Option 30 Report

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National Roads Maintenance Review Phase 3

Consideration of optimal delivery structures for roads management and maintenance

June 2012











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Organisations represented on the National Roads Maintenance Review Steering Group

SCOTS - Society of Chief Officers of Transportation in Scotland

The Office of the Scottish Road Works Commissioner (SRWC)

SOLACE Scotland - Society of Local Authority Chief Executives and Senior Managers

COSLA - Convention of Scottish Local Authorities

Transport Scotland

Contents

1	Executive Summary	1
2	Introduction	3
3	Current Delivery of Roads Services	4
3.1	Establishing Current Arrangements (Baseline Position)	4
3.1.1	Information Gathering	4
3.1.2	Responses	5
3.1.3	Overview of Current Arrangements	5
4	Options for Optimal Delivery Structures	8
4.1	Objective Setting	8
4.2	Methodology	8
4.3	Option Development	10
4.3.1	Option A – Current Arrangements (baseline)	12
4.3.2 4.3.3	Option B - Structural Change (new roads authorities)	12 13
4.3.4	Option C - Shared Services Option D (combination of Options B & C)	14
4.3.5	Option E (a wholly new means of roads maintenance delivery)	14
5	Assessment of Options	15
5.1	Overall Assessment	15
5.2	Structural Change	15
5.3	Shared Services	16
6	Other Matters	18
6.1	Contract Types	18
6.2	Legislation	18
6.3	Application of VAT	18
7	Conclusions	19
7.1	Key Findings	19
7.2	Way Forward	20

Appendices

Appendix A Project Brief

Appendix B Organisational Chart

Appendix C Overall Assessment of Generic Options

Appendix D Overview of Risks and Issues

Appendix E Research on Alternative Delivery Models in the UK

and Abroad

1 Executive Summary

Background

The National Roads Maintenance Review (Review) is being taken forward in phases. Phase 2 was published in 2011 and identified 30 separate options to be taken forward. One of the key options identified was Option 30 "to undertake an assessment of the optimum arrangements for the management and maintenance of roads in Scotland".

This report is in response to the Review brief for Option 30, received on 10 February 2012, which was to 'Explore the optimum delivery of road maintenance services'. The research study has been undertaken by a Task Group managed by a former Chair of SCOTS and comprised representatives from Halcrow, PricewaterhouseCoopers (PwC) and the Improvement Service. The report has been prepared in consultation with the Review Steering Group which included representatives from SCOTS, the SRWC, COSLA, SOLACE, and Transport Scotland.

The report looks at the optimum delivery of the management and maintenance of roads services in Scotland and explores amendments to existing structures including shared services and without a complete change of roads authorities' functions but also considers the potential for new roads authority structures. An important consideration for the research work was that it had to be "outcome focussed", based on deliverability and compatibility with the Christie Commission recommendations and Public Sector Reform principles.

Approach

The first step in approaching the work was to identify the current models of service delivery in place across Scotland. This exercise was carried out in order to gain a comprehensive understanding of the approach to delivering roads maintenance and the levels of expenditure being incurred. The need to review delivery arrangements is being recognised by a number of roads authorities as are the financial challenges arising from budgetary pressures.

In considering potential options for change it was important to identify objectives and associated criteria for the assessment process. This allowed options which have been developed to be assessed in a consistent way which complied with guidance on public sector reform.

Objectives were identified as part of the assessment process for a range of options for delivery structures. A detailed methodology was developed to allow a rigorous qualitative assessment of generic options, building on high level objectives. The methodology was developed with particular reference to the work of the Christie Commission covering matters such as social and economic wellbeing, accountability and the wider public sector reform. COSLA leaders endorsed the methodology and its use in assessment of options.

The project brief identified five high level generic options for roads service delivery:

- A Current arrangements
- B Structural change
- C Shared services
- D Combination of structural change and shared services
- E A new means of delivery based on UK or international best practice.

The assessment of the sub-options indentified under structural change and shared services was carried out using the objectives and the assessment criteria. It was of a qualitative, high level nature using the professional judgement and experience of members of the Task Group including advice from legal and tax experts. It was subject to a Peer Review by representatives from SCOTS, COSLA, SOLACE, Transport Scotland and the Improvement Service.

