PERTH AND KINROSS COUNCIL

Enterprise and Infrastructure Committee

9 November 2016

Roads Asset Annual Status Report

Report by Director (Environment)

This report presents a status summary of the Council's Roads assets based upon the latest published Scottish local authority data as at 31 March 2016. It describes the current condition of the asset, the standards achieved and provides performance indicator information to allow benchmarking of results.

1. BACKGROUND

- 1.1 As the Local Roads Authority, Perth and Kinross Council is responsible for a roads network and associated infrastructure with a Gross Replacement Value (GRV) of £3.28 Billion. This is calculated using the guidelines set out in the statutory Whole of Government Accounts.
- 1.2 Perth & Kinross Council continues to perform well in comparison to other Scottish Councils in the respect that our roads are in a better condition and our response times are better. Our costs per kilometre of network remain consistently below average which evidences the efficiencies that are realised through robust management of the asset.
- 1.3 For Street Lighting our average costs are the lowest in our family group and second lowest in Scotland yet our record for repairing faults remains one of the best in Scotland.
- 1.4 An annual carriageway condition survey is carried out by the Scottish Roads Maintenance Condition Survey (SRMCS). This produces a Road Condition Indicator (RCI) which is used for both developing planned carriageway maintenance and as a performance indicator.
- 1.5 The Council's Roads Maintenance Strategy was approved by the Enterprise and Infrastructure Committee on 2 April 2014 and the Roads Asset Management Plan was approved on 17 June 2015 (Report no: 15/254 refers.) The Strategy and the Plan requires the publication of an annual status report which is the purpose of this paper.
- 1.6 The 2016 CIPFA Transport Asset Code sets out how Councils should undertake a valuation of their Roads assets and in Scotland this has been supported by EXP Consulting through the Society of Chief Officers of Transportation in Scotland (SCOTS) / County Surveyors Society Wales (CSSW) project to ensure a coordinated response.

- 1.7 Audit Scotland presented a follow up report to their Maintaining Scotlands Roads report in August 2016. It stated that in general Roads Authorities need to demonstrate a greater commitment to improving road condition and that collaborative working has advanced little since the last report in 2012. The report identified that in financial year 2014/15 Perth & Kinross Council had the 9th lowest spend of the 32 authorities on road maintenance. Subsequent to this, the Council has approved an additional £6 million of investment in roads maintenance and structures over 3 years when setting the 2016/17 Revenue Budget in February 2016.
- 1.8 Notwithstanding the above, the condition of our road network remains in the top half (15th) in Scotland. Perth & Kinross Council is also currently undertaking a review with Dundee City and Angus Councils to build on existing partnership working and develop our collaborative approach to the management and maintenance of the local roads network.

2. ROAD CONDITION

2.1 The carriageway asset is considered by road classification group and comprises the following:

| Road Class | Urban Length (km) | Rural Length (km) | Total Length (km) |
|-------------------|-------------------------|----------------------|-------------------|
| A Road | 61.6 | 365.0 | 426.6 |
| B Road | 21.9 | 326.0 | 347.9 |
| C Road | 25.1 | 593.3 | 618.4 |
| Unclassified Road | 406.5 | 650.1 | 1056.6 |
| Total Length (km) | 515.1 | 1934.4 | 2449.5 |

Table 1 – Road Classification Lengths
Definitions of the Road Classifications are detailed in Appendix 1

2.2 The Scottish Road Maintenance Condition Survey measures and summarises the condition of the carriageway into the following bands:

| Green | The road is in an acceptable condition |
|-------|---|
| Amber | The road condition indicates that further investigation is needed to establish if treatment is required |
| Red | The road has deteriorated to the point at which repairs to prolong future life should be considered |

- 2.3 Table 2 is shown in Appendix 2 to the report and shows the condition of the overall Council road network as measured by SRMCS for the period 2010 to 2015. Results are compared to the Scottish average.
- 2.4 Analysis of Table 2 indicates that the previous slow deterioration in the Council's road network condition has stabilised and in the last survey has shown an improvement.

- 2.5 The improvement is a reflection of the implementation of the Council's approved Roads Maintenance Strategy which targets the A class network and this is predicted to improve further over time (Report no 15/254 refers).
- 2.6 Tables 3-6 are shown in Appendix 2 and show the road condition by individual road classifications, again compared with the Scottish average.
- 2.7 The approved Roads Maintenance Strategy allows for a managed reduced level of investment in B Class and C Class roads to facilitate the prioritisation of investement in the Council's A Class roads network. However, as this strategy has only recently been adopted it is not anticipated to be fully reflected in the roads condition survey data for a number of years.
- 2.8 Condition of the U Class network in Perth & Kinross remains at a consistently higher percentage than the Scottish average. It should be noted however that only 10% of the U Class network is surveyed annually.

