbook is currently being issued to all staff that use a vehicle for council business.
- 12.7 The City Council has also lowered its fleet emissions through a range of other measures, including replacing vans and larger cars with small, 'city' cars whenever possible and giving officers who have high mileage claims access to lower emission lease vehicles for business use in order to reduce the amount of miles driven in their own vehicles.

12.8 The Committee referred to the Sunderland Strategy and the many supporting policies in place which aspire for the city to be 'cleaner and greener'. It was acknowledged that the adoption of electric vehicles into fleet operations would be a significant step towards achieving this, however, this alone would not assist the city in meeting its own target of reducing emissions by 80 per cent by 2050. Instead, this should be seen as one part of a much wider drive to reduce carbon emissions from transport from the council and its workforce.

13. TECHNOLOGY/SUITABILITY

13.1 The Committee agreed to consider all forms of low-carbon transport and technology during the course of the review but took a view that there should be a focus on electric vehicles as this is of key economic importance to the city.

13.2 There remain many questions surrounding low-carbon vehicles and the Committee recognised there are still significant gaps in knowledge and understanding, not only in research and development but also in consumer/business attitudes to these products.

Electric Vehicles

13.3 Electricity is one of the practical options available as an alternative to oil, as it can be produced from sustainable sources and can be readily supplied. Charging costs are substantially less than petrol or diesel engines, from £1.03-£4.01 per 100 miles (which is the average range of an electric vehicle). Recently there have been considerable advancements in technology in regard to this type of vehicle and improvements have been made in terms of range and driveability.

13.4 The Committee found that electric vehicles would not be suitable for everybody and stakeholders in the low-carbon vehicle industry expect a realistic take up of electric vehicles would be around 10 per cent by 2020-2025, accounting for the challenges still to be addressed.

13.5 To date there has been limited take up of electric vehicles in the delivery of services, particularly in the public sector. Smith's Electric Vehicles informed the Committee that larger private sector organisations are starting to recognise the benefits of using electric vehicles and it's customers include:-

- Pepsi Co
- Transport for London
- John Lewis (transportation of customers);
- DHL (delivery of goods);
- Sainsburys (delivery of internet grocery shopping);
- TNT Express (delivery of goods);
- Royal Mail (parcel and post distribution); and

- Balfour Beatty.

Sainsburys

Sainsbury's is the third largest chain of supermarkets, operating 567 supermarkets and 377 convenience stores. In 2005 Sainsbury's Online trialled Smith Electric Vehicles (the Edison) in its home shopping delivery applications in and around Central London. The 3.5 tonne vans were modified to meet Sainsbury's specific requirements for its urban online deliveries, with each vehicle restricted to 40 miles per hour with a range of 60 miles per day.

Each zero emission van saves 5 tonnes of CO₂ per year – the equivalent of one round trip from London to Rio de Janeiro, or the entire annual CO₂ footprint of a small UK household. Sainsbury's find that the electricity used to power its electric vehicles generates around 50 per cent less CO₂ than diesel vans, as well as reduced particulates, NO_x and noise. Other key benefits realised through the trial included reduced running costs (fuel savings, congestion charge exemption, tax breaks, etc), reduced maintenance costs and improved driver safety and drivability.

Additionally, the use of greener technologies has proven to be a soft benefit as the company's stakeholders are increasingly valuing emission free operations.

The trial established the importance of having robust charging routines in place and close ties to electric vehicle maintenance providers. The electric vehicles are plugged in whenever they are at the store; there are three drop off cycle's per day and they charge for ½ hour between these runs. They return to base for the last time at around 10pm and the vehicle has its main charge overnight. Driver training has also been key in ensuring drivers are maximising the potential of the vehicle; for instance through regenerative braking.

- 13.6 Smith's has worked with some local authorities through the LCVPP to introduce electric vehicles into council fleets including Gateshead, Newcastle, Islington and Camden. Wakefield University has also taken up the use of an electric minibus to transport students between campuses.

Addressing public perceptions and the EV urban myths

- 13.7 The Committee understood that a number of public perceptions had built up around low carbon vehicles and in particular electric vehicles, and considered that business perceptions may mirror those of individual consumers and this is likely to be contributing to the reluctance across all sectors to embrace these types of vehicles.

- **Cost**

- 13.8 Smith's Electric Vehicles confirmed that that the biggest concern for business in adopting electric vehicles into fleets is the initial high capital cost. The Committee understood this was also the case for individual consumers, however it was considered important to promote the longer term view to give the appropriate context to the initial costs of purchasing an electric vehicle.

- 13.9 The Committee strongly felt that it was the ten year time period that would prove the most attractive to organisations and would give the most incentive to switch to electric vehicles, however serious questions remain as to the state of the vehicle after a ten year period, particularly where the service provided involves heavy and prolonged usage.
- 13.10 SASMI considered that the advent of Nissan and Renault's mass production of all-electric transit vans will increase the accessibility and usage of the electric van in fleet services by substantially lowering the capital cost for purchase. The Committee felt this would make electric vehicles a significantly more economically viable option for the Council.
- 13.11 An effective way of reducing cost barriers would be to provide leasing or financing arrangements and as such a number of partners in the financial sector were now signed up to assisting potential customers of Smith's. The Committee agreed that a lease option may be considered by Sunderland City Council given the difficult financial constraints within which it is now working.
- 13.12 Another issue considered by the Committee was the lifespan of an electric vehicle battery and costs to replace the battery. Reports throughout the evidence gathering were mixed, however it was understood that the battery becomes 80% efficient after 5-10 years, determined by the quality of the battery. A replacement battery could cost up to £10,000 - this should reduce - but only if demand and production increases.
- 13.13 In addition, the Committee learnt that a number of new 'second life' industries are emerging to make use of batteries that no longer have the efficiency to power an electric vehicle. Several examples were given to the Committee including:-
- Energy storage for wind farms, and in third world countries with a large supply of energy from the sun;
 - As back up generators for services that require an unbreakable power supply such as banks, hospitals and the emergency services; and
 - To power ships.
- 13.14 The second life concept for future business opportunities remains unknown but could yield substantial economic benefit dependant on what that reality may be in 10-15 years. If a strong, viable market existed, ultimately, this 'second life' would give the battery a residual value which the owner of the vehicle (in this instance, the council or other public sector bodies) could off-set against the cost of a replacement battery. It would also reduce the initial purchase price of an electric vehicle as the current cost includes disposal.
- **Vehicle Performance**
- 13.15 Electric vehicles are often marketed as having a 100 plus mile range however the Committee gathered from a range of sources that this could be somewhat optimistic. Unlike an internal combustion engine (ICE), electric vehicles do not produce excess heat with which to heat the vehicle, operate the windscreen wipers or use the radio. The vehicles are therefore fitted with a

3kw power system to provide this capacity. Other local authorities have found that this does significantly affect the vehicle range. In addition the topography of a route will also reduce the range. The Committee felt the council would need to consider the actual range for the city as each local area has its own unique 'fingerprint' in terms of topography and traffic.

- 13.16 Smith's advocated the use of electric vehicles for use within local authority fleets as vehicles tend to cover static routes over small geographical areas which are well within the range of the vehicle.
- 13.17 The Committee however, found that experiences of electric vehicles within council fleets were mixed. Coventry City Council reported that one user travels between Coventry and Sheffield on the M1 every day (a journey of 75 miles) and had experienced no difficulties. Gateshead also reported no issues of range; the electric vehicles in its fleet had an average range of 70, which was well above the average daily use.
- 13.18 Newcastle City Council had trialled a home-use project whereby staff were encouraged to take the electric vehicles home for several days to test the range availability and the suitability for home charging. There were no issues with range but there were reports that problems can occur when additional lighting or long hours are required.
- 13.19 Liverpool City Council found that whilst the cars drove very well there were issues with actual range, which was between 50 and 70 miles instead of 100 as listed. This greatly reduced in the winter when cars' heaters and windscreen wipers were in use more. In addition, if the vehicle is not switched off in the correct way the battery runs flat and the vehicle has to be returned to the manufacturer for up to two weeks.
- 13.20 It became apparent to the Committee that it was widely acknowledged in the industry that reduced range and other issues could often be attributed to the way the vehicles are driven. Smith's had found there was a range increase of up to 30% when driven by a trained driver. AMAP has also evidenced this and introduced the DrOpLET (Driver Optimisation for Low Emissions Transport), which investigated the impact of different driving styles for both battery usage and fuel consumption. It found that upon completion of the training, drivers had typically saved 25% on fuel costs whilst battery usage could be improved by up to 100%.
- 13.21 Those local authorities who had introduced electric vehicles into the fleet operations agreed; Coventry City Council, Gateshead Council and Liverpool City Council had all taken steps to ensure drivers were fully trained in the use of EVs. This training was delivered by the Energy Saving Trust. The Committee considered that, should the Council adopt electric vehicles into its fleet, appropriate training for drivers should be taken into account, to address these issues before they occur.

- **Safety and Maintenance**

- 13.22 The Committee raised a concern in regard to the increased chance of road accidents due the greatly reduced noise of the vehicles. It was clarified that

electric vehicles do not operate silently however a noise generator can and has been fitted to make them more audible to pedestrians. The Committee has long promoted pedestrian safety on the city's roads and felt that issue this would be something to bear in mind, given the Council's fleet would be operating in all weathers and at all times of the day and night.

13.23 It was acknowledged that, at the present time very little was known among the emergency services about the consequences of an accident involving one or two electric vehicles in comparison with ICE vehicles. This has been recognised as an issue and Northumbria Police and Gateshead College have begun to investigate the possible outcomes of road accidents involving electric vehicles and provide appropriate training to those who would attend such accidents. In addition ElecScoot will shortly be providing training to the RAC to enable them to assist users.

- **Charging and Infrastructure**

13.24 In order to charge an electric vehicle at home an individual consumer requires a 'home charging kit' however for a larger 'fleet' electric vehicle, dedicated charging points are unnecessary; as long as the vehicle is returned to base at the end of each shift it can be charged using what is in effect an electric socket which can be installed for as little as £100.

Hybrid Vehicles

13.25 The Committee found that beside electric vehicles, hybrid vehicles were the most established technology currently available in the low-carbon market. In some respects hybrids are equally as attractive as the all-electric vehicles; whilst the emissions are higher, the requirement to charge is mitigated by the ICE contained within the vehicle.

13.26 For the delivery of some services, public transport, for example, electric vehicles are not currently fit for purpose due to the limited range, and in these cases hybrid vehicles offer a reasonable alternative to those organisations wishing to address carbon emissions through its fleet.

13.27 Go NorthEast reported that the hybrid vehicles in its fleet account for an improvement in fuel consumption of between 15%-20%, however the cost of the bus is prohibitive at £100k, even taking into account the savings made in fuel reduction. It clearly stated that until the cost reduces it would be unable to utilise this vehicle option as much as it would wish to.

13.28 The Committee considered that it would be sensible for the Council to give consideration to hybrid vehicles for the delivery of any service whereby the range was greater than 70 miles or the capacity to regularly charge an electric vehicle was not possible.

Vehicles Powered by a Hydrogen Fuel Cell

13.29 The Committee found that many people, including those in public transport and research, felt that the advantages of hydrogen fuel cell technology would be hugely important for the future as it releases zero emissions, although at

the current time several issues were still to be resolved which were holding up hydrogen as a viable option for fuelling transportation.