Findings

The key findings of the report are detailed below:

- Delivery of roads services in each of the 33 roads authorities varies, with a wide range of management arrangements and roads services being delivered as part of an integrated front line service model as opposed to a standalone one. Current arrangements are unlikely to be sustainable and indeed some local authorities are already implementing or seeking to implement change from existing delivery models. As such, there appear to be wider opportunities to improve the delivery of road services over the short, medium and long term.
- 2. The various approaches to financial reporting across roads authorities should be standardised, where possible. This should be linked to any work developing more robust Key Performance Indicators and benchmarking in the wider public services. In addition, there should be further research work undertaken on international best practice.
- 3. A range of options have been reviewed for reconfiguration of the delivery of roads services that could potentially generate economies of scale and fuller utilisation of existing capacity and skills. These have been classified into two broad categories:
 - a. Shared Services (Option C) and sub-options range from specific maintenance works through to maximum sharing of a complete roads service. These approaches could involve local and/or trunk road authorities. The qualitative assessment found that all seven sub-options can be taken forward in the short to medium term. If the anticipated benefits of shared services are not sufficiently realised over the short to medium term, then exploration of structural change should be accelerated
 - b. Structural Change (Option B) and sub-options incorporate reform of the current structure of road authorities to form a new roads authority or authorities. The qualitative assessment carried out identified that six sub-options met the objectives and initial screening assessment criteria. The implementation of any such structural change is likely to be in the medium to long term. Structural change should only be considered if the anticipated benefits of shared services are not sufficiently realised. In any event, any structural change is likely to require detailed assessment in the shorter term and consideration of any necessary convergence of contractual commitments.
- 4. The standardisation of a variety of strategies could be developed pan Scotland in the short term and progressed as a pilot.

2 Introduction

The National Roads Maintenance Review (Review) is being taken forward in phases. Phase 2 was published in 2011 and identified 30 separate Options to be taken forward. One of the key options identified was Option 30 "to undertake an assessment of the optimum arrangements for the management and maintenance of roads in Scotland".

This report is in response to the Review brief for Option 30 which was to 'Explore the optimum delivery of road maintenance services'. It was received on 10 February 2012 (see Appendix A for Project Brief). The research study has been undertaken by a Task Group managed by a former Chair of SCOTS and comprised representatives from Halcrow, PricewaterhouseCoopers (PwC) and the Improvement Service. The report has been prepared in consultation with the Review Steering Group which included representatives from SCOTS, the SRWC, COSLA, SOLACE, and Transport Scotland (see Appendix B Organisational Chart for delivery of Option 30).

The report looks at the optimum delivery of the management and maintenance of roads services in Scotland exploring amendments to existing structures including shared services and without a complete change of roads authorities' functions but also exploring the potential for new roads authority structures. An important consideration for the research work was that it had to be outcome focussed, based on deliverability and compatibility with the Christie Commission recommendations and Public Sector Reform principles.

The report identifies:

- how roads services are provided at present as well as ongoing changes to service delivery
- potential roads services delivery models which could be worthy of further investigation.

The delivery of management and maintenance of roads is governed by the Roads (Scotland) Act 1984 and is undertaken by 33 roads authorities i.e. the trunk roads authority (Transport Scotland) and the 32 local roads authorities.

The report recognises the economic climate in which Scottish public spending in 2011/12 has been reduced by some £1.3 billion, with capital reduced by 22.9%. Based on UK Government spending plans, it could take until 2025/26 for the Scottish Government budget to return to 2009/10 levels, a cumulative loss of £40 billion¹.

Additionally, Audit Scotland estimated the cost of the backlog across the whole of the Scottish roads network to amount to around some £2.25 billion²; £1.54 billion for local authority roads (excluding bridges and other assets) and £0.713 billion for trunk roads.

¹Scottish Spending Review 2011 and Draft Budget 2012-13

² Maintaining Scotland's Roads – A follow-up report, Audit Scotland, February 2011

3 Current Delivery of Roads Services

3.1 Establishing Current Arrangements (Baseline Position)

The first step in approaching this work was to identify the current models of service delivery in place across Scotland. This exercise was carried out in order to gain a comprehensive understanding of the approach to delivering roads maintenance and the levels of expenditure being incurred. It is essential to be aware of the current position in order to develop and properly assess feasible alternative delivery models. In discussion with the Working Group, the Task Group devised information gathering questionnaires, based on formats³ previously used by Audit Scotland and SCOTS.

3.1.1 Information Gathering

The Task Group developed a two-part questionnaire for the roads authorities on their current delivery structures for organisational arrangements and financial matters respectively.