Road Service Standards

| Se | rvice | Measured By | Target Compliance | 2014/15 | 2015/16 |
|--------|---|--|----------------------|---------|---------|
| | Undertake routine carriageway and footway safety inspections on Category 2 and 3 at intervals of 1 month. | | 100% | 93.8% | 93.1% |
| (0) | Safety Inspections | Undertake routine safety inspections on Category 4(a) Link Road at intervals of 3 months. | 100% | 92.5% | 94.1% |
| Safety | ions | Undertake routine safety inspections on Category 4(b) Local Access roads at intervals of 1 year. | 100% | 85.1% | 96.7% |
| | R L | Category 1 defects shall be rectified or made safe within 3 hours. | 100% | 100% | 100% |
| | Defect Reporting | Category 2 defects shall be rectified or made safe within 1 day. | 100% | 100% | 87% |
| | ng ng | Category 3 defects shall be rectified or made safe within 7 days. | 80% | 83% | 65.8% |

Table 7 - Carriageways Service Standards

Performance Indicators

2.9 The status of the carriageway asset is measured and compared to nationally standardised performance indicators:

| | Results | | | |
|---|------------------|-------------------------------------|---------------------------------|---|
| Description | PKC 2015/16 | SCOTS Family Group Average | Scottish National Average | Analysis |
| Percentage of Category1 (Reactive) defects made safe within response times | 100% | 97.22% | 89.78% | Better than both the SCOTS family group and national average. |
| Percentage of carriageway safety inspections completed on time | 89.73% | 90.56% | 91.93% | Slightly below the national average and SCOTS family group average |
| Percentage of carriageway length to be considered for maintenance treatment | 34.30% | 38.64% | 36.79% | Better than both the SCOTS family group and the national average |
| Percentage of carriageway length treated | 5.05% | 4.38% | 3.6% | Better than the SCOTS family group and the national average |
| Total carriageway maintenance expenditure by carriageway length | £3,942 per km | £3,435 per km | £5,865 per km | Higher than the SCOTS family group but lower than the national average. |

- 2.10 The SCOTS Performance Management and Benchmarking Focus Group continues to work with the Association for Public Service Excellence (APSE) and the County Surveyors Society Wales (CSSW) to produce Performance Indicator information allowing local authorities to compare their performance and drive improvement.
- 2.11 The Scottish local authorities are split into family groups based on network length and urban/rural split. Perth and Kinross Council is in the Rural Family Group along with Aberdeenshire, Angus, Argyll & Bute, Scottish Borders, Dumfries & Galloway, Highland and Moray Councils.

<u>Investment</u>

2.12 The following table shows the expenditure for financial years 2014/15 and 2015 on the carriageway asset:

| Cost Category | 2014/15 | Output 2014/15 | 2015/16 | Output 2015/16 |
|---|------------|---|------------|--|
| Planned Maintenance – Preventative | £802,160 | 78.22 km surface dressed (3.2% of network) | £986,277 | 91.16 km surface dressed (3.74% of network) |
| Planned Maintenance - Corrective | £3,334,818 | 26,478 linear metres (1.08%) of 40mm resurfacing | £3,826,990 | 19,611 linear metres (0.8%) of 40mm resurfacing |
| | | 2150 linear metres (0.08%) of 60mm resurfacing | | 12,752 linear metres (0.52%) of 60mm resurfacing |
| | | 2354 Linear metres (0.1%) of 100mm resurfacing Reconstruction - None | | 1,932 Linear metres (0.77%) of 100mm resurfacing 95 linear metres (0.003%) of |
| | | carried out Drainage improvements (46 sites) | | reconstruction Drainage improvements (50 sites) |
| Routine Cyclic Maintenance | £407,277 | 23,072 gullies cleaned (£216k) | £475,807 | 33,000, gullies cleaned drainage channels cleaned (£295k) |
| | | Road Markings renewed as required (£191k) | | Road Markings renewed as required (£106k) |
| | | Clear choked gullies (1077 no) | | Clear choked gullies (1243 no) |
| Routine – Reactive Repairs (emergency) | £52,049 | 53 Category 1 defects (£6k) Provide stand by service and attend to emergency defects during out of hours period (£46k) | £78,000 | 71 Category 1 defects Provide stand by service and attend to emergency defects during out of hours period (£76k) |
| Reactive structural repairs (emergency) | £137,417 | Repairs to retaining walls and embankments following weather events, subsidence etc. | £548,633 | Repairs to retaining walls and embankments following weather events, subsidence etc. |

