REPORT TO: **CITY DEVELOPMENT COMMITTEE - 22 AUGUST 2011**

REPORT ON: **STREET LIGHTING PARTNERSHIP**

REPORT BY: **DIRECTOR OF CITY DEVELOPMENT**

REPORT NO: **335-2011**

1 PURPOSE OF REPORT

1.1 This report provides an update on progress and performance of the Street Lighting Partnership with Tayside Contracts on the delivery of the Street Lighting Services to 31 March 2011.

2 RECOMMENDATION

2.1 It is recommended that the Committee notes the content of this report and agree that the Director of City Development be remitted to report back annually to the Committee with the ongoing progress of the Partnership.

3 FINANCIAL IMPLICATIONS

3.1 There are no direct financial implications arising from this report.

4 BACKGROUND

4.1 Reference is made to Article V of the Planning and Transport Committee of 9 March 2009 when approval was given to extend the Partnership with Perth & Kinross and Tayside Contracts by a further 3 years to 31 March 2012.

4.2 An Executive group comprising two senior officers from each Council and Tayside Contracts meet on a quarterly basis to review performance of the Partnership against a number of agreed criteria. The Partnership continues to perform well. The following provides a summary of performance against agreed criteria and the Departments Service Plan 2007-2010.

4.3 The approved Service Plan 2007-2010 detailed five service objectives for street lighting which are listed below.

4.3.1 'Continue to improve the overall management and maintenance of the street lighting asset and maintain the position as one of the lead authorities in Scotland for this service".

Dundee City Council, Street Lighting is a member of the Society of Chief Officers Transport Scotland (SCOTS) "cities" benchmarking family and annual exercises are carried out to compare performance against the other major cities. The full results of this benchmarking exercise for 2009/10 (including Dundee figures for 2010/11) are listed in Appendix A. However, the key highlights are listed below.

a Dundee repairs their street lighting twice as quickly as the next best performing City.

b In percentage terms, Dundee has half the number of faults annually, indicating a more effective repair and maintenance policy.

c Due to the proactive approach taken with maintenance and the speed of repairs, fewer calls were received from the public in percentage terms when compared with other cities. In percentage terms, City A had three times as many calls and City C had six times as many calls.

d Compared with Dundee, City A has nearly 5 times as many lights per 1000 street lights not working as planned on any one evening. City C has 12 times as many.

e The average cost of carrying out a street lighting repair in Dundee was £27.12, compared to £44.43 in City A and £67.73 in City C.

4.3.2 "Continue to achieve best value in the procurement of street lighting works and optimise average unit costs for repairs".

Average Repair Costs (including bulk lamp change)

	Pre Partnership 2002/03	Service Plan Baseline 2006/07	2007/08	2008/09	2009/10	2010/11	Target 2010/11
Actual	£37.79	£25.53	£24.84	£28.00	£26.84	£27.12	£27.00
Adjusted for Inflation using 2010/11 RPI	£48.84	£29.04	£27.23	£30.81	£28.28	£27.12	£27.00 (£30.71 at 2006/07 prices)

Figures above include adjustment to account of inflation and increases in retail index figures.

The Council has changed its strategic approach towards street lighting maintenance from a reactive regime of repairing lights when they fail to a more proactive approach which involves replacing groups of lamps in a geographical area at the end of their expected life. There are four major benefits to this approach.

a It produces a higher level of productivity, by reducing wasted travelling time of randomly attending faults in different areas of the City.

b It reduces fuel consumption which has benefits to the environment.

c It reduces the number of street lights dark on any one evening.

d It reduces cost.

4.3.3 "Continue to improve the reliability and operation of street lighting equipment by reducing the number of annual defects over the four year period of the plan".

Two indicators continue to show improved performance when averaged over the previous 3 years. The number of faults reported by the public showed a slight increase but this is attributed to the exceptional bad weather conditions during the months of December and January. During this period the majority of street lighting resources were being employed on priority Winter Maintenance duties and as a result, lighting faults were taking slightly longer to repair.

Street Lighting Faults

Baseline 2002/03	2006/07	2007/08	2008/9	2009/10	2010/11	Target 2010/11
9532	5168	4650	4578	4930	4826	4500

Mean Time Between Failures (MTBF) average over 3 Years

Baseline 2002/03	2006/07	2007/08	2008/9	2009/10	2010/11	Target 2010/11
2 years 108 days	3 years 171 days	4 years 48 days	4 years 317 days	4 years 199 days	5 years	> 5 years

Number of Street Lighting Faults reported by the Public

Baseline 2002/03	2006/07	2007/08	2008/09	2009/10	2010/11	Target 2010/11
2252	1219	1117	1202	1416	1546	<1219

4.3.4 'Continue to seek improved community safety through the implementation of the white light programme across the city through consultation with stakeholders'.

The percentage of street lighting converted to white light in the city now stands at 45% which is significantly more than any other Scottish Council. Other alternative sources of funding will continue to be investigated in order to aim to achieve 100% coverage across the City.