The organisational arrangements part of the questionnaire was based on a previous format used by SCOTS and sought to gain a profile of delivery models across Scotland for roads services. It covered road network length, client/contract arrangements, reporting arrangements, shared services arrangements, examples of good practice and human resources utilised.

The information gained provided an understanding of how current roads authorities are structured and informed the assessment process.

The financial part of the questionnaire was based upon the Audit Scotland questionnaire of 2009 used in delivery of its report "Maintaining Scotland's Roads – A follow up report". The requirement for some additional information was identified by the Task Group.

The financial return sought data on roads maintenance expenditure across seven revenue expenditure categories. These were based on the structure of the previous Audit Scotland information request and included road construction, structural maintenance, environmental maintenance, weather / winter maintenance, lighting safety / emergency patching and routine repairs.

In addition, it was requested that expenditure in each of these seven categories be broken down into the main cost elements of staff, plant and materials.

The purpose of requesting this data was to build a picture of the current spending on road maintenance across Scotland to allow an analysis of the current position in several areas to:

³ SCOTS Alternative Delivery Model Questionnaire, 2010 and Audit Scotland National Review Returns 2010

- Assess the proportion of total spend for each of the seven categories
- Understand the constituent elements of spend for each of the seven categories (i.e. employee costs, plant and machinery etc.)
- Calculate the movement in expenditure since Audit Scotland last gathered information in this format in 2009/10 to give an insight into trends and spending patterns.

Before circulation to the roads authorities, both parts of the questionnaire were trialled by South Lanarkshire Council and Transport Scotland. The feedback was then reviewed and some adjustments were subsequently made to the questionnaire in an effort to ease completion of it.

Copies of the questionnaire were produced and passed to SCOTS and Transport Scotland representatives on the Steering Group for circulation on Friday 2 March 2012, with a return date of 16 March 2012.

3.1.2 Responses

The return of questionnaires to the Task Group was over an extended period of nearly three months.

The status of questionnaire returns at the end of May 2012 is detailed in Table 3.1 below.

Table 3.1 Status of questionnaire returns

Questionnaire Responses	Organisational	Financial
Substantially complete	31	23
Incomplete	0	3
Not returned	2	7

There were gaps and apparent anomalies in the information provided. Consequently it has not been possible to establish a complete picture across Scotland of the current arrangements for roads service delivery. Nevertheless, an overview of the information received is shown below.

3.1.3 Overview of Current Arrangements

Organisational

The understanding of "organisational arrangements" is based on submissions from the 31 out of 33 roads authorities that provided a response. The information provided has been categorised into broad headings as detailed below.

Road Network Length

The responses show the diversity of the road network being managed across Scotland with three local roads authorities responsible for 0-500 km, ten responsible for 500-1000 km, thirteen responsible for 1001-2500 km, three responsible for 2501-5000 km and two responsible for over 5000 km of road network. In comparison, the trunk roads authority is responsible for 3405km of trunk roads.

Client/Contract arrangements

The questionnaire sought to establish the nature of management and contractual arrangements in place within roads authorities. In summary:

- Whilst two roads authorities use outsourced service delivery arrangements the remaining 29 also use the private sector to varying degrees by exposing a percentage of contracts out to tender in line with Best Value requirements and therefore have a mixed economy in terms of service delivery
- There are six roads authorities with a client/contractor split in place
- There are 25 in house contractors providing services to other customers
- There are 26 roads authorities intending to review current arrangements over the next twelve months
- There are 26 local roads authorities who have contractual arrangements (including framework agreements) of two years or longer e.g. North Lanarkshire Council (10 years)
- The trunk roads authority has contractual arrangements greater than five years duration including long term Design Build Finance and Operate (DBFO) arrangements of up to 30 years (eg M80 DBFO).

Reporting arrangements

- There are 32 local roads authorities, who each report directly to their local authority leadership
- Transport Scotland is the trunk road authority responsible for managing the trunk road network on behalf of Scottish Ministers
- Organograms were provided by 30 roads authorities for the delivery arrangements for the management and maintenance of roads services. They demonstrate a wide range of management arrangements for the delivery of roads services but the common theme is that roads services are part of an integrated front line service model as opposed to a standalone one.