| Cost Category | 2014/15 | Output 2014/15 | 2015/16 | Output 2015/16 |
|-----------------------|------------|-------------------------------|------------|--------------------------------------|
| Routine – Reactive | £2,174,831 | Carry out repairs to category | £956,362 | Carry out repairs to category 2 and |
| Repairs (non- | | 2 and 3 defects identified | | 3 defects (potholes) identified |
| emergency) | | during road safety | | during road safety inspections |
| | | inspections | | |
| | | Repairs to signs and | | Repairs to signs and bollards (296 |
| | | bollards (418 no) | | no) |
| | | Repairs to verges following | | Repairs to verges following vehicle |
| | | vehicle damage (106 | | damage (113 locations) |
| | | locations) | | |
| | | Repairs to fences and | | Repairs to fences and pedestrian |
| | | pedestrian guard rails (13 | | guard rails (9 locations) |
| | | locations) | | |
| | | Repairs to vehicle restraint | | Repairs to vehicle restraint |
| | | systems (5 locations) | | systems (6 locations) |
| | | Repairs to footways (771 | | Repairs to footways (550 |
| | | locations) | | locations) |
| | | Minor drainage repairs (299 | | Minor drainage repairs (144 |
| | | locations) | | locations) |
| | | Carriageway repairs | | Carriageway repairs (potholes) |
| | | (potholes) (16,409 locations) | | (7,380 locations) Several sites had |
| | | | | multiple potholes |
| | | Repairs to cattle grid (1 | | Repairs to cattle grid (2 locations) |
| | | locations) | | |
| | | Repairs to kerbs (70 | | Repairs to kerbs (30 locations) |
| | | locations) | | |
| | | Repairs to retaining wall (2 | | Repairs to retaining wall (3 |
| | | location) | | location) |
| | | Repairs to bus shelter (2 | | Repairs to bus shelter (2 location) |
| | | location) | | |
| | 04 704 000 | Carriageway patching | C4 70C 044 | Carriageway patching (permanent) |
| Table 9 Carriagoway I | £1,761,333 | (permanent) | £1,706,941 | (6227 m2) |

Table 9 – Carriageway Investment and Output for 2014/15 and 2015/16

2.13 The programme for Carriageway maintenance over the period 2016/2021 is shown in Appendix 3 to the report.

Structures

Condition

2.14 The structures asset is considered by structure type and comprises the following:

| Structure Type | Quantity |
|--------------------|----------|
| Road Bridges | 560 |
| Footbridges | 14 |
| Unusual Structures | 2 |
| Retaining Walls | 171* |
| Culverts | 337 |
| Subways | 2 |
| Total | 1086 |

Table 10 - Quantity of Structure Types

Stock Condition Indicators

- 2.15 Two condition indicators are evaluated for each local authorities stock of structures defined as:
 - BSCI_{ave}: Average Stock Condition Indicator the weighted average of the individual Condition Indicator scores; this score provides an overview of the average stock condition.
 - BSCI_{crit}: Critical Stock Condition Indicator the weighted average of the Critical Indicator scores. This score provides an indication of the criticality of the stock with regards to load carrying capacity.

Individual Structure Condition Indicators

- 2.16 Two condition indicators are calculated for each structure, which are defined as:
 - BCI_{ave}: the average BCI for a structure taking into account the condition of all structural elements on the structure. This score provides an overview of the average structure condition.
 - BCI_{crit}: the condition score of the load bearing element which is in worst condition. This score provides an indication of the criticality of the structure with regards to load bearing capacity.

^{*}Data incomplete

Structure Condition Indicator Score Range Groupings

| BSCI / BCI Score Range Group: | General Description | BSCI Stock Condition Descriptor | BCI Individual Condition Descriptor |
|-------------------------------------|------------------------|--|---|
| 90 ≤ BCI ≤ 100 | Very Good Condition | Structure stock is in a very good condition. Very few structures may be in a moderate to severe condition. | Structure is new and / or very good condition of repair. |
| 80 ≤ BCI < 90 | Good Condition | Structure stock is in a good condition. A few structures may be in a severe condition. | Structure in good condition of repair. |
| 65 ≤ BCI < 80 | Fair Condition | Structure stock is in a fair condition. A number of structures may be in a severe condition. | Structure in fair condition of repair, requires some works. |
| 40 ≤ BCI < 65 | Poor Condition | Structure stock is in a poor condition. Many structures may be in a severe condition. | Structure requires urgent works to remain in service. |
| 0 ≤ BCI < 40 | Very Poor Condition | Structure stock is in a very poor condition. Many Structures may be unserviceable or close to it. | Structure may be unserviceable or close to it. |