- 13.30 AMAP has been conducting research and development for the hydrogen fuel cell. Its first project consisted of an Almera donated by Nissan which was adapted to run on hydrogen gas. The project was designed to assess the characteristics of hydrogen; to check vehicle performance; health and safety issues; and the cost implications attached. The University worked with local SMEs on this project to help train them in the use of hydrogen to power vehicles.
- 13.31 A hydrogen tank was fitted into the boot of the vehicle, however due to the size of the tank the vehicle would not be useful as a family car. This view was echoed by SASMI who felt that the hydrogen fuel cell's main use would be SUVs, vans, buses and lorries and would therefore be a feasible option for use in the delivery of services.

Bio-fuel

- 13.32 The Committee found that this technology appeared to have had limited take up among local authorities, however Camden City Council had commissioned research to investigate the life cycle environmental impacts of road transport biofuels to inform the fleet procurement policy. Three biofuels (biomethane, biodiesel and biofuel) were compared to conventional diesel and petrol vehicles. Biomethane was shown to have the lowest overall environmental impacts, based on air quality and green house gas emissions. Biomethane is also a renewable transport fuel as it is derived from methane gas released during the decomposition of organic waste.
- 13.33 Following these results Camden embarked on a biomethane vehicles trial in partnership with Veolia Environmental Services Ltd, Iveco and Gasrec and as a result of the positive outcome of the trial and research project, Camden introduced 15 compressed biomethane vans in December 2010 manufactured by VW Caddy and Mercedes Benz.
- 13.34 The debate continues in regard to the sustainability of biofuels. Whilst they have the potential to provide a renewable source of fuel, there is a risk of an adverse social and environmental impact which could actually increase in carbon emissions. The Committee agreed that whilst biofuels continued to come under significant scrutiny, the Council should continue to keep a watching brief on future developments.

14. CONCLUSIONS

- 14.1 The Scrutiny Committee have made a number of conclusions based on the evidence gathered throughout the review. These are:-
- (a) The targets set out within the Climate Change Act 2008 highlight the extent of the task faced nationally, regionally and locally, and there are significant financial and environmental implications should the target be missed. It is therefore imperative, particularly in the context of mounting budgetary

pressures, that this agenda continues to be given the highest priority allowing for the financial position of the Council;

- (b) The Fleet and Transportation Review of the Council is timely, and will be supported by the evidence gathered throughout the Policy Review. Whilst this Review places more emphasis upon electric vehicles it is acknowledged that there are limitations on their use as part of the Council's fleet and it is therefore sensible to consider all types of low-carbon technology. The longer time period of the research and development project in partnership with the University of Sunderland will give the Council the maximum scope to find the range of options that best suit its need;
- (c) Improvements to public transport in the city, and across the region will have a unique contribution to make in reducing carbon emissions and the continuation of the improvement journey in line with European legislation and beyond will be essential;
- (d) The research and analysis undertaken by Genex provides evidence advocating the adoption of electric cars into the Council's fleet. In addition, the Council may now provide other local authorities and public sector bodies with a robust business case, not previously available;
- (e) The potential benefits of regional procurement are acknowledged, particularly in order to meet the objectives for reducing carbon emissions and supporting a developing industry in the region; however further investigation to ensure this is the better option. Additionally the opportunities afforded to regional suppliers should be maximised whilst giving due regard to EU procurement rules;
- (f) There is little doubt that, with such emphasis within the city's Economic Masterplan on low-carbon industries and technology that the success of low-carbon vehicles is fundamental to the success of the city's economy and that the Council must show itself to be leading the way if it expects other organisations and individuals to follow;
- (g) A previous recommendation of this Scrutiny Committee as part of the Policy Review 'Sunderland the Place' in regard to raising the profile of the city is ever pertinent if the city is cement its position as a low-carbon city. This should be continually reviewed to ensure the city is getting the right messages to those outside and within the city;
- (h) It is important that the Council doesn't consider the adoption of electric and other low-carbon vehicles into the fleet in isolation, and considers other appropriate measures that can be easily and readily implemented to reduce carbon emissions from transport by the Council and its workforce;
- (i) At the present time consumer confidence in electric vehicles is low. A number of 'urban myths' have built up around this mode of transport and it is reasonable to suggest that an appropriate charging infrastructure and a raised profile of electric vehicles on the roads of the city will go some way to fostering consumer confidence;

- (j) Electric vehicles drive and look the same as a traditional car, however there are distinct differences and the mishandling of an electric vehicle can reduce its performance by up to 30% and damage the battery. Effective training for drivers can, for the most part mitigate this;
- (k) The consideration of leasing vehicles rather than purchasing them outright may mitigate the financial risks involved to the Council;
- (l) At the current time the focus should be on setting appropriate goals in regard to reducing carbon emissions through the Council's fleet. Only once progress has been made in this regard can the Council effectively encourage partners, suppliers and contractors to utilise low-carbon vehicles; and
- (m) At the current time it is not financially feasible to introduce larger electric vans into the Council fleet, however as the capital costs of these vehicles reduce the Council should be ready to re-visit the cost benefit analysis. Whilst some of the technology covered within this Policy Review is at different stages and more or less was known low-carbon vehicle technology is moving at pace and the Council should fully exploit new technologies if it will enable the delivery of improved services to residents, reduced costs and protect the environment.

15. RECOMMENDATIONS

15.1 The Environment and Attractive City Scrutiny Committee has taken evidence from a variety of sources to assist in the formulation of a balanced range of recommendations. The Committee's key recommendations to the Cabinet are as outlined below:-

- (a) That the Scrutiny Committee be informed of the outcome of the Fleet and Transportation Review and progress in regard to implementation;
- (b) That the Council considers implementing appropriate targets for the replacement of its current fleet cars with electric counterparts based upon the findings and recommendation of Cenex with a view to revisiting the cost benefit analysis for larger vans as capital costs change;
- (c) That the Council considers an electric car pool system for its staff and that the appropriateness of extending this to the wider community is investigated;
- (d) That the Council commissions a comprehensive training programme for drivers should electric vehicles be utilised within the fleet;
- (e) That the impact of efforts made to establish the city as a 'Low-Carbon City' be continually monitored to ensure tangible benefits to the city;
- (f) That the Council considers a range of innovative methods of reducing carbon emissions from all forms of transport and keeps a 'watching brief' on the developments of technology for low-carbon vehicles;
- (g) That the Council explores ways in which to encourage partners to explore the use of low-carbon vehicles where appropriate;

- (h) That the Council collaborates with NEPO to present the business case to the region's local authorities and other public sector bodies, to gain the level of commitment required to progress this agenda;
- (i) That NEPO considers undertaking further research and analysis to ensure there is clear business case for regional procurement;
- (j) That any procurement, whether regional or the Council acting as an individual organisation, maximises the opportunities available to local suppliers; and
- (k) That the Committee receives specific progress updates on the improvements to public transport in regard to reducing carbon emissions as part of wider annual updates given by Nexus.

16. ACKNOWLEDGEMENTS

- 16.1 The Scrutiny Committee is grateful to all those who have presented evidence during the course of our review. We would like to place on record our appreciation, in particular of the willingness and co-operation we have received from the below named:-

Les Clark, Head of Street Scene, Sunderland City Council

Paul Muir, Engineer, Sunderland City Council

Ian Bell, Fleet and Transport Manager, Sunderland City Council

Julie Elliott MP, Sunderland Central

Sharon Hodgson MP, Washington and Sunderland West

Bridget Phillipson MP, Houghton and Sunderland South

Geoff Allison, Smith Electric Vehicles

Bernard Garner, Nexus

Kevin Carr, Go North East

Robin Knight, Stagecoach Group

Adrian Morris, University of Sunderland

Paul Gough, Gateshead College

Dr. Colin Herron, Zero Carbon Futures, Gateshead College

Ian Taylor, North East Purchasing Organisation

Gordon Mockett, Smiles Engineering

Chris Baylis, Avid Technologies

Mark Nailis, Innova Power

Ian Allison, Elecscoot

17. BACKGROUND PAPERS

17.1 The following background papers were consulted or referred to in the preparation of this report:

- (a) Sunderland Strategy (2008-2025)
- (b) Sunderland Economic Masterplan (2010)
- (c) Weather and Climate Risk Management Strategy: Revision 1
- (d) Local Transport Plan 3 (2011)
- (e) Climate Change Act (2008)
- (f) DECC: Carbon Plan (March 2011)
- (g) DfT: Ultra Low-carbon Vehicles in the UK (2009)
- (h) Committee on Climate Change, Surface transport:
www.theccc.org.uk/sectors/surface-transport
- (i) DfT/OLEV: Making the Connection: The Plug-In Vehicle Infrastructure Strategy (2011)
- (j) Committee on Climate Change - Third annual report to Parliament, 'Meeting carbon budgets' (2011)
- (k) SMMT Environment: Electric Car Guide 2011
- (l) RAC Foundation: Shades of Green – Which low-carbon cars are the most eco friendly? (2011)
- (m) DECC: **www.decc.gov.uk**

18. GLOSSARY OF TERMS

Biofuel	Biofuels are fossil fuel substitutes. They can be made from a range of agricultural crops, usually oily crops for biodiesel and crops rich in sugars or starch for bioethanol. By-products and wastes like used cooking oil, tallow and municipal solid waste can also be used to produce biofuels. Blended into fossil fuels in small proportions, bioethanol and biodiesel can be safely used in today's road vehicles.
CRT	Continuous Regeneration Traps - an emission control technology that contains a Platinum catalyst and a particulate filter. It is designed for use with large diesel engines, particularly large trucks and buses.
CNG	Compressed Natural Gas – Stored in a high-pressure container (usually at 3000 to 3600 psi) it is used mainly as an alternative fuel for internal combustion engines (such as automobile engines). It generates low hydrocarbon emissions, but a significant quantity of nitrogen oxide emissions.
CO2	Carbon Dioxide
DECC	Department for Energy and Climate Change
DfT	Department for Transport
EGR	Exhaust Gas Recirculation - In internal combustion engines, exhaust gas recirculation is a technique to reduce nitrogen oxide (NOx) emissions used in petrol/gasoline and diesel engines. It works by re-circulating a portion of an engine's exhaust gas back to the engine cylinders.
EMP	Economic Masterplan
EV	Electric Vehicle - any vehicle powered, in part or in full by a battery that can be plugged into a mains electricity supply and has zero emissions at the point of use.
GHG	Greenhouse Gas
Hybrid	A hybrid vehicle is a vehicle that uses two or more distinct power sources to move the vehicle. Most hybrid electric vehicles combine an internal combustion engine and one or more electric motors.
Hydrogen Fuel Cell	A device that converts the chemical energy from a fuel (hydrogen) into electricity through a chemical reaction with oxygen or another oxidizing agent.
ICE	Internal Combustion Engine
LCVPPP	Low-carbon Vehicle Public Procurement Programme
LCVIP	Low-carbon Vehicles Innovation Platform

Li-ion	Lithium ion battery - is a family of rechargeable battery types in which lithium ions move from the negative electrode to the positive electrode during discharge, and back when charging.
LTP3	Local Transport Plan 3 2011-2021
NEPO	North East Purchasing Organisation
NiMH	Nickel Metal Hydride – a type of rechargeable battery which uses a hydrogen absorbing alloy for the negative electrode.
NTM	National Transport Model
NOx	Mono-nitrogen oxides – A combination of NO and NO ₂ (nitric oxide and nitrogen dioxide). They are produced from the reaction of nitrogen and oxygen gases in the air during combustion, especially at high temperatures. In areas of high motor vehicle traffic, such as in large cities, the amount of nitrogen oxides emitted into the atmosphere as air pollution can be significant. NOx gases are formed everywhere where there is combustion – like in an engine.
SCCP	Selective Catalytic Conversion Process – a technology which uses ammonia to break down dangerous NOx emissions produced by diesel engines into nitrogen and water.
ULCVD	Ultra Low-carbon Vehicle Demonstration
ULSD	Ultra Low Sulphur Diesel

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Appendix 1

Environment and Attractive City Scrutiny Committee Public Consultation – Low Carbon Vehicles

A consultation was carried out with members of public over a two week period at the customer service centre in Sunderland city centre. 67 residents participated in answering 4 simple questions to gain their views on the reduction of carbon emissions through the provision of low carbon vehicles. This is a very small sample size in comparison to the population therefore the following findings should be taken in context. The purpose of the consultation was to give a snapshot of the public opinion around the introduction of low carbon vehicles to the Council fleet.