Shared Services and Good Practice

- Shared service/joint working arrangements regarding roads maintenance from 31 roads authorities included winter maintenance, salt provision, roads maintenance materials, street lighting, plant, benchmarking and weather forecasting
- Good practices adopted by roads authorities include salt conservation,
 Sideways Co-efficient Routine Investigation Machine (SCRIM) and scanner
 surveys i.e. Scottish Road Maintenance Condition Survey (SRMCS), monitoring
 Hand Arm Vibration Syndrome (HAVS), annual tenders used to ensure value
 for money and operating a mixed market strategy to ensure works are
 procured both internally and externally.

Human Resources Utilised

• There are approximately 3,000 persons directly employed in roads services in 23 roads authorities who submitted data. Around 1,000 are office based and the remaining 2,000 are site-based. The total figure for all 33 authorities could be in the order of 4,500.

Financial

The financial part of the questionnaire returns were received from 26 roads authorities including Transport Scotland. The information provided offers a level of insight as to how much is being spent across Scotland and on what functions of roads service provision. However, a comprehensive baseline financial position could not be established due to the incomplete responses as noted in the table above. There would be significant benefits to be obtained by having a full financial baseline to inform and support any change process.

It is also recognised in considering the responses that the particular reporting formats adopted by individual roads authorities tend to reflect the standard reporting formats adopted within the parent organisation. This makes wider analysis and comparison much more difficult.

From the partial response to the financial part of the questionnaire it is estimated that annual total expenditure by all 33 roads authorities could be in the order of some £450m-£500m. It would also be reasonable to conclude that spend by local roads authorities equates to some 75-80% of overall roads spend.

In summary, for both organisational and financial parts of the questionnaire it is vital to have all data, to facilitate effective quantitative assessment of any changes in service delivery. It is also considered appropriate to confirm the robustness of the information gathered to date as part of any future assessment, and to seek the adoption of a standardised form of reporting, wherever possible.

4 Options for Optimal Delivery Structures

The need to review delivery arrangements is being recognised by a number of roads authorities as are the financial challenges arising from budgetary pressures.

In considering potential options for change it is important to identify objectives and associated assessment criteria for the assessment process. This allows options which have been developed to be assessed in a consistent way which complies with guidance on public sector reform.

4.1 Objective Setting

Objectives were identified as part of the assessment process for a range of options for delivery structures taking account of the Christie Commission Report and are detailed below:

- To empower individuals & communities in the delivery of road services
- To have a more efficient outcome-focused road service
- To achieve improvements in road service provision
- To have sustainable roads services & behaviours.

These objectives help set the essential outcomes required for any potential change scenarios and help to identify a range of options that may be able to deliver them.

In deriving these objectives, cognisance was also taken of the:

- The National Roads Maintenance Review Phases 1 and 2
- Recommendations from the Audit Scotland follow up report, Maintaining Scotland's Roads, February 2011
- Christie Commission Principles and Criteria
- HM Treasury's Guide to Appraisal and Evaluation in Central Government (The Green Book)
- Scottish Transport Appraisal Guidance.

4.2 Methodology

A methodology was developed to allow a rigorous qualitative assessment of generic options, building on the high level objectives outlined above. The methodology was developed with particular reference to the work of the Christie Commission covering matters such as social and economic wellbeing, accountability and the wider public sector reform. It also considered feedback from the Working Group and extracts from the provided COSLA manifesto as well as an awareness of single outcome agreements developed by Community Planning Partnerships.

The assessment criteria are outcome focussed and were subject to rigorous review. The methodology has been based around seven headings, of equal importance, outlined below.

Social and economic wellbeing

- To achieve improved outcomes for Scotland's people and communities through the delivery of roads services:
 - Address needs of people and communities
 - Tackle inequality and promote equality
 - Accessibility
 - Safety
 - Resilience

Affordability

- To be affordable and sustainable within anticipated available budgets:
 - Upfront (set-up) costs
 - Ongoing revenue costs
 - Downstream efficiency opportunities

Accountability

- To have appropriate arrangements for services to be accountable to local people and communities through:
 - Governance structures operating at a local level
 - Local democratic accountability
 - Public facing service delivery
 - Ability to deploy funding at a local level
 - Improve transparency over plans, expenditure and performance

Implementation

- To appraise moving from current roads service delivery to an alternative model:
 - Viability of moving to an alternative model
 - Issues associated with current legislation or existing contracting and management approaches
 - Ability to introduce new contracting approaches to increase flexible working and framework agreements
 - Ability to maintain service delivery at a national or local level during any transition period