Table 11 - Structure Condition Indicator Score Range Groupings

Service Standards

| Service | Measured By | Target Compliance | 2014/15 | 2015/16 |
|---|---|----------------------|---------|---------|
| Carry out General Inspections at a maximum frequency of 2 years. Excluding structures programmed for a Principal Inspection. | | 100% | 100% | 94.21% |
| Safety | Carry out Principal Inspections at a maximum frequency of 6 years. | 100% | 100% | 97.35% |
| | Carry out Scour Inspections at a maximum frequency of 6 years. | . 111119/6 | | 100% |
| | Attend non-emergency maintenance call outs within 7 days. | 100% | 100% | 100% |
| | Maintain all Structures such that the BSCI (ave) remains above 85. | 85 | 83.8 | 85.10 |
| Cor | Maintain all Structures such that the BSCI (crit) remains above 75. | 75 | 74.5 | 74.77 |
| Condition | The total number of weight restricted bridges within the authority shall remain below 1% of stock. | 1% of stock | 1.57% | 1.75% |
| | The number of sub-standard structures subject to BD79 monitoring within the authority shall remain below 2% of stock. | 2% of stock | 7.2% | 7.0% |

Table 12 - Structures Service Standards

- 2.17 In general, the overall condition of the Council's structures stock is Good to Fair.
- 2.18 However the condition of individual structural components within the stock is below acceptable standards. This has resulted in a high level of sub-standard structures being subject to special monitoring.
- 2.19 A number of weight restrictions have had to be placed on bridges which are not capable of carrying full traffic loadings. Given the available budget they are currently subject to an increased monitoring regime.

Performance Indicators

2.20 The status of the structures asset is measured and compared by nationally standardised performance indicators:

| | Results | | | |
|--|----------------|-------------------------------------|---------------------|---|
| Description | PKC 2015/16 | SCOTS Family Group Average | National Average | Analysis |
| Percentage of principal inspections carried out on time | 97.35% | 80.47% | 78.75% | Better than both the SCOTS family group and national average. |
| Percentage of general inspections carried out on time | 94.21% | 68.35% | 83.61% | Better than both the SCOTS family group and national average. |
| No of Council owned bridges failing assessment | 58 | 56 | 22 | PKC has more bridges failing assessments than the national average and SCOTS family group average. |
| No of privately owned bridges failing assessment on Council road network | 8 | 3 | 5 | PKC has more private bridges failing assesments than the national average and SCOTS family group average. |

Table 13 - Performance Indicators showing PKC returns against SCOTS family group returns and national average returns

Investment

2.21 The following table shows the expenditure on Structures for financial year 2015/16 with the budget figure as reported to the Strategic Resources & Policy Committee on 23 September 2015:

| Capital | 2015/16 | 2015/16 |
|-----------------------------|----------|----------|
| | Planned | Actual |
| Kenmore Bridge | £194,000 | £202,079 |
| Thorter Bridge Culvert | £239,000 | £209,711 |
| Kenmore Club Retaining Wall | £40,000 | £44,994 |
| A93 Lair Junction | £63,000 | £25,306 |
| Bridge Parapets Upgrade | £0 | £111,209 |
| Programme | | |
| Total | £536,000 | £593,299 |

| Revenue | 2015/16 | 2015/16 |
|-------------------------------|------------|-----------|
| | Budget | Actual |
| Bridge Repairs | £1,000,000 | £469,395 |
| Inspections and Minor repairs | £172,000 | £171,795 |
| A977 New Balado Bridge Wing | £67,000 | £73,607 |
| Wall repair | | |
| Bleaton Hallet Bridge | £0 | £265,453* |
| Total | £1,239,000 | £980,250 |

Table 14 - Structures Investment 2015/16

2.22 The following table shows the Structures budget for financial year 2016/17 as reported to the Strategic Resources & Policy Committee on 21 September 2016:

| Revenue | 2016/17 |
|-------------------------------|----------|
| | Budget |
| Bridge Repairs | £450,000 |
| Inspections and Minor repairs | £172,000 |
| Total | £622,000 |

| Capital | 2016/17 |
|-------------------------|----------|
| | Budget |
| West of Fearnan Culvert | £194,000 |
| Parapets Upgrades | £39,000 |
| Bridge Replacement | £110,000 |
| Programme | |
| Thorter Bridge Culvert | £79,000 |
| Total | £422,000 |