Of the 67 respondents, 42 were female (63%) and 24 were male (36%). Responses came from a broad range of age groups, and there was a good response in particular from those aged 18-24.

Sunderland is aiming to cut its carbon emissions by 29% by 2020 and 80% by 2050 and has an action plan to achieve this for the city. How important do you think it is for Sunderland City Council to contribute to this by reducing its own carbon emissions?

61% of respondents felt this was very important, whilst 33% felt it was fairly important, demonstrating that there is support for Sunderland City Council in making a contribution to the reduction of carbon emissions.

Interestingly, those who felt it was not at all important or not very important were all from the 18-24 age category. This might suggest that younger people do not see the reduction of carbon emissions as a priority, or have a more limited knowledge or understanding of the Council's role.

To what extent do you agree or disagree that the Council should replace its vehicles with electric vehicles when they are due to be replaced?

55% of respondents felt this was very important, whilst 33% felt it was fairly important. This might suggest strong support from residents for electric vehicles to be used within the Council fleet when the time comes to replace older vehicles.

Similarly to the first question, those who answered 'strongly disagree or 'tend to disagree' were mainly from the 18-24 age group.

How concerned are you about the effect of transport on climate change?

There was a mixed response to this question. A third of respondents were very concerned about the effect of transport on climate change, whilst almost half said they were fairly concerned and one fifth did not show much concern.

How concerned are you about exhaust fumes from traffic?

An overwhelming 59% of respondents said they were very concerned about exhaust fumes from traffic and 24% of people were fairly concerned.

More respondents showed concern about exhaust fumes from traffic than the effect of transport on climate change. Three out of four of the respondents who said they were not at all concerned about the effect of transport on climate change said they were fairly concerned about exhaust fumes from traffic. This would indicate that the issue of climate change is more remote and intangible to residents where as the health issues caused by the effects of exhaust fumes are. Perhaps there also is a lack of knowledge around how climate change will impact upon the city in the future.

The age group data has shown a trend in a lack of concern from the younger age groups (18-24 and 25-34).

The trend also shows that the higher the age group, the more likely they are to be concerned about the effect of transport on climate change and the effect of exhaust fumes on traffic.

	No. of people concerned about the effect of transport on climate change				No. of people concerned about exhaust fumes from traffic			
	Very	Fairly	Not very	Not at all	Very	Fairly	Not very	Not at all
18-24	1	4	8	2	1	7	5	2
25-34	1	4	8	2	1	7	5	2
35-44	2	4	1	1	4	3	1	0
45-54	5	7	0	0	9	3	0	0
55-64	3	5	0	0	6	1	1	0
Over 65	6	2	0	0	6	1	1	0

When considering the responses by gender, there was a trend amongst females showing slightly more concern about both the effect of transport on climate change and the effects of exhaust fumes.

Conclusions

- There was strong support from respondents for Sunderland City Council making a contribution to the reduction of carbon emissions.
- The majority of respondents agreed that the City Council should replace its vehicles with electric vehicles when they are due to be replaced.
- Respondents showed significantly more concern for the effects of exhaust fumes than the effect of transport on climate change.
- There appears to be less concern and interest about climate change and the use of electric vehicles from younger people.

Appendix 2

Inova Power/The Hydrogen and Fuel Cell Co-operative

Inova Power has developed a hydrogen generation system which is designed for vehicle and stationary use. Recognising the demands of the consumer in terms of extending the range of electric vehicles, it is collaborating with a large EU consortium of companies in France, the UK and Spain to utilise the technology in a major fuel cell vehicle demonstration on a project called HyVan, which will produce 50-100 electric and fuel cell range extended vehicles.

Inova has approached Smith Electric Vehicles to produce the vehicles. A network has been developed, which includes County Councils (across the country), a major multiple super market chain and a port, all of which will take part as the end users of the vehicles in the UK. The project will run for 24 months and will involve the construction of a chain of H2 refuelling stations across the 3 main countries. An estimated start date for this programme will be the end of 2012.

The Hydrogen and Fuel cell Co-operative is a not for profit venture made up of 6 SME companies and Sunderland University's AMAP Institute. The Co-operative has come together as a supply chain which can deliver a hydrogen infrastructure. There are two projects currently in place, linked to building a Hydrogen Corridor to Scotland.

Inova will collaborate with Gateshead College and will be run by Aberdeen City Council. The project is part of a North Sea Interreg (an EU-funded programme that helps Europe's regions form partnerships to work together on common projects). The Co-operative is positioning itself with others to influence policy in the UK and Europe, ensuring the North East region is in the best position to influence and win funding and contracts.

In addition Inova is developing a modular design for a new type of portable refueling station and a renewable energy storage system for both wind and solar. This is linked to organisations in Canada, Scotland, Norway and the Co-operative is hoping to utilise technology from a North East Blue chip based in the Team Valley.

Avid

The AVID Technology Group Ltd is an engineering business that designs and manufactures low and zero emission vehicle technology products and specialist electric vehicles.

AVID Vehicles Ltd was set up with colleagues in ComeSys Europe Ltd with the intention of creating products for ComeSys to manufacture. The company has built a range of electric vehicles including Range Rover, sports cars, CUE-V City car, Electric UTV and supported many other projects in its first year.

There are 3 companies operating in the group; AVID Technology making components, AVID Inovations managing client projects and AVID Electric Vehicles building production electric vehicles. Chris is now focusing on business and IPR development for the group.

AVID Electric Vehicles manufactures an affordable, practical, zero emission vehicle; the eBear. This type of vehicle is known as a UTV which stands for Utility All Terrain Vehicle. UTVs are designed to go on and off road, and be used for a wide variety of applications. The global market for UTV's is around 1 million units per year.

eBear uses less than 1 pence of electricity per mile and also benefits from free road tax and 100% enhanced capital allowance (in the UK). It is available to users in the commercial and industrial sector and has many inner urban applications. It can be fitted with a range of attachment options such as snow ploughs and grit spreaders as well as different body options.

AVID Innovation licences technology and provides engineering development services for leading global vehicle manufacturers and tier 1 suppliers. It helps customers develop the vehicles and powertrain the components of tomorrow; providing expertise, knowhow and IP in control systems, electric vehicles and hybrid vehicles.

AVID Technology makes products and systems that control vehicle emissions and improve fuel efficiency with a team of specialists in the areas of drive-by-wire controls, thermal systems and mobile electronics. The drive by wire controls can be found on construction machinery, trucks, buses and niche vehicles from leading global brands helping customers to meet ever more demanding government legislation for exhaust emission quality.

AVID's advanced thermal systems are used by bus manufacturers and operators to reduce fuel consumption and emissions, and by hybrid and electric vehicle manufacturers to control the temperature of the sensitive power electronics.

Elecscoot

Elecscoot Ltd was established in 2007.

The original idea was to source vehicles from the Far East and retail them here in the UK and Europe.

We now have a power train that to date has a zero failure, meaning the company has gone from 100% return to zero returns. Elecscoot has had a brand new scooter designed and developed here in the North East, and will also be completing the Controller and BMS (what does this stand for?) in the near future which is hoped will be the best in the world market to date.

From its experience Elecscoot also recognised there was little or no training available to enable people to extend their current trade or to enter into the world of EVs. As a result of that Elecscoot has written a course which is currently being evaluated for an accreditation.

Elecscoot works with contacts in many areas including the unemployment sector and will be offering this course to those currently unemployed, particularly aiming at those aged 16 to 25. Participants can sit the course from the very start and come away with certificates allowing them to work on EVs and in any sector of this industry. Once they have sat the courses and passed guarantee placements will be made available for them, thus bringing the unemployment levels down.

Elecscoot feels courses like these are invaluable to organisations such as the City Council and its garage maintenance teams. Participants can do the courses on day release, and then become certified to work on High Voltage EV systems, again a huge bonus for councils having qualified staff to service and repair electric vehicles.

Elecscoot also runs a basic introduction course which they highly recommend to anyone interested in the EV world and the demand there will be for qualified personnel in the very near future.

The basic course will cover the history of EVs, different types of power train, film footage of caring for the environment, older EVs and current models available, and some practical work where participants can observe a power train at work. The end of the course would outline what training is available, what areas will bring highest demand and the opportunity to book courses in advance.

Elecscoot's EV range is also extending to the 4 wheel market, particularly the commercial vehicles.

Elecscoot feels its pricing structure is geared up to be very competitive. It will be retailing 1 particular truck, with many different applications available from £18,000 plus vat, where other companies in the sector are charging £90,000 for a medium sized commercial vehicle.

To summarise Elecscoot is a company that has grown on demand, and although a smaller company, it will be a major player in the commercial and training sectors.

Smiles Engineering (NE) Ltd

Smiles specialises in engine and emission control systems for commercial vehicles predominantly for bus and coach operators. The business activity focuses on the engineering and development of bus engine repowers and its unique selling point is the ability to remove an existing engine and insert a new engine in its place.

The business has 30 years of experience initially specialising in the machining and remanufacture of engines for a wide range of applications. During this time the company gained a wealth of knowledge, experience and workforce skill sets. In 2009, the business was acquired by Gordon Mockett with a view to developing the existing scope of the company.

The company offers a range of services including engine repowers, chassis refurbishment, emissions control systems and diesel particulate filter cleaning (car/bus).

- Emissions Control Systems

Exhaust emissions are harmful to air quality and various after market systems have been designed and marketed to fit older vehicles, which have no emission control fitted as standard.

The purpose of the emissions control process is to maintain the system and clean the particulate filters. To do this the company has invested in equipment which cleans the filters by a baking process, as recommended by the major filter substrate manufacturers. The procedure tests the filter before cleaning; clean the filter; and re-test it. Tests are compared to determine how efficient the cleaning has been and if the filter is fit for further use. Smiles customers have included Go Ahead, Arriva, Stagecoach and Travel London, amongst others, and the bus operators find this process to efficient and economical.

- Engine Repowers

The ability to remove a Euro 3 or below engine and repower with a Euro 4, 4+ or 5, gives bus operators huge potential in terms of providing an economical alternative to purchasing a brand new bus and comply with European legislation. Engine repowers can improve fuel consumption by up to 80%, with the lowest improvement 15-20%.

Stagecoach, East Scotland have provided a bus for repower and will monitor fuel economy, performance and reliability 'in-service'. After an appropriate time, an evaluation will be carried out to determine whether the repower has achieved the expected efficiency of 1.5 to 2 miles per gallon. The data gathered from this will be used to market the repower to other prospective customers.