Ability to Deliver

- To appraise the ability of an alternative model to provide an improved roads service:
 - Opportunities for joint collaboration, working arrangements, and operational collaboration between road authorities
 - Scope to introduce integrated service arrangements within local authorities
 - Scope to introduce shared services across consortia of roads authorities
 - Opportunity for empowerment of front-line staff
 - Encourage services to pursue preventative approaches

Sustainability

- Sustainability of the service and the environment:
 - Achieving critical mass of resources
 - Fostering strategic & local knowledge
 - Promoting training & career development
 - Encouraging environmentally sustainable behaviours

Public sector reform

- Links to other public sector reform:
 - Service delivery consistent with and supportive of the wider reform and improvement of public services.

The Review Steering Group was engaged in the development of this methodology. COSLA leaders have endorsed the methodology and its use in the assessment of the options.

In addition, as part of this exercise potential risks and issues associated with each of the assessment criteria were identified, a summary of which is presented in Appendix D.

4.3 Option Development

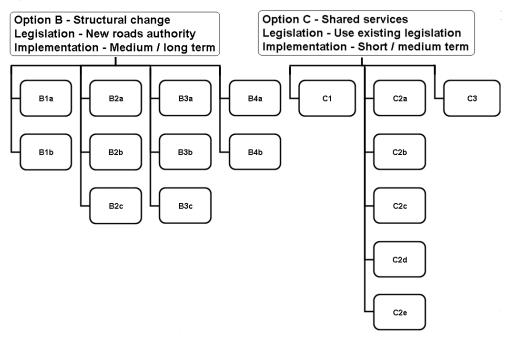
The project brief identified five high level generic options for roads service delivery:

- A Current arrangements
- B Structural change
- C Shared services
- D Combination of structural change and shared services
- E A new means of delivery based on UK or international best practice.

Options were developed at various workshops and meetings by the Task Group.

For Option A, current arrangements (baseline position), the information received in the questionnaire returns was analysed and confirmed that there are different service delivery models in place across Scotland and change initiatives being pursued by a number of roads authorities. In considering Options B (structural change) and C (shared services) a number of potential delivery models emerged as shown in Figure 4.3. It is assumed that structural change represents the merger of two or more local or trunk roads authorities to form a new roads authority while shared services represents the creation of shared services delivery models across two or more local or trunk roads authorities or within a local authority with other services.

Figure 4.3



For Option D, a combination of structural change and shared services, it was not feasible in this report to consider specific options until Options B and C are further developed.

For Option E a wide ranging research of delivery models across the UK, Europe and Australia, was undertaken in order to assess current practices elsewhere and their possible relevance to this study (see Appendix E for a summary of research).

In taking forward their study the Task Group met with a number of partners' representatives to inform further the option generation process as detailed below:

- SCOTS views of delivery options as well as current developments within three roads authorities in Ayrshire - Chair of SCOTS Resources Committee & East Ayrshire Council
- North Lanarkshire Council's Limited Liability Partnership Head of Roads and Transportation
- Tayside Contracts and recent developments in client maintenance Executive Director, Perth & Kinross Council
- Transport Scotland current and future contractual arrangements for trunk road network Head of Network Maintenance.

The options identified are considered generic, transferable across authorities and not mutually exclusive.

The options are explained in the following paragraphs.

4.3.1 Option A – Current Arrangements (baseline)

The questionnaire responses received have contributed to a level of understanding as to how roads services are currently delivered across Scotland. What can be ascertained from professional judgement and reviewing the questionnaire returns is the existence of drivers for change and the requirement for existing services to exercise flexibility in considering future service delivery. In particular, authorities face funding challenges through reducing budgets and a deteriorating roads condition. The wider economic climate indicates a need for "best value" from existing funding and possible reduced funding availability in the future.

These factors reflect those raised by Audit Scotland in their follow up report of 2011.

In view of the above, it is recognised that keeping to the current arrangements is unlikely to be sustainable for roads authorities. There are examples of some roads authorities already implementing or seeking to implement change to current delivery models, such as the three Ayrshire Councils (investigating the provision of shared services through a complete roads service), Glasgow City Council (integrating their roads services with other service provision) and Perth & Kinross Council (combined its client maintenance with contracting works under Tayside Contracts).