Table 15 - Structures 2016/17 Programme

Street Lighting

Condition

2.23 The street lighting asset is considered using the following classification:

| Column Material | Quantity |
|-----------------------|----------|
| Galvanised Steel | 14,805 |
| Aluminium (pre 2000) | 3,344 |
| Aluminium (post 2000) | 4,008 |
| Cast Iron | 24 |
| Total | 22,181 |

^{*}Expenditure on Bleaton Hallet Bridge has been incurred as emergency works in response to a severe weather incident

| Cable Assets | Quantity (m) |
|---------------------|--------------|
| Cable under Footway | 372,500 |
| Cable under Verge | 372,500 |
| Total | 745,000 |

| Other Street Lighting Assets | Quantity |
|------------------------------|----------|
| Wall Bracket | 2,179 |
| Wooden Pole | 236 |
| Control Cabinet | 1,216 |
| Total | 3,631 |

| Luminaires | Quantity |
|------------|----------|
| All | 25,288 |
| Total | 25,288 |

Table 16 - Quantity of Street Lighting Assets

| Columns Exceeding ESL (by Material Type) | | | |
|--|-----------------------|-----------------------------|--|
| Material Type | Columns Within ESL | Columns Exceeding ESL | |
| Galvanised Steel | 10389 | 4416 | |
| Aluminium (pre 2000) | 3339 | 5 | |
| Aluminium (post 2000) | 4008 | 0 | |
| Cast Iron | 24 | 0 | |

Table 17 – Quantity of Columns Exceeding ESL

2.24 In 2015/2016, 19.86% of columns exceeded their Expected Service Life (ESL). The table above shows that a high proportion of galvanised steel columns have exceeded their ESL. These column types have a high priority rating in the column replacement programme.

| Luminaire Exceeding ESL (By Material Type) | | | | |
|--|---------------|-------------------|--|--|
| Material True | Luminaires | Luminaires Within | | |
| Material Type | Exceeding ESL | ESL | | |
| SOX | 5576 | 4435 | | |
| SON | 1715 | 6660 | | |
| FLUORESCENT | 293 | 3587 | | |
| METAL HALIDE | 36 | 136 | | |
| LED | 0 | 2171 | | |
| Other | 123 | 556 | | |

Table 18 - Quantity of Luminaire Exceeding ESL

2.25 In 2015/16, 30.6% of lanterns exceeded their ESL. (Note: ESL is assumed to be 20 years for all luminaire types). The table above shows that a high proportion of the remaining SOX luminaires have exceeded their ESL. Replacement of SOX luminaries is a high priority in forward work programmes.

Service Standards

| Service | Measured By | Target Compliance | 2014/15 | 2015/16 |
|--|--|----------------------|----------|--------------|
| Safety | Electrical testing of all equipment shall be undertaken at a frequency of 6 years. | 100% | 46% | 65.37% |
| ety | Emergency faults shall be made safe or repaired within 4 hours of notification. | 100% | 100% | 100% |
| C | The percentage of street light columns exceeding their expected service life (ESL) should be no more than 25%. | 25% | 21.42% | 19.86% |
| A non-emergency fault shall be rectified within 7 working days (Single Outage) Average time taken to repair faults to restore | | 100% | 97% | 97% |
| on | Average time taken to repair faults to restore lamps to working order. | 2.6 days | 2.5 days | 2.74 days |

Table 19 - Street Lighting Service Standards

Performance Indicators

| | Results | | | |
|---|----------------|-------------------------------------|---------------------|--|
| Description | PKC 2015/16 | SCOTS Family Group Average | National Average | Analysis |
| Percentage of repairs within 7 days | 97% | 97.57% | 89.88% | The Council performance for repairing faults is on a par with the SCOTS family group and one of the best across Scotland |
| Average cost for repairing a routine fault | £34.52 | £66.43 | £80.47 | One of lowest of the Scots benchmarking family group. |
| Average time taken to repair (days) | 2.74 days | 2.98 days | 5.57 days | Less than half the Scottish average which is 5.57 days. |
| Public calls as a percentage of street lights | 8.24% | 9.55% | 11.33% | The Council receives a low percentage of calls when compared to the SCOTS benchmarking family group. |

Table 20 - Performance Indicators showing PKC returns against SCOTS family group returns and national average returns

2.26 The Council performance for repairing faults remains one of the best in Scotland with 97% of faults repaired within 7 days. The average cost of repairing a routine fault is £34.52 which remains one of the lowest in Scotland. Perth & Kinross Council receives the lowest number of public calls as a percentage of street lights of the SCOTS benchmarking family group. The average time taken to repair a fault was 2.74 days, which is less than half the Scotlish average of 5.79 days.