As the business grows there will be a requirement to recruit a skilled workforce of technical employees to support the engineering design and development.

ENVIRONMENT AND ATTRACTIVE SCRUTINY COMMITTEE

2ND APRIL 2012

PERFORMANCE REPORT QUARTER 3 2011/2012 (OCTOBER – DECEMBER 2011)

REPORT OF THE CHIEF EXECUTIVE

1.0 PURPOSE OF THE REPORT

The purpose of this report is to provide Environment and Attractive City Scrutiny Committee with a performance update for the period October to December 2011.

2.0 BACKGROUND

Performance reports provided to Scrutiny Committee prior to March 2011 were based on performance indicators from the previous government's national indicator list, with a particular focus on those prioritised within the Local Area Agreement. In October 2010 the Coalition Government announced the deletion of the National Indicator set and also announced that from April 2011 there would no longer be a requirement for council's to produce an LAA. Both announcements signalled a move towards self regulation and improvement with more flexibility to report against local priorities using a set of locally determined measures.

For 2011/12 and beyond the Council's aim is that performance reporting should be focused on the key priorities for the people, place and economy of Sunderland. This new approach will be reflected in the performance reports and evolve and develop over 2011/12. Performance reports will include former national performance indicators reported to scrutiny committee adopted into the local performance framework for 2011 – 2012 (and those that continue to provide performance reporting relevant to the key issues and priorities for Sunderland will continue be part of the reporting framework for 2012 – 2013). In addition as part of the Council's annual planning arrangements, consideration is also being given to identifying new localised performance measures which will also be needed to support a robust performance framework tailored to local needs. These will be reported to the relevant scrutiny committee as appropriate and some of these new measures will be reported in 2011/12, where information is available and adds value to the review of performance. Members should also be aware there are also some former national indicators that are no longer available and have therefore been removed from the performance framework.

Attached at Appendix 1 is an extract of the basket of indicators that the Council has identified within the self-regulation performance framework for 2011-2012 that demonstrate progress against priorities that fall within the remit of this committee.

3.0 PERFORMANCE UPDATE

- 3.1 The following section contains a summary of performance across a number of priority areas including recycling, cleanliness standards, planning, transport, road safety, highways and accessibility.

Performance details for quarter 1, 2 and 3 as well as the previous year end performance are shown at appendix 1.

3.2 Street and Environmental Cleanliness

Previously data for street and environmental cleanliness was collected three times a year and reported to DEFRA (Department for Environment, Food, and Rural Affairs). The Local Authority is no longer required to report to DEFRA against these indicators and has therefore taken the opportunity to review these and report during 2011/12 based on what is important at a local level.

Following a review Fly-posting was identified as traditionally having very low levels in Sunderland and it was therefore decided not to collect data on this for 2011/12. Instead, it was decided that the council would start measuring levels of dog fouling across the city – the results of which could help the enforcement team who are responsible for responding to dog fouling.

The frequency of data collection has been reviewed to provide more accurate information and is now ongoing and is carried out by the Contract and Compliance team within City services with results being produced every quarter and reported to the Tidy Britain group.

A combined average of these surveys to the end of quarter 3 shows that:

- 2.38% were deemed to have unacceptable levels of litter compared to quarter 2 when performance was 2.33%.
- Less than 1% (0.68%) were deemed to have unacceptable levels of detritus an improvement on quarter 2 when performance was 3%.
- Less than 1% (0.68%) were deemed to have unacceptable levels of graffiti consistent with quarter 2 performance.
- 1% were deemed to have unacceptable levels of dog fouling, an improvement on quarter 2 when performance was 2%.

An increase of 0.04% was seen between quarter 2 and quarter 3 in relation to litter despite a survey of the centre between Christmas and New Year for the first time as well as the inclusion of back lanes in the city centre for the first time also.

Whilst there is a small increase in incidence of litter between quarter 2 and 3 the performance represents generally low levels of litter with positive performance being maintained and these services having a high focus through the Responsive Local Services project

3.3 Recycling

The amount of household waste collected and *not* recycled was 512 kilograms per household for the period October to December 2011 which is an improvement when compared to quarter 3 (October to December) of 2010 when performance was 534 kilograms.

The percentage of household waste that is recycled has also improved to 35% in October to December 2011 compared to 32% in October to December 2010 and indicates that the council is on track to continue the year on year performance improvement achieved in recycling. The introduction of the blue bin service had a significant impact on the improvements in recycling and performance continues to further improve as a result of increased tonnage through the blue bin collection service and higher recycling performance due to improvements to the Household Waste Recycling and Reception Centre at Beach Street. However, figures illustrate a reduction on the previous quarter, which is related to seasonal variations in green garden waste and the winter suspension of the collection service.

The amount of municipal waste sent to landfill has also continued to be reduced to 61% in October to December 2011 from 67.5% in October to December 2010. This is in line with improvements in recycling performance.

It should be noted that quarterly figures are provisional until the end of the financial year and may alter slightly.

3.4 Planning

The number of net additional dwellings built in England has been reducing on an annual basis since 2008/9, on average 16% fewer additional dwellings built per year. In contrast, Sunderland has seen an increase in the number of net additional dwellings in the same time period. Between 2008/9 and 2010/11 there was an average annual increase of 28.4%, from 190 net additional dwellings in 2008/9 to 380 in 2010/11.

The scrutiny report for quarter 2 (July to September 2011) highlighted to scrutiny members a change in this trend and identified two factors, namely an increase in demolitions and a reduction in the number of new dwellings being built. A high number of demolitions in the first two quarters of 2011/12 has resulted in the number of net additional dwellings falling to 104 properties, a 73% reduction compared to the previous year. This is due to several large regeneration sites across the city being demolished, particularly in the Doxford Park (50 demolitions), Broom Hill (38 demolitions), Castletown (34 demolitions) and Downhill (40 demolitions) parts of the city. In addition, the number of dwellings completed has fallen from 536 in the first three quarters of 2010/11 to 358 in 2011/12. Scrutiny has previously been advised that historically the number of dwellings in Sunderland has been sustained by previous government affordable homes policies. In recent years private developers have not been able to develop and deliver private schemes the principle factor being the lack of

mortgage availability as opposed to the lack of available land sites that are ready for housing development.

The percentage of major applications processed within 13 weeks has remained stable from last quarter at 84%. Performance is above that for the same period last year and is also above the target of 80%.

The percentage of minor applications processed within 8 weeks fell marginally from 91.2% in quarter 2 to 90.6% in quarter 3. Performance is below that for the same period last year and below the target of 93.5%.

The percentage of other applications processed within 8 weeks also fell marginally from 96.2% to 95.7%. Performance is below that for the same period last year and below the target of 98%.

Performance has declined on the same period last year due to the complexity and nature of applications. Minor applications are monitored on a weekly basis to ensure the best performance possible is achieved.

3.5 Accessibility, Transport and Travel

a) Accessibility

Data on accessibility to key employment sites and services by sustainable methods (using public transport and other sustainable methods such as walking or cycling) is an annual data set and there is no update for quarter 3.

On the 14th December 2011, the government announced that it would back Sunderland's £85.2m bid towards the new Wear crossing project, with work on tenders and contracts expected to start early 2012 and construction work beginning later in the year subject to the outcome of a public enquiry on compulsory purchase orders. The target completion date of the project is late 2015. The new bridge crossing is a major development expected to impact on accessibility, transport and travel within the city.

b) Transport

As the transport measures for bus punctuality are annual there has been no further update on these indicators. The last report to scrutiny reported that bus punctuality for non-frequent services has improved year on year. This reflects well on the work of the LTP partners in implementing bus priorities and other highway improvement measures. An 85% target (the percentage of non-frequent buses (fewer than 6 buses per hour) on time according to scheduled bus departure times) is set nationally by the Traffic Commissioners and by its nature does not reflect local circumstances. It can best be seen as very much an aspirational target. The local aspiration should be for a year on year improvement trend.

There has been a slight increase in excess waiting time for frequent bus services year on year, although while this trend is a matter for concern, performance is within the target of 1 minute and 5 seconds. Discussions are taking place with operators regarding punctuality of services which has an effect on customer satisfaction.

Recently the Tyne and Wear Integrated Transport Authority (TWITA) were successful in their bid to attract £4.9 million from the Local Sustainable Transport Fund (LSTF). The fund was awarded to those integrated transport authorities and local authorities that provided a comprehensive package of transport measures targeted at supporting the economy and encouraging its growth, improving road safety and promoting healthier lifestyles and cleaner, greener air. Sunderland is expected to obtain a 5th share of this 4.9 million pound.

Sunderland's four key aims are to:

- To reduce congestion and make journey times more reliable and predictable which will benefit the economy.
- To increase the proportion of journeys made by low-carbon and sustainable forms of travel with reduced carbon emissions
- To encourage active travel as a form of transport to increase the levels of physical activity amongst young people with significant health benefits
- To reduce the volume of motorised traffic at the start and finish of the school day to improve safety around school entrances

The congestion measure is an annual performance indicator and there is no update for quarter 3. The latest available data shows that the average journey time in minutes during morning peak times remains consistent with the previous year (see appendix 1). School traffic, however, can have a significant impact on congestion at peak times with journeys during term time taking 25% longer than when schools are shut during the school holidays.

c) Travel to School

Data relating to method of transport for children travelling to school is updated annually and there is no update for the period October to December 2011. The latest available data, relates to the academic year 2009/2010 and shows that the percentage of 5-11 year olds travelling to school by car has increased to 32.4% from 31.2% in the previous year and 30.9% in the year prior. This is considerably higher than the projected target to reduce the figure to 13%. The proportion car sharing and walking to school has decreased and is lower than the projected target to increase to 10% and 59% respectively.

A key objective of the bid to the Local Sustainable Transport Fund included tackling congestion by developing attractive and practical alternatives to travelling to school by car. Over the next four years Sunderland City Council will work with schools in the area in relation to new transport and travel initiatives aimed at reducing travel to school by car as well as further promoting existing initiatives. The initiatives include:-

- **Walk once a Week** - the country's largest national walk to school programme, aimed at primary school children, sees pupils earn highly collectible pin badges recognising their walking achievements. WoW is a simple way to increase walking rates, with schools taking part having nine per cent more young people walking to school than the national average.
- **Campaign in a Box/Free your Feet** - Free your Feet is a walking programme for secondary school children and has increased walking rates by as much as 15 per cent in some schools. It encourages young people to take up the walking challenge by submitting postcards saying how far they've walked with prizes on offer.
- **Bike-it** – Bike-it aims to develop a cycling culture within schools and involves families and school staff. It also encourages the appointment of school cycling champions, holds bike breakfasts for cyclists, and organises free mend your bike days. Cycling levels at Bike-it Schools are five times the national average.
- **Balance Bikes** - Balance Bikes are small, pedal free bicycles aimed at pre-school children to get them into the cycling habit. This project will buy a number of bikes for nursery schools and training will be provided for staff.
- **FEAT 1st** - gives families the information, skills and confidence they need to make short trips on foot and bike.
- **Child Pedestrian Training/Bus Induction** - These projects will help children to become safe and confident pedestrians and public transport users.
- **Parking at Schools** - This project enables all Tyne and Wear Local Authorities to carry out parking enforcement outside schools using cameras fitted to Smart cars.
- **School Links** - This project will fund infrastructure works, making it easier to cycle or walk to school. Work can include resurfacing cycle paths or installing new pedestrian crossings.
- **Grants to Schools** - This project will fund bike sheds within schools, providing safe places for pupils to store their bicycles. Other works might include new paths school paths, pool bikes, bike trailers and tools.
- **Promotion of Public Transport** - This project teaches children the different ways to get to school and encourages parents to use Tyne and Wear's frequent and convenient public transport links and to take advantage of discounted travel of children.
- **Travel Matters** - Travel Matters is a website that encourages primary schools to look at green travel options. The site boasts an extensive library of teaching materials as well as a pupil zone full of fun and challenging activities.