4.3.5 'Continue to minimise the adverse impact that the Street lighting function has on the environment'.

The Partnership is committed to minimising street lighting impact on the environment. Street lighting makes up approximately 19% of the Council's energy consumption and has an important part to play in the Council's obligations to reducing energy levels through the recently introduced statutory carbon reduction legislation. LED lighting is already in place in various locations in the City and adaptable lighting levels have been introduced into some industrial areas where lighting level can be reduced during the night in line with reduced vehicle and pedestrian activity.

Energy Losses

Baseline 2002/03	2006/07	2007/08	2008/9	2009/10	2010/11	Target 2010/11
20%	13%	13%	13%	12%	11%	<13%

Average load connection per Street Light

Baseline 2002/03	2006/07	2007/08	2008/9	2009/10	2010/11	Target 2010/11
unavailable	104W	104W	104W	103w	103w	<104w

4.4 A Roads Asset Management Plan incorporating the street lighting asset continues to be developed through SCOTS on behalf of all Scottish Road Authorities including Dundee City Council.

4.5 The Partnership purchased a Computerised Asset Management system and this has been populated with street lighting information which is being used to manage the asset including the production of appropriate management reports in accordance with the SCOTS Asset Management project and national framework.

4.6 The general condition of the street lighting asset is being assessed through annual structural and electrical test programmes which allows for prioritisation of renewal/replacement programmes on the basis of risk. This information is being added to the Asset Management system.

4.7 The Road Asset Management Plan is developing well. At this stage it is showing that the actual investment in street lighting is less than required. Once the Asset Management Plan and system is sufficiently developed, it is proposed to bring a report to Committee to advise on the condition of the street lighting asset and the investment required.

4.8 The Partnership is performing well in winning work outwith the Council's allocated street lighting budget. In 2010/11, 35% of the work carried out by the Partnership was carried out on behalf of external clients. This is 7% higher than the previous year and perhaps reflects a slight recovery in the house building sector.

4.9 The present Street Lighting Partnering arrangement meets the Scottish Government's objectives in increased partnership working in line with the Efficient Government Agenda and the street services model set by the Regional Transport Partnership.

5 POLICY IMPLICATIONS

5.1 This Report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management. There are no major issues.

6 CONSULATIONS

6.1 The Chief Executive, Depute Chief Executive (Support Services), and the Director of Finance, have been consulted and are in agreement with the contents of this report.

7 BACKGROUND PAPERS

7.1 None.

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Director of City Development

Fergus Wilson
City Engineer

FW/LMcG/EH

28 July 2011

Dundee City Council
Dundee House
Dundee

SCOTS Street Lighting Working Group

Cities Benchmarking Group
Benchmarking Parameters for 09/10

				City A	Dundee			City B	City C
	Headings	Measures		2009/10	2008/09	2009/10	2010/11	2006/07	2009/10
Condition/ Asset Preservation	Reliability	Faults as a % of street lighting stock		40.5%	20.54%	22.11%	20.00%	38.5%	65.53%
		Mean time between failures (MTBF) Years		2.47	4.87	4.52	5.00	N/A	1.53
		% of columns over 30 years old		37.34%	32.31%	35.85%	35.43%	27.6%	49.62%
Customer Service	Repair Times	Average time taken to repair (days)		4.90	2.10	1.90	2.5	3.5	6.30
	Public perception	% of repairs within 7 days		92.26%	94.60%	95.60%	92.50%	92.71%	90.03%
	Staffing	Public calls as a % of faults		47.17%	20.54%	28.72%	32.03%	44%	55.41%
	People Management (HR)	Public calls as a % of street lights		19.11%	5.39%	6.35%	6.41%	15.5%	36.31%
		% of street lights modern white light		31.17%	41.66%	45.04%	49.42%	N/A	12.58%
Availability		Number of night inspections annually		17	48	48	48	6	10
		% of street lights not working as planned on anyone evening		1.74%	0.33%	0.35%	0.35%	3.3%	4.41%
Financial	Financial Costs	Average costs (client) of repairing routine faults (eg component replacement)		£44.43	£28.00	£26.84	£27.12	£37.36	£67.73
	Financial Investment	Individual cost of night inspecting a street light		£0.27	£0.03	£0.04	£0.03	N/A	£0.14
Environment	Carbon Footprint Energy Consumption	Total Investment in infrastructure per street light		£34.82	£43.75	£47.22	£52.72	£51.74	£86.33
		Average connected load per street light (watts)		130.38	104.52	103.73	103.53	111	116.33
		Average annual electricity consumption per street light (kWhrs)		512.56	408.88	405.79	424.14	N/A	479.03
		Street Lighting CO2 Emissions (tonnes)		8775.56	4893.47	4859.41	5495.69	N/A	18507.26
		No of Street lights		30,850	22,287	22,300	24,129	54,991	69,141

Note - City B were unable to submit KPI's for 2007/08 to 2009/10