Investment

2.27 The following table shows the expenditure for financial years 2014/15 and 2015 on Street Lighting:

| Cost Category | 2014/15 | Output 2014/15 | 2015/16 | Output 2015/16 |
|--|----------|---|----------|---|
| Planned Maintenance – Corrective | £487,244 | 1447 lanterns replaced during year. (5.75% of total stock) | £486,960 | 1028 lanterns replaced during year (4.06%) |
| Total net payment for bulk/planned replacement of street lighting stock. | | 252 columns replaced during year (1.13% of total stock) | | 215 columns replaced during year (0.96% of total stock) |
| Routine – Reactive Repairs | £199,225 | 5862 total faults repaired. | £194,620 | 5,638 total faults repaired. |
| Total number of routine, day to day faults affecting lanterns, control | | 3998 of the total faults that were identified as a result of scouting/inspection. | | 3,554 of the total faults that were identified as a result of scouting/inspection |
| gear or photo cells. | | 1864 of the total faults that were identified as a result of reports by public / other third parties. | | 2,084 of the total faults that were identified as a result of reports by public / other third parties. |
| Routine – Reactive Repairs | £377,653 | All other net annual payments for maintenance of street lighting stock (excluding bulk/planned replacement and energy costs). | £293,051 | All other net annual payments for maintenance of street lighting stock (excluding bulk/planned replacement and energy costs). |

Table 21 - Street Lighting Investment and Output

2.28 Following approval by the Strategic Policy & Resources Committee on 23 September 2015 (Report No 15/396 refers) to undertake a spend to save replacement of less efficient street lighting installations and provide significant energy savings in terms of cost and CO2 emissions, the following programme of light and column replacement works is being implemented:

| | Lanterns | Coloumns |
|---------|----------|----------|
| 2015/16 | 1500 | 375 |
| 2016/17 | 1500 | 375 |
| 2017/18 | 1500 | 375 |
| 2018/19 | 2000 | 500 |
| 2019/20 | 2000 | 500 |
| 2020/21 | 2000 | 500 |
| 2021/22 | 2000 | 500 |
| 2022/23 | 2000 | 500 |
| 2023/24 | 998 | 250 |

Traffic Management

2.29 All traffic signal and public space CCTV cameras require continuous maintenance to ensure the equipment remains operational and in a safe condition.

Condition

| Traffic Signal Types | Quantity | Exceeding Expected Service Life (ESL) | Within Expected Service Life (ESL) |
|---|----------|---------------------------------------|---|
| Traffic Signal Junctions | | | |
| Junctions | 45 | 5 | 40 |
| Traffic Signal (Pedestrian Crossing) Subtypes | | | |
| Single Carriageway | 58 | 2 | 56 |
| Dual Carriageway | 3 | 1 | 2 |
| Total | 106 | 8 | 98 |

| Other Traffic Management System Types | Quantity |
|---------------------------------------|----------|
| Information Systems | 0 |
| Safety Cameras | 35 |
| Variable Message Signs | 0 |
| Vehicle Activated Signs | 38 |
| Real Time Passenger Information | 0 |
| Total | 63 |

Table 22 - Traffic Signal Quantity's and Quantity exceeding ESL

2.30 Expected Service Life is calculated to be 20 years for equipment and 40 years for associated engineering works.

Service Standards

| Service | Measured By | Target Compliance | 2014/15 | 2015/16 |
|--------------|--|----------------------|---------|---------|
| Traffic Sign | nals | | | |
| S | Attendance at Major faults shall be within 4 hours. | 100% | 89.5% | 79.66% |
| Safety | Attendance at Minor faults shall be within 24 hours. | 100% | 96.6% | 81.58% |
|)ty | Undertake electrical inspections for electrical assets at each installation every year. | 100% | 87.7% | 86.8% |
| C | Initial repair of major faults shall be within 1 hour. | 100% | 84.21% | 83.46% |
| on | Initial repair of minor faults shall be within 24 hours. | 100% | 95.62% | 95.07% |
| Condition | The percentage of traffic signal installations exceeding their ESL of 20 years should be no more than 0. | 100% | 99% | 92.45% |