3.6 Road Safety

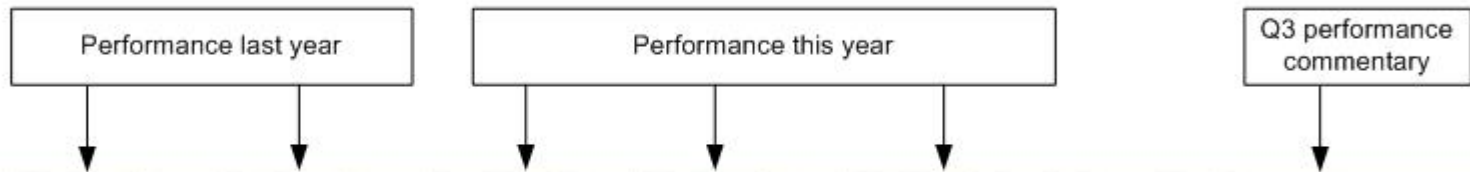
The basket of road safety indicators shows continuous improvement compared to last year including the number of people and the number of children killed or seriously injured or slightly injured on our roads remains low with fewer casualties in the first 9 months of 2011/12 when compared with the first 9 months of 2010/11. The Council continues to work hard to reduce the number of people killed or seriously injured through education, promotion and the implementation of traffic engineering measures where appropriate. A prioritisation mechanism has been developed which gives priority to sites with a significant accident history and has been used to assist in formulating a programme of future works.

4. RECOMMENDATION

That the Committee considers the continued good progress made by the council and the Sunderland Partnership and those areas requiring further development to ensure that performance is actively managed.

Contact Officer: Kelly Davison-Pullan
Title: Lead Officer for Corporate Performance
Telephone: 0191 566 3048 / 07795 238 059

Report Key




Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage of relevant land and highways that is assessed as having deposits of litter that fall below an acceptable level (NI195a)	5.00 %	3.00 %	1.33 %	2.33 %	2.38 %	✔	Surveys conducted every The litter score is slightly may be down to the fact city centre between Chris time we have surveyed th undoubtedly its busiest tir lanes in the city centre w

This is a Q3 comparison against Q3 last year. The symbols mean:

- Bigger is better and performance has improved
- Smaller is better and performance has improved
- Performance is stable
- Bigger is better and performance has declined
- Smaller is better and performance has declined
- Information is not available

Cleanliness


Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage of relevant land and highways that is assessed as having deposits of litter that fall below an acceptable level (NI195a)	5.00 %	3.00 %	1.33 %	2.33 %	2.38 %		Our score in terms of litter is slightly higher than last quarter but this may be down to the fact that we decided to survey the city centre between Christmas and New Year, which is undoubtedly our busiest time of the year. Back lanes were also surveyed this quarter, which is another first.
The percentage of relevant land and highways that is assessed as having deposits of detritus that fall below an acceptable level (NI195b)	14.00 %	7.00 %	1.67 %	3.17 %	0.68 %		Lower than the previous quarter and also an improvement on the same period last year.
The percentage of relevant land and highways that is assessed as having levels of graffiti that fall below an acceptable level (NI195c)	2.00 %	1.00 %	0.17 %	0.67 %	0.68 %		A slight increase over the previous quarter, although an improvement on the same period last year.
The percentage of relevant land and highways that is assessed as having levels of dog fouling that fall below an acceptable level (LPI068)	?	?	0.67 %	2.00 %	1.02 %		This measure is new in 2011/12. Performance lower than the previous quarter.





Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The grade that measures the year on year change in total number of incidents of fly tipping compared with the year on year change in total number of enforcement action (reducing fly tipping incidents and increasing enforcement activity is better performance) Grade 1 is very effective and grade 4 is poor (NI196)	1.00	3.00	3.00	3.00	3.00		<p>The primary aim of this annual measure is to decrease incidents of fly tipping, while increasing the number of enforcements.</p> <p>The latest available data relates to the 2010/11 financial year, when a total of 47,074 incidents were recorded compared to 25,012 the previous year and 47,404 the year before that. Enforcement actions have remained static across all 3 years.</p>

Recycling

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The number of kilograms of household waste collected that is not sent for reuse, recycling or is not composted or anaerobic digestion per household (NI191)	534.32	706.59	173.79	347.51	512.29	↓	<p>Figures have continued to fall, exceeding the target. This is due to a reduction in growth of residual household waste and ongoing efforts to divert more waste for recycling.</p> <p>Quarterly figures are provisional until the end of the financial year as they can alter slightly.</p>
The percentage of household waste arisings which have been sent by the Authority for reuse, recycling, composting or treatment by anaerobic digestion (NI192)	32.25 %	31.21 %	37.34 %	36.87 %	35.37 %	↓	<p>Performance continues to improve from the previous year through increased tonnages from the blue bin collection service and higher recycling performance due to improvements to the Household Waste Recycling and Reception Centre at Beach Street. However, figures illustrate a reduction on the previous quarter, which is related to seasonal variations in green garden waste and the winter suspension of the collection service.</p> <p>Quarterly figures are provisional until the end of the financial year as they can alter slightly.</p>
The percentage of Municipal waste landfilled (NI193)	67.50 %	65.23 %	60.21 %	61.58 %	61.08 %	↓	<p>The amount of municipal waste sent to landfill has decreased in line with improvements in recycling performances illustrated in NI192 and the diversion of some material to an alternative processing facility which serves to reduce volume.</p> <p>Quarterly figures are provisional until the end of the financial year as they can alter slightly.</p>





Planning




Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The net increase in dwelling stock over one year is calculated as the sum of new build completions, minus demolitions, plus any gains or losses through change of use and conversions (NI154).	411.00	376.00	74.00	31.00	104.00		<p>The reduction in the number of net additional homes provided in 2011/12 is due to two main reasons:-</p> <p>Firstly, the number of new build completions across the city has declined from 536 units in the first three quarters of 2010/11 to 358 units in the first three quarters of 2011/12. The rate of new build in Sunderland has been artificially sustained primarily due to the previous Government's affordable housing policies, such as the Kickstart scheme. In 2010/11 407 out of 641 (63.5%) new build properties were developed by the social housing sector. This contrasts with only 178 in 2009/10, which only accounted for 39.9% of all new build completions. In addition, the extra care housing programme in Sunderland has created sites in Hetton, Houghton, Silksworth and Washington which has delivered additional affordable housing schemes over the last several years. Private developers during this period however have not been able to develop and deliver private schemes. The principle factor being the lack of mortgage availability as opposed to the lack of available sites that are ready to develop for housing.</p> <p>Secondly, the number of demolitions in the first three quarters of 2011/12 was 254, an increase of 103% from 126 in 2010/11. This is due to several large regeneration sites across the city being demolished, particularly in the Doxford Park (101 demolitions), Broom Hill (64 demolitions), Castletown (34 demolitions) and Downhill (40 demolitions) parts of the city.</p>

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage of major planning applications dealt with in 13 weeks (NI157a)	81.82 %	80.85 %	81.25 %	84.21 %	84.85 %		Performance in relation to major applications has continued above the local target level of 80%. Applications received in this quarter have been of a complex nature and together with the need to encourage and work with developers has resulted in some applications exceeding their target. Major applications are continually monitored by management and are discussed at weekly management meetings to ensure the best performance possible is achieved.
The percentage of minor planning applications dealt with in 8 weeks (NI157b)	96.20 %	95.29 %	93.62 %	91.20 %	90.61 %		Performance has declined on the same period last year due to the complexity and nature of applications. Minor applications are monitored on a weekly basis to ensure the best performance possible is achieved.
The percentage of 'other' planning applications dealt with in 8 weeks (NI157c)	97.98 %	97.47 %	97.80 %	96.21 %	95.68 %		Performance has declined on the same period last year due to the complexity and nature of the applications and the number that is called to committee by council members which delays a decision. Other applications are also monitored on a weekly basis to ensure the best performance possible is achieved.
The total number of net additional dwellings that are deliverable as a percentage of the planned housing provision (in net additional dwellings) (NI159)	120.16 %	120.00 %	120.00 %	120.00 %	120.00 %		Latest data relates to 2010/11. Only a very marginal decrease on 2009/10 and still 20% over and above the housing supply requirement.







Transport & Road Safety

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The number of people killed or seriously injured (KSI) in road traffic collisions (BV099ai)	72.00	89.00	18.00	36.00	57.00	✓	Latest data is lower than 72 recorded at the same point last year. Success in attracting a share of £4.9million as part of the Local Sustainable Transport Fund and continued road safety awareness out in schools should help us to continue this positive trend.
The number of children (aged under 16 years) killed or seriously injured (KSI) in road traffic collisions (BV099bi)	19.00	22.00	5.00	8.00	13.00	✓	Latest data is lower than 19 recorded at the same point last year.
The number of people slightly injured in road traffic collisions (BV099ci)	585.00	844.00	204.00	381.00	549.00	✓	Latest data is lower than 585 recorded at the same point last year.
The percentage change in number of people killed or seriously injured during the calendar year compared to the previous year. (Figures are based on a 3 year rolling average) (NI047)	6.62 %	9.90 %	11.89 %	9.81 %	6.64 %	✓	Based on the 3 year average across 2009, 2010 and 2011, performance has improved by 6.64% when compared against the previous 3 year average of 2008, 2009 and 2010.

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage change in number of children killed or seriously injured during the calendar year compared to the previous year. (Figures are based on a 3 year rolling average) (NI048)	4.28 %	10.80 %	-4.95 %	-3.09 %	-11.13 %		Based on the 3 year average across 2009, 2010 and 2011, performance has declined by 11.13% when compared against the previous 3 year average of 2008, 2009 and 2010.
The average number of days taken to repair a street lighting fault, which is under the control of the local authority (BV215a)	5.34	5.42	4.76	4.48	4.68		Performance has improved year on year and remains on target against 7 days. As part of our PFI contract with Aurora, written in September 2003, residential street lamps have been replaced every 3-4 years and highway lamps replaced every 2 years. This early intervention has helped reduce incidents of lamp failure.
The average number of days taken to repair a street lighting fault, where response time is under the control of a DNO (BV215b)	21.93	21.29	14.89	15.85	15.24		Performance has improved year on year and remains on target against 35 days. Performance is out of the City Council's control as it is governed by Northern Electric, the Distribution Network Operator (DNO)
Congestion - Average journey time per mile (in minutes) during morning peak times (NI167)	3.03	3.05	3.05	3.05	3.05		Latest data relates to 2010/11, which has decreased slightly over 2009/10.