Table 23 - Traffic Management Service Standards

Performance Indicators

| | | Results | | |
|---|----------------|-------------------------------------|---------------------|---|
| Description | PKC 2015/16 | SCOTS Family Group Average | National Average | Analysis |
| Percentage of faults rectified within target time | 94.86% | 95.06% | 94.68% | PKC is similar to both the national average and SCOTS family group average. |
| Percentage of faults rectified on first visit | 94% | 97.38% | 88.75% | PKC is above the national average but below the family group average. |
| • | | | | below the family group average. |

Investment

2.31 Traffic signal investment/refurbishments are carried out on sites which have shown significant equipment deterioration or when a site is under review due to other circumstances such as a new housing development or road layout amendments.

2.32 The following table shows the expenditure on Traffic Signals for financial year 2015/16 with the budget figure as reported to the Strategic Resources & Policy Committee on 23 September 2015:

2015/16 Actual

| Cost Category | 2015/16 Planned | Output | 2015/16 Actual |
|------------------------------|--------------------|---|----------------------------------|
| Planned Maintenance | £77,000 | Planned Maintenance Contract – Siemens | £77,100 |
| Reactive Maintenance | £47,000 | Miscellaneous reactive repairs and maintenance costs. | £122,049 |
| Telecommunication Costs | £12,000 | Annual costs for communication systems | £6,115 |
| Energy Costs | £70,000 | Electricity costs for Traffic Signals, and Automatic Bollards | £53,990 |
| Capital Works | £117,000 | Wellmeadow Refurbishment Works, Removal of 5-way traffic signal junction and installation of 4 pedestrian crossings in area. | £145,251 |
| | £50,000 | York Place, Caledonian Road Refurbishment Works. Due to the age of the site, it has severerly deteriated and now requires full refurbishment. | Carried forward to 2016/17 |
| CCTV Planned Maintenance | £5,954 | Planned Maintenance Contract – Spie Scotshield Ltd | £4,961 |
| CCTV Reactive Maintenance | £6,196 | Miscellaneous reactive repairs and maintenance costs | £6,447 |
| CCTV System Costs | £50,044 | System running costs Including system upgrade. | £46,921 |

Table 25 - Traffic Management Investment and Output 2015/16

2.33 The following table shows the Traffic Signals budget for financial year 2016/17 as reported to the Strategic Resources & Policy Committee on 21 September 2016:

2016/17 Programme

| Cost Category | 2016/17 Budget | Output 2016/17 |
|-------------------------|-------------------|---|
| Planned Maintenance | £77,000 | Planned Maintenance Contract – Siemens |
| Reactive Maintenance | £49,500 | Miscellaneous reactive repairs and maintenance costs |
| Telecommunication Costs | £8,000 | Annual costs for communication systems |
| Energy Costs | 70,000 | Electricity costs for Traffic Signals, and Automatic Bollards |

| Cost Category | 2016/17 Budget | Output 2016/17 |
|---------------------------|-------------------|--|
| Capital Works | £23,000 | Completion of Wellmeadow Refurbishment Works |
| | £21,000 | Completion of York Place, Caledonian Road Refurbishment Works |
| | £48,000 | Strathmore Street Pedestrain crossing refurbishment |
| | £29,000 | Crieff Road, Perth Pedestrian crossing refurbishment |
| | £14,000 | A93 Isla Bridge Works commence in 2016/17 and completing in 2017/18. |
| CCTV Planned Maintenance | £4,961 | Planned Maintenance Contract – Spie Scotshield Ltd |
| CCTV Reactive Maintenance | £6,447 | Miscellaneous reactive repairs and maintenance costs |
| CCTV System Costs | £29,865 | System running costs |

Table 26 - Traffic Managmenet 2016/17 Programme

2.34 An additional £600,000 of Capital funding has been allocated towards Urban Traffic Control and Road Safety Initiatives. In detail, this amounts to £100,000 for each of those categories for three years from financial year 2020/21. It is expected that this will enable a number of additional measures such as pedestrian crossings, to be introduced.

Summary and Future Developments

- 2.35 The overall condition of the Council's roads network and associated infrastructure continues to decline marginally year on year. Strategies and future programmes have, however, been developed to assist in mitigating this within the funding levels available. It should be noted that whilst this is the case, roads in Perth & Kinross remain in a better condition in comparison to other Scottish Councils.
- 2.36 The Roads Maintenance Strategy, implemented through the approved Roads asset management plan, directs where the available funding is spent and is currently targeted at the Council's primary road network with lower category roads receiving less expensive treatments such as patching and surface dressing.
- 2.37 The Street Lighting Partnership have commenced a programme to drive down energy costs and replace their infrastructure in a planned and phased manner.
- 2.38 Improvements to both the Council's CCTV and traffic signalling systems will be undertaken periodically in accordance with available funding. Priority will be given to maintaining the existing systems as effectively as possible to ensure that the functionality is prolonged as much as possible.

2.39 The overall condition of the Council's road structures (bridges, culverts & retaining walls) continues to decline year on year however a £1m "one off" investment in 2015/16 has started to address this decline.

3. RECOMMENDATION

3.1 It is recommended that the Committee note the contents of this Roads Asset Status Report, together with the condition and performance of the Council's Roads assets as at 31 March 2016, as set out in Appendix 2 to the report, and the Roads Maintenance programme as set out in Appendix 3 to the report.

Authors

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Approved

| Name | Designation | Date |
|----------------|------------------------|-----------------|
| Barbara Renton | Director (Environment) | 28 October 2016 |

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1. IMPLICATIONS, ASSESSMENTS, CONSULTATION AND COMMUNICATION

| Strategic Implications | Yes / None |
|---|------------|
| Community Plan / Single Outcome Agreement | Yes |
| Corporate Plan | Yes |
| Resource Implications | |
| Financial | Yes |
| Workforce | None |
| Asset Management (land, property, IST) | Yes |
| Assessments | |
| Equality Impact Assessment | None |
| Strategic Environmental Assessment | None |
| Sustainability (community, economic, environmental) | None |
| Legal and Governance | None |
| Risk | None |
| Consultation | |
| Internal | Yes |
| External | None |
| Communication | |
| Communications Plan | None |

1. Strategic Implications

Community Plan / Single Outcome Agreement

- 1.1 The Perth and Kinross Community Plan/Single Outcome Agreement sets out a number of priorities. By maintaining the roads asset it enables every aspect of life to continue:
 - (i) Promoting a prosperous, inclusive and sustainable economy
 - (ii) Supporting people to lead independent, healthy and active lives
 - (iii) Creating a safe and sustainable place for future generations

Corporate Plan

- 1.2 The Council's Corporate Plan lays out five Objectives which provide clear strategic directions, inform decisions at a corporate and service level and shape resources allocation. This report supports the delivery of the following Corporate Plan objectives:
 - (i) Promoting a prosperous, inclusive and sustainable economy;
 - (ii) Supporting people to lead independent, healthy and active lives; and
 - (iii) Creating a safe and sustainable place for future generations.

2. Resource Implications

Financial

Capital

2.1 See detail in report.

Revenue

2.2 See detail in report.

<u>Workforce</u>

2.3 Maintenance of the network is implemented using existing staff resources.

Asset Management (land, property, IST)

2.4 This report defines the outcomes of managing the roads asset.

3. Assessments

Equality Impact Assessment

- 3.1 Under the Equality Act 2010, the Council is required to eliminate discrimination, advance equality of opportunity, and foster good relations between equality groups. Carrying out Equality Impact Assessments for plans and policies allows the Council to demonstrate that it is meeting these duties.
- 3.2 This section should reflect that the proposals have been considered under the Corporate Equalities Impact Assessment process (EqIA) with the following outcome:
 - (i) Assessed as **not relevant** for the purposes of EqIA.

Strategic Environmental Assessment

3.3 Strategic Environmental Assessment (SEA) is a legal requirement under the Environmental Assessment (Scotland) Act 2005 that applies to all qualifying plans, programmes and strategies, including policies (PPS). The proposals have been considered under the Act and no further action is required as it does not qualify as a PPS as defined by the Act and is therefore exempt.

Legal and Governance

3.4 Legal and Governance assessment is not required for this report.

Risk

3.5 A risk assessment is not required for this report.

4. Consultation

- 4.1 The following were consulted in the preparation of this report:
 - The Roads Maintenance Partnership
 - The Street Lighting Partnership
 - Structures Team
 - Traffic Management Team
 - Corporate Finance

5. Communication

5.1 None.

2. BACKGROUND PAPERS

2.1 No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1983 (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above report.

3. APPENDICES

- 3.1 Appendix 1 Definitions of the Road Classifications
- 3.2 Appendix 2 Carriageway Condition against Scottish Average
- 3.3 Appendix 3 Capital Roads Information