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 < > Q3	Commentary
The percentage of the local authority's A-road and M-road network where maintenance should be considered (NI168)	2.00 %	3.00 %	3.00 %	3.00 %	3.00 %		Latest data relates to 2010/11. It should be noted that these figures are still exceptional and show that Sunderland are performing well compared to other authorities. A marginal decline in direction of travel and slight under performance against target could be attributed to: Surveys allowing for a 10% error rate and the fact that the out turn is rounded to a whole number; and the effects of the bad winter which influenced results in January.
The percentage of the local authority's B-road and C-road network where maintenance should be considered (NI169)	2.00 %	3.00 %	3.00 %	3.00 %	3.00 %		Latest data relates to 2010/11. Comments above apply here too.
The percentage of people of working age living within the catchment area of a location with more than 500 jobs either travelling by public transport and/or walking (NI176)	83.79 %	84.60 %	84.60 %	84.60 %	84.60 %		Latest data relates to 2010/11, which is an improvement over 2009/10.





Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The total number of local bus and light rail passenger journeys originating in the authority area (NI177)	180,775,000.00	178,271,000.00	178,271,000.00	178,271,000.00	178,271,000.00	✖	<p>Latest data relates to 2010/11 when ridership amounted to 39,926,000 Metro passenger journeys and 138,345,000 bus passenger journeys. Metro ridership was affected by the start of the reinvigoration works to tracks and to stations, which involved weekend possessions initially, leading onto major line closure and it is expected that improvement works will continue to have an effect. Bus passenger journeys has been affected by a reduction in the number of older and disabled people using services, while the remainder is due to the continuing decline in adult fare paying passengers. Overall, we are still ahead of the LTP2 target of 169,000,000 which had been set before the current English National Concessionary Travel Scheme arrangements were progressively implemented. It should be noted that mandatory bus concession for older and disabled people has been in place since 2001.</p>

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
Bus punctuality - the percentage of non-frequent buses (fewer than 6 buses per hour) on time according to scheduled bus departure times (NI178i)	75.10 %	76.20 %	86.00 %	86.50 %	89.20 %		We are currently over performing against the Tyne & Wear target of 86% to quarter 3 and we have also improved on 75% reported at the same point last year. The new Sunderland Strategic Transport Corridor and financial benefits from the Local Sustainable Transport Fund will help to improve performance.
Bus punctuality - Excess waiting time of frequent services (6 or more buses per hour) in number of minutes (NI178ii)	0.48	0.51	0.52	0.91	0.81		Measured in minutes or a proportion of minutes, 0.81 (or 49 seconds) is slightly higher than 0.71 (or 43 seconds) reported at the same point last year and also higher than our target of 0.65 (39 seconds) to quarter 3.
The percentage of school aged children in full time education stating that the mode of transport that they usually use for travelling to school is by car (NI198)	21.90 %	22.90 %	22.90 %	22.90 %	22.90 %		An increased number of children aged 5-16 travelled to school by car during academic year 2009/10.
Percentage of 5-10 year olds travelling to school by car (NI198ia)	31.20 %	32.40 %	32.40 %	32.40 %	32.40 %		An increased number of 5-10 year olds travelled to school by car during academic year 2009/10
Percentage of 5-10 year olds travelling to school by car share (NI198ib)	8.20 %	7.10 %	7.10 %	7.10 %	7.10 %		A reduced number of children shared a lift to school during academic year 2009/10
Percentage of 5-10 year olds travelling to school by public transport (NI198ic)	3.30 %	3.50 %	3.50 %	3.50 %	3.50 %		An improvement in terms of the number of 5-10 year old children travelling to school by public transport

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
Percentage of 5-10 year olds travelling to school by walking (NI198id)	57.00 %	56.60 %	56.60 %	56.60 %	56.60 %		A reduced number of children aged 5-10 walked to school during academic year 2009/10
Percentage of 5-10 year olds travelling to school by cycling (NI198ie)	0.10 %	0.40 %	0.40 %	0.40 %	0.40 %		An increased number of children aged 5-10 cycled to school during academic year 2009/10
Percentage of 5-10 year olds travelling to school by other means (NI198if)	0.10 %	0.00 %	0.00 %	0.00 %	0.00 %		A reduced number of children aged 5-10 travelled to school by other means of transport during academic year 2009/10
Percentage of 11-16 year olds travelling to school by car (NI198iia)	15.20 %	14.90 %	14.90 %	14.90 %	14.90 %		A reduced number of children aged 11-16 travelled to school by car during academic year 2009/10.
Percentage of 11-16 year olds travelling to school by car share (NI198iib)	1.90 %	1.60 %	1.60 %	1.60 %	1.60 %		A reduced number of children aged 11-16 shared a lift to school during academic year 2009/10.
Percentage of 11-16 year olds travelling to school by public transport (NI198iic)	25.50 %	24.10 %	24.10 %	24.10 %	24.10 %		A reduced number of children aged 11-16 travelled to school by public transport during academic year 2009/10.
Percentage of 11-16 year olds travelling to school by walking (NI198iid)	49.60 %	56.80 %	56.80 %	56.80 %	56.80 %		An increased amount of children aged 11-16 walked to school during academic year 2009/10.
Percentage of 11-16 year olds travelling to school by cycling (NI198iie)	0.50 %	0.40 %	0.40 %	0.40 %	0.40 %		A reduced number of children aged 11-16 cycled to school during academic year 2009/10.
Percentage of 11-16 year olds travelling to school by other means (NI198iif)	7.30 %	2.10 %	2.10 %	2.10 %	2.10 %		A reduced number of children aged 11-16 travelled to school other means of transport during academic year 2009/10.

Accessibility

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage of households within 20 minutes of closest secondary school (travelling by public transport, walking and cycling) (NI175a)	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	➡	Latest data relates to 2010/11. Accessibility to a place can change for a number of reasons but the most likely cause is that there has been some change in the frequency or routeing of bus services. Bus Operators make frequent changes throughout the year to the details of the service that they provide. The current trend seems to be to maintain a service but to vary the route usually by making it longer and more circuitous. The general effect of this is not that places become inaccessible but that it takes longer to get there hence the change in the relevant performance indicators. Given the complex interactions between services particularly if interchange between services is part of the journey it is extremely difficult to identify which of multiple changes has caused what effect.
The percentage of households within 20 minutes of closest primary school (NI175b)	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	➡	As above.
The percentage of households within 30 minutes of closest A&E hospital (NI175c)	87.10 %	86.50 %	86.50 %	86.50 %	86.50 %	✖	As above.
The percentage of households within 20 minutes of closest GP surgery (NI175d)	99.70 %	100.00 %	100.00 %	100.00 %	100.00 %	✔	As above.
The percentage of households within 40 minutes of specific employment sites - Doxford (NI175e)	87.80 %	91.00 %	91.00 %	91.00 %	91.00 %	✔	As above.

Performance Indicator	Q3 2010/11	Q4 2010/11	Q1 2011/12	Q2 2011/12	Q3 2011/12	Q3 <> Q3	Commentary
The percentage of households within 40 minutes of specific employment sites - Nissan (NI175f)	79.20 %	75.90 %	75.90 %	75.90 %	75.90 %		As above.
The percentage of households within 40 minutes of specific employment sites - Pattinson (NI175g)	77.20 %	87.00 %	87.00 %	87.00 %	87.00 %		As above.
The percentage of households within 40 minutes of specific employment sites - City Centre (NI175h)	84.50 %	84.20 %	84.20 %	84.20 %	84.20 %		As above.
The percentage of people of working age living within the catchment area of a location with more than 500 jobs either travelling by public transport and/or walking (NI176)	83.79 %	84.60 %	84.60 %	84.60 %	84.60 %		Latest data relates to 2010/11, which is an improvement over 2009/10.

ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE

2 APRIL 2012

DRAFT ANNUAL REPORT OF THE COMMITTEE

REPORT OF THE CHIEF EXECUTIVE

Strategic Priority: SP5 - Attractive and Inclusive City

Corporate Priorities: CI01 – Delivering Customer Focused Services, CI04 – Improving Partnership Working To Deliver ‘One City’

1. PURPOSE OF THE REPORT

- 1.1 To approve the Scrutiny Committee report as part of the overall scrutiny Annual Report 2011/12 that is to be presented to Council.
- 1.2 In the first instance, the report will be submitted to the Management Scrutiny Committee on 19 April 2012. The report will then be incorporated into an Annual Scrutiny Report which includes the work of each Scrutiny Committee.

2. BACKGROUND

- 2.1 This will be the third year that the Annual Report will be a single combined report of all seven Scrutiny Committees. The annual report will outline the development in the scrutiny function and provide snapshots of the outcomes achieved during the last 12 months.
- 2.2 In June 2011, Members of the Scrutiny Committee agreed the annual work programme for the municipal year 2011/12. The Work Programme brought together the issues raised by Members as the major priorities and challenges facing the city for the year ahead.

3. CURRENT POSITION

- 3.1 The draft content of the annual report of the Committee is set out in Appendix 1.

4. CONCLUSION

- 4.1 The Committee has delivered a busy work programme in 2011/12, which is reflected in the annual report. The Scrutiny Committee has worked with Council Directorates, partner organisations and residents of the city to deliver the work programme and has tackled a number of key issues making suggestions for improvements to services delivered across the city.

5. RECOMENDATION

- 5.1 Members are asked to consider and comment on the draft end of year report of the Committee.
- 5.2 The report, together with the comments of members, will be submitted to the Management Scrutiny Committee on 19 April 2012.

6. BACKGROUND PAPERS

- Environment and Attractive City Scrutiny Committee Agendas 2011/12
- Environment and Attractive City Scrutiny Committee Work Programme 2011/12

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APPENDIX 1

This year the Committee wanted to look at the use of 'Low-Carbon Vehicles in the Delivery of Public Services' as its main item of work. The initial driver for this review were the issues posed by climate change, and as we have progressed through the year it has highlighted the importance of this issue for Sunderland, environmentally, economically and financially.

The targets to reduce carbon emissions contained within the Climate Change Act 2008 are binding and there are major implications for non-achievement by 2050. The growth and development of the low-carbon transport industry as a means of reducing carbon emissions in the UK provides an excellent opportunity for us as a city, and as a region to develop our reputation and standing in this arena. Getting the greatest value for money has never been more crucial and public sector expenditure should have the maximum impact on job creation and economic development within the region, therefore it made sense to us as a Committee that a range of low emission vehicles are utilised by public sector bodies.

The Committee took a wide range of evidence for the review from sources including the city's MPs, the North East Purchasing Organisation (NEPO), NEXUS and the bus operators, the University of Sunderland and Gateshead College and several local and regional businesses working in the low-carbon transport sector. We were particularly pleased to work with Cenex, the UK's leading expert in low-carbon transport who was able to provide us with robust evidence to significantly influence and strengthen the overall review.

We concluded that the council should consider implementing targets to adopt electric cars into its fleet and that it should continue to keep a close eye on developments in low-carbon transport technologies. Driver training programmes in the use of electric vehicles will be crucial and we also feel a wide range of other measures should be explored to reduce the council's transport carbon emissions. Finally, we recommended that the council should 'lead the way' and do as much as it can to encourage other public and private sector organisations to take up low-carbon vehicles.

It has been a busy year in other areas of work too; we have successfully influenced some key plans for the city, including the Seaburn Masterplan and Design Code. We also worked closely with officers to develop a prioritisation scheme for traffic and road safety to enable the council to make the greatest impact and best allocation of resource on such an important topic for our residents. Finally, we were pleased to receive a positive update on future plans for Fawcett St in the City Centre, a matter this Committee has long taken a keen interest in.

I would like to take the opportunity to give my thanks to colleagues, officers and partners for the ongoing enthusiasm and commitment they have shown whilst looking at issues that are important to the future of our city's development.

**PROJECT UPDATE: STREET LIGHTING AND HIGHWAY
SIGNS PFI CONTRACT**

**JOINT REPORT OF THE EXECUTIVE DIRECTOR OF CITY SERVICES
AND AURORA (SUNDERLAND STREET LIGHTING LTD)**

**Strategic Priorities: Attractive and Inclusive City, Prosperous City and
Safe City**

**Corporate Priorities: CIO1: Delivering Customer Focused Services, CI04:
Improving partnership working to deliver 'One City'**

1.0 PURPOSE OF THE REPORT

1.1 The reason why the report has been brought to Committee is that progress on the Street Lighting and Highway Signs PFI is included on the Committee's 2012-2013 work programme.

2.0 PART A: INTRODUCTION SUNDERLAND CITY COUNCIL

2.1 Street lighting continues to be rated by the city's residents as one of the most important services provided by the council.

2.2 The Street Lighting and Highway Signs PFI contract commenced in 2003, has duration of 25 years and is worth over £5m per annum. In the first five years of the contract Aurora invested over £30m in providing the city with nearly 31,000 lighting units and 4000 highway signs. Since the completion of this work, Aurora has focused their resources on the operation and maintenance aspects of the service as well as assessing the requirement, based on risk, for a future replacement programme.

2.3 The contract is one based on performance with payments being made on achieving the contractual standards.

2.4 The council's role in the delivery of the street lighting service is that of contract monitor; assessing Aurora's performance against the five relevant performance standards within the contract and applying deductions where necessary on a monthly basis. The standards are set out in Aurora's report (Part B).

2.5 Its pleasing that Aurora's performance continued to improve during the last year with the level of deductions being reduced to reflect this.

2.6 Whilst Aurora's report highlights its performance against the contractual standards, there is more focus on innovation and the examination of more

energy efficient technology which if adopted will assist in reducing the city's carbon footprint and energy costs.

- 2.7 Representatives from Aurora, Phil Jordan (PFI General Manager) and Neil Bailey (Design Manager), will be attending the meeting to present their update report and answer any questions raised by members.

3.0 PART B: PROGRESS REPORT –AURORA (SUNDERLAND STREET LIGHTING LTD)

- 3.1 2011 was the 8th year of the 25 year P.F.I. project, and the annual maintenance programme continues to be delivered following the completion of the Core Investment Programme (CIP) in August 2008. The 2011 annual service report has been submitted, using information obtained from the eighth year of operation, and supplementary information provided by our partner Sunderland City Council.

- 3.2 **Performance Standard 1-** related to installations of new columns during the Core Investment Period (Applicable years 1 to 5 of the project). There is therefore no requirement to measure performance against this standard.

3.3 Performance Standard 2- Lighting Performance and Planned Maintenance

- 3.3.1 Maintenance undertaken in 2011 in accordance with this standard included; electrical testing, structural inspections, bulk lamp replacements, painting, cleaning, and routine monitoring using night time patrols. In all 55,150 planned maintenance operations were completed in 2011, which is in keeping with the rolling four year maintenance cycle. Planned maintenance also includes highway signs and illuminated traffic bollards, and each sign has received at least one maintenance visit within the year, Traffic bollards have 7no visits, 1no in summer and the remainder throughout the winter months.

- 3.3.2 The lighting standard required in the contract is that 98% of units shall be lit during their hours of operation. An average of 99.35% was achieved throughout 2011. The 2011 yearly average equates to 305 units from a total of approximately 47,000 units being inoperative at any one time.

- 3.3.3 A visual inspection has also been carried out as part of each planned maintenance operation in line with national guidance.

- 3.3.4 There were no deductions made against this standard during 2011.

3.4 Performance Standard 3-Operational Responsiveness and Reactive Maintenance

- 3.4.1 Within the contract Aurora has 7 calendar days to respond to faults on its

apparatus. The average time taken to repair a non emergency fault in 2011 was 4.96 calendar days, representing a 10% improvement on 2010 response times and well within the contract requirement.

- 3.4.2 There were 134 reported column knockdowns as a result of Road Traffic Accidents (RTAs) which were attended to in 2011, the majority of which were replaced within the contract requirement time of 15 working days. The exceptions being columns located on a High Speed Road, which were replaced within planned road closures.
- 3.4.3 There were 192 reports of vandalism to street furniture in the year, which is the same as the reported figures for 2010. These were also dealt with in the prescribed rectification period set down in this standard. Only 4 reports of vandalism to subways were received, a further reduction on previous years figures.
- 3.4.4 Members will recollect from Aurora's previous annual reports and the presentation given by NEDL, on request of the Scrutiny Committee in 2010, that an area of concern was the response to lighting faults caused by electrical supply failure which is the responsibility of Northern Powergrid (formerly NEDL). Aurora is pleased to report that the response time performance of Northern Powergrid in 2011 has improved 26%, averaging 17 calendar days as opposed to 22 days previously. This is a result of improved communications and reporting processes involving all parties. However, when it is likely that permanent repairs will not be carried out by Northern Powergrid in a reasonable time, Aurora continues to be committed to installing temporary overhead supplies in sensitive and high risk areas.
- 3.4.5 There were no deductions made against this standard during 2011.

3.5 Performance Standard 4-Contract Management and Customer Interface.

- 3.5.1 As stated in paragraph 2.1, street lighting continues to be rated by the city's residents as one of the most important services the council provides. The most recent Ipsos MORI satisfaction survey undertaken on behalf of the council indicated a 92% satisfaction with street lighting, the highest scoring of all the council's services. Aurora will be striving to make further improvements during 2012 and thereafter.
- 3.5.2 The Business Support section of Aurora Street Lighting is constantly monitoring and dealing with customer contacts in accordance with this standard. Complaints and enquiries are logged onto the 'Communication Tracker' which is a Customer Liaison database. The level of complaints and enquiries have dropped significantly since the end of the C.I.P. in 2008 from 167 to 67 in 2011, which was to be expected due to significantly less construction works taking place.

- 3.5.3 The contract manager has ownership of each enquiry, and is accountable for ensuring response times are in accordance with the standard. The response times set down in the contract are within 5 working days for a council enquiry, all other enquiries within 10 working days. In the year, 87 design and estimate requests were received and all met within target, 44 were 5 working day response times, 43 had 10 day response times.
- 3.5.4 Additionally a total of 67 'Tracker' service complaints or enquiries concerning lighting levels were dealt with in 2011, 28 of these were from elected members. At the time of compiling this report there were zero outstanding complaints or enquiries. A total of 1765 telephone enquiries regarding street lighting were received from the public in 2011.
- 3.5.5 Deductions in the sum of £3872.72 were made against performance Standard; this was due to the standard charge agreed with SCC relating to the non provision of 24 hour Contact Centre. It is important to note that since service commencement and through agreement with the council this service has been provided by the council's out of hour's team. The number of reports is minimal averaging only eight faults per week. The agreed charge is £320.91 per month (indexed).

3.6 **Performance Standard 5-Best Value Assistance and Reporting**

Performance standard 5 refers to the timely and accurate provision of the monthly and annual service report which includes the following items:

- Performance against local and national performance indicators
- Environmental considerations (waste, energy etc)
- Innovation and service improvement.
- Health and Safety Issues.
- Customer feedback and satisfaction

No penalties have been received under performance standard 5 for the year.

3.7 **Performance Standard 6-Working Practices**

Performance Standard 6 monitors the performance of Aurora Street Lighting in dealing with failures of health and safety categorised as Routine, Urgent and Serious.

Failure to deal with incidents of this nature in the timescales set out in the Output Specification/Method Statements results in financial deduction and the accrual of Service Points.

No financial deductions or Service points have been levied in the reporting year. Aurora's accident frequency rate (AFR) was zero in the

year.

4.0 OTHER AREAS OF SERVICE DELIVERY

- 4.1 Both the Houghton Feast and Christmas Festive Lighting programmes were delivered to specification in 2011/12, including additional City Centre Illuminations. Over 1,600 labour hours were expended on erecting, improving and removing the festive lighting during the period. Feedback from the council's events team is that both programmes proved to be a success and were well received by the public and elected members.
- 4.2 Aurora continue to assist the Council in making communities feel safer by undertaking operations for the Central Security Unit; erecting, re-locating and repairing CCTV cameras.34 jobs were carried out in the year.
- 4.3 The new street lighting and illuminated artwork elements of the Marine Walk Lighting Scheme was successfully completed by Aurora in October 2011. Phase 1 of the Street Lighting element of the Market Square project was also delivered in 2011, with Phase 2 having started in early March 2012.

5.0 INNOVATION, NEW TECHNOLOGY AND DEVELOPMENT WORK

- 5.1 As the project moves into year 9, solutions are constantly being sought to reduce the city's carbon footprint and its £2.8m annual energy costs. Aurora has, in conjunction with the Council, continued to explore product information and data relating to areas of the contract where savings may be made.
- 5.2 Under the PFI Project, Aurora has takes responsibility for the liability and risk associated with the lighting assets. Their replacement will normally be due to failure, end of life or invest to save opportunities. The main area for invest to save in 2012 is Wessington Way comprising 227 lantern replacements.
- 5.3 In 2011 trialling of innovative products has been introduced to several areas to improve service delivery, and product efficiency. The following are examples:

Brief	Pro-active installation of a more robust Subway Lighting unit.
Benefit	Reduction in vandalism to lighting, improved lighting levels.
Responsibility	R Barnett.
Due Date	Commenced 2010 (ongoing).

Brief	SCC access to elements of the 'Communication Tracker'.
Benefit	Facilitate improved transparency.
Responsibility	Peter Cook/ Paul Stoddart.
Due Date	March 2011 - completed

Brief	Installation of LED Units in Bk.Green Tce/Bk. Hylton Rd.
Benefit	Trial – Reduced energy/maintenance costs.
Responsibility	SCC & Aurora.
Due Date	Ongoing

Brief	Installation of Solar Powered Bollards-several locations.
Benefit	Zero energy costs.
Responsibility	SCC & Aurora.
Due Date	Ongoing.

Brief	Photograph all Traffic Signs held in inventory.
Benefit	Faster sign recognition for replacement/maint. Purposes.
Responsibility	R.Barnett/P.Cook
Due Date	90% complete (ongoing).

Brief	Invest in LED Lamps for % of H/ton Feast Illuminations.
Benefit	Trial - Reduced energy/maintenance costs.
Responsibility	R.Barnett.
Due Date	2011/12 Annual Works Programme (ongoing).

5.4 Light Emitting Diodes (LEDs) energy reducing technology has previously been examined as a replacement option for our existing lamps. These can provide benefits of reduced energy consumption, planned

maintenance and faults with the benefit of improved reliability. Additional benefits include improvements to health and safety and the sustainability of the project. Previously, capital costs proved prohibitive for the investment, however recent advances in the manufacturing processes have significantly reduced these costs. Aurora are examining potential finance opportunities and reworking financial models to establish a business case for their use.

- 5.4.1 As referred to in paragraph 5.2, currently there are issues with having to attend to faults on Wessington Way as we rely on planned closures for access. This results in lights being out for significant periods of time. Work is currently being carried out by Aurora to determine a design solution using LED technology for the replacement of the lanterns on Wessington Way in 2012. Implementation of such a scheme will greatly reduce the frequency of attendance. The aim is to remove the need for lamp changes and reduce energy by an estimated 25%.
- 5.5 Aurora have installed a small number of lighting columns with LED lanterns in two back lanes (Hylton Road and Green Terrace) which are currently being trialled; agreement on performance standards with regard to what constitutes a lamp failure will need to be confirmed with the council.
- 5.6 Methods of trimming (reducing burning hours) have been investigated and an easy option is the use of new photo electric cells (PEC). It is intended that stock will be changed from 70/35 lux switching to new 35/18 lux by July 2012 which provides a change in the lantern switching regime resulting in less burning hours of the lantern. It is estimated this could provide approximately a 2% reduction in burning hours per lantern.
- 5.7 Aurora is currently working on street lighting asset modelling, utilising data from 300,000 assets from across existing Balfour Beatty street lighting PFI business to provide improvements in the management of the assets.
- 5.8 Consideration could be given by the council to the re classification of lighting standards on the road network, whereby introducing new “white light” technology, could allow a reduction in lighting classification levels where appropriate.
- 5.9 In the first half of 2012 the specification for developers will be reviewed, updated and agreed with the council. The proposal is to allow developers to incorporate newer energy reducing technology on new developments within the city. The document will be reviewed annually thereafter.

6.0 DEVELOPMENTS UTILISED IN OTHER PFIS

- 6.1 As stated earlier in the report Aurora is entering the 9th year of the PFI, and since the commencement of this contract our parent company,

Balfour Beatty (Living Places), has been successful in acquiring six other PFI concessions.

It may be helpful for the Committee to be advised of some of the solutions being adopted in these contracts.

6.2 A Central management system (CMS) has been introduced on the complete Coventry PFI inventory. This enables the removal of night patrols, auto reporting of faults, trimming and dimming of the inventory and allows for preventative maintenance of the stock. With innovative design solutions and implementing a CMS a target energy reduction of 38% is forecast.

6.3 The newer PFIs provide options to have a mixed lighting solution depending on the network. These cover the following:

- A non design lighting class solution (1 for 1) with an option to reduce columns within a street and a design class solution on part of the network e.g. high speed roads.
- CMS solution depending on population size.
- De illumination or solar power of highway signs
- Implementation of reflective technologies wherever possible and low energy LED lamps to traffic signs.
- Implementation of fluorescent street lighting technology in Northamptonshire as one measure to significantly reduce energy

7.0 RECOMMENDATIONS

7.1 The committee is recommended to note the contents of this report.

8.0 BACKGROUND PAPERS

8.1 Annual Service Report 2011

ENVIRONMENT AND ATTRACTIVE CITY 2 APRIL 2012
SCRUTINY COMMITTEE
WORK PROGRAMME 2011-12

REPORT OF THE CHIEF EXECUTIVE

Strategic Priorities: SP5 Attractive and Inclusive City

Corporate Priorities: CIO1: Delivering Customer Focused Services, CIO4: Improving partnership working to deliver 'One City'

1. PURPOSE OF THE REPORT

- 1.1 The report attaches, for members' information, the work programme for the Committee's work during the 2011-12 Council year.
- 1.2 The work of the Committee in delivering its work programme will support the council in achieving its strategic priorities of Attractive and Inclusive City, support delivery of the related themes of the Local Area Agreement, and, through monitoring the performance of the Council's services, help the Council achieve its Corporate Improvement Objectives CIO1 (delivering customer focussed services) and CIO4 (improving partnership working to deliver 'One City').

2. BACKGROUND

- 2.1 The work programme is a working document which the Committee can develop throughout the year. The work programme allows members and officers to maintain an overview of work planned and undertaken during the Council year.

3. CURRENT POSITION

- 3.1 The work programme reflects discussions that have taken place at the 27 February 2012 Scrutiny Committee meeting. The current work programme is attached as an appendix to this report.

4. CONCLUSION

- 4.1 The work programme developed from the meeting will form a flexible mechanism for managing the work of the Committee in 2011-12.

5. RECOMMENDATION

- 5.1 That Members note the information contained in the work programme and consider the inclusion of proposals for the Committee into the work programme.

Contact Officer: Sarah Abernethy, Scrutiny and Area Support Officer
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ENVIRONMENT AND ATTRACTIVE CITY SCRUTINY COMMITTEE WORK PROGRAMME 2011/2012

REASON FOR INCLUSION	JUNE 13.06.11	JULY 25.07.11	SEPTEMBER 12.9.11	OCTOBER 24.10.11	NOVEMBER 7.11.11	DECEMBER 12.12.11	JANUARY 16.01.12	FEBRUARY 27.02.12	MARCH 13.03.12	APRIL 02.04.12
Cabinet-Referrals and Responses			Response to the 10/11 Policy Review – Sunderland 'the Place'							
Policy Review	Annual Work Programme and Policy Review (HL)	Scoping Report and Setting the Scene (HL/Les Clark)	Approach to the Review (HL)	Low Carbon Public Transport (Nexus, Go NorthEast, Stagecoach) Policy Review Progress Report (HL)		Policy Review Progress Report (HL) Response to the Review (from city MPs) (HL)	Procurement of Low Carbon Vehicles (Ian Taylor, NEPO) Policy Review Progress Report (HL) Best Practice (HL) Expenditure in support of the Policy Review (HL)	Low Carbon Vehicle Sector (TBC) Cost Benefit Analysis - Cenex (Les Clark)	Policy Review: Draft Final Report (HL)	Policy Review: Final Report (HL)
Performance			Performance Q1 (Kelly Davison-Pullan) Policy Review Recommendations: Performance (HL)			Performance (Kelly Davison-Pullan)				Performance (Kelly Davison-Pullan)
Scrutiny	Seaburn Masterplan and Design Code (Keith Lowes) Forward Plan (SA)	Highways Maintenance (Graham Carr) Preliminary Flood Risk Assessment (Neil Cole) Work Programme (SA) Forward Plan (SA)	Public Conveniences (Les Clark) Work Programme (SA) Forward Plan (SA)	Public Transport (Nexus) Waste Management (Les Clark) Catchment Flood Management Plans (Neil Cole) Work Programme (SA) Forward Plan (SA)	Prioritisation Framework for Traffic and Road Safety (1) (Les Clark)	Work Programme (SA) Forward Plan (SA)	Prioritisation Framework for Traffic and Road Safety (2) (Les Clark) Work Programme (SA) Forward Plan (SA)	Fawcett St (Les Clark) School Travel Plans (Les Clark) Work Programme (SA) Forward Plan (SA)	Local Development Framework (Neil Cole) –Annual Update Community Infrastructure Levy (Neil Cole)	Draft Scrutiny Annual Report (HL) Street Lighting Annual Update (Graham Carr/Aurora) Work Programme (SA) Forward Plan (SA)
CCFA/Members Items/Petitions	Request for Inclusion of an Item - Planning Applications (HL)									

**FORWARD PLAN – KEY DECISIONS FOR THE PERIOD 1
APRIL 2012 – 31 JULY 2012**

REPORT OF THE CHIEF EXECUTIVE

Strategic Priorities: SP5 Attractive and Inclusive City

**Corporate Priorities: CIO1: Delivering Customer Focused Services, CIO4:
Improving partnership working to deliver ‘One City’**

1. Purpose of the Report

- 1.1 To provide Members with an opportunity to consider those items on the Executive’s Forward Plan for the period 1 April 2012 – 31 July 2012 which relate to the Environment and Attractive City Scrutiny Committee.

2. Background Information

- 2.1 Holding the Executive to account is one of the main functions of Scrutiny. One of the ways that this can be achieved is by considering the forthcoming decisions of the Executive (as outlined in the Forward Plan) and deciding whether Scrutiny can add value in advance of the decision being made. This does not negate Non-Executive Members ability to call-in a decision after it has been made.
- 2.3 To this end the most recent version of the Executive’s Forward Plan is included on the agenda of each of the Council’s Scrutiny Committees.

3. Current Position

- 3.1 Following member’s comments on the suitability of the Forward Plan being presented in its entirety to each committee it should be noted that only issues relating to the specific remit of the Environment and Attractive City Scrutiny Committee are presented for information and comment.
- 3.2 For members information the remit of the Environment and Attractive City Scrutiny Committee is as follows:-

Place shaping; Building Control; Unitary Development Plan and the documents comprising the development plan; Local Transport Plan; Coast protection; Cemeteries and Crematorium; Grounds Maintenance; Flood Risk; Highways services and Streetscene; Waste and Recycling; Allotments

- 3.3 In the event of members having any queries that cannot be dealt with directly in the meeting, a response will be sought from the relevant Directorate.

4. Recommendations

- 4.1 To consider the Executive's Forward Plan for the period 1 April 2012 – 31 July 2012.

5. Background Papers

None

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**Forward Plan -
Key Decisions
for the period
01/Apr/2012 to
31/Jul/2012**



**E Waugh,
Head of Law and Governance,
Sunderland City Council.**

14 March 2012

Forward Plan: Key Decisions from - 01/Apr/2012 to 31/Jul/2012

No.	Description of Decision	Decision Taker	Anticipated Date of Decision	Principal Consultees	Means of Consultation	When and how to make representations and appropriate Scrutiny Committee	Documents to Contact	Officer to be considered	Tel No
01561	To approve the Highway Maintenance Programme for 2012/13.	Executive Director of City Services	18/Apr/2012	Member with Portfolio for Attractive and Inclusive City; Utility Companies; Elected Members;	Meetings; Correspondence	Via the Contact Officer by 20 March 2012 - Environment and Attractive City Scrutiny Committee	Key Delegated Decision and Report	Graham Carr, Highway Asset Manager	5611298
01567	To approve the 2012 Strategic Housing Land Availability Report (SHLAA)	Cabinet	18/Apr/2012	Cabinet, Council Directorates	Circulation of draft Cabinet paper	Via the Contact Officer by 20 March 2012 - Environment and Attractive Scrutiny Committee	SHLAA Report	Neil Cole	5611574

Forward Plan: Key Decisions from - 01/Apr/2012 to 31/Jul/2012

No.	Description of Decision	Decision Taker	Anticipated Date of Decision	Principal Consultees	Means of Consultation	When and how to make representations and appropriate Scrutiny Committee	Documents to Contact	Tel No	Officer
01569	To approve the 2012 Employment Land Assessment Update	Cabinet	18/Apr/2012	Cabinet, Council Directorates	Circulation of draft Cabinet paper	Via the Contact Officer by 20 March 2012 - Environment and Attractive Scrutiny Committee, Prosperity and Economic Development Scrutiny Committee	ELA Report	Neil Cole	5611574
01566	To approve the Local Development Framework Core Strategy Draft Preferred Option.	Cabinet	18/Apr/2012	Cabinet, Council Directorates	Circulation of draft Cabinet paper	Via the Contact Officer by 20 March 2012 - Environment and Attractive Scrutiny Committee, Prosperity and Economic Development Scrutiny Committee, Sustainable Communities Scrutiny Committee	Core Strategy Preferred Option, Sustainability Appraisal, Rejected Options Report	Neil Cole	5611574
01568	To approve the 2012 Retail Needs Assessment Update	Cabinet	18/Apr/2012	Cabinet, Council Directorates	Circulation of draft Cabinet paper	Via the Contact Officer by 20 March 2012 - Environment and Attractive Scrutiny Committee	Retail Needs Report	Neil Cole	5611574