4.3.2 Option B - Structural Change (new roads authorities)

Structural change has been considered as the provision of a complete roads service through a merger of roads authorities. Sub-options generated under this category incorporate reform of the current structure of road authorities, and would require changes to current governance and management arrangements underpinned by legislative change. These would include the creation of a single national roads authority covering the current duties of both the trunk roads authority and all the local roads authorities; the creation of a number of regional road authorities covering the same duties; or the integration of responsibility for trunk roads with local authorities' existing responsibility for local roads.

The sub-options identified and taken forward for assessment against objectives and assessment criteria are detailed below:

Local

B1a Existing local roads authority with all trunk roads in their area

B1b Existing local roads authority including certain⁴ trunk roads in their area.

Regional

B2a New roads authority covering two or more Council areas for local roads by agreement

B2b New roads authority covering two or more Council areas including local and certain⁵ trunk roads by agreement

⁴ Certain trunk roads include for example rural carriageways through towns but do not include motorways.

- B2c New roads authority covering two or more Council areas including both local and all trunk roads by agreement.
- B3a New regional roads authorities across Scotland for local roads
- B3b New regional roads authorities across Scotland for trunk roads
- B3c New regional roads authorities across Scotland for local and trunk roads.

National

- B4a New national roads authority with a single HQ
- B4b New national roads authority with regional/local hubs.

4.3.3 Option C - Shared Services

Sub-options generated under this category could involve the integration of roads services with other services within a local authority as well as the creation of shared service arrangements between local authorities and/or the trunk roads authority. These arrangements could range from two or more roads authorities agreeing to specific collaborative arrangements for a range of maintenance works, specialist services or equipment, through to a single roads service. Another sub option could be to deliver roads strategies and policies pan Scotland.

The options identified and taken forward for assessment against objectives and assessment criteria are detailed below:

Local

C1 A roads service combined with other local authority services⁶.

Regional

- C2a Shared services for a limited or wider range of maintenance works with other local and trunk roads authorities
- C2b Shared services for a limited or wider range of specialist works with other local and trunk roads authorities
- C2c Shared services for a limited or wider range of professional services with other local and trunk roads authorities
- C2d Shared services for a complete roads service with other local roads authorities
- C2e Shared services for a complete roads service with other local roads authorities and trunk roads.

National

C3 Shared services for roads policy or strategies across Scotland with local and trunk roads authorities.

⁵ Certain trunk roads include for example rural carriageways through towns but do not include motorways

⁶ For C1 consideration is for the roads service delivery part only.

Service areas that could be potentially integrated at a national level include for example policy or strategies for roads, winter gritting, road safety, cycling, roads development guidelines, asset management methodology, flooding, environment, traffic control, procurement, framework agreements for works and services and major emergencies.

4.3.4 Option D (combination of Options B & C)

The combination of structural change and shared services options has not been considered further at this stage. It is recommended that any potential combinations be fully considered once specific roads service delivery options have been generated by roads authorities.

4.3.5 Option E (a wholly new means of roads maintenance delivery)

In consideration of Option E a wide ranging research of delivery models across the UK, Europe and Australia, was undertaken in order to assess current practices elsewhere and their possible relevance. Although there were no distinct models identified which had not already been included in Option B or C (see Appendix E for summary of research) further research work should be undertaken.

5 Assessment of Options

5.1 Overall Assessment

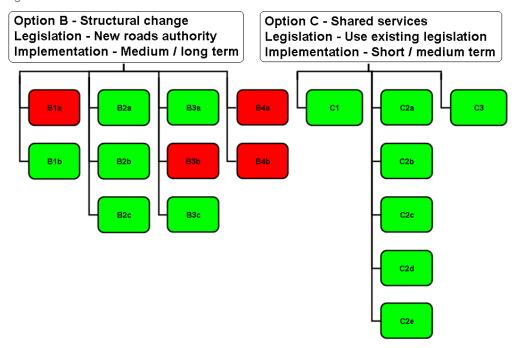
The assessment of the sub-options identified for structural change and shared services was carried out using the data available and an approach that considered the objectives and the assessment criteria relative to the current arrangements in place.

A preliminary screening was undertaken that was of a qualitative, high level nature using the professional judgement and experience of members of the Task Group. It has also been subject to a Peer Review by representatives from SCOTS, COSLA, SOLACE, Transport Scotland and the Improvement Service.

The outcome of the high level qualitative assessment for each option under the two categories B and C is shown in Figure 5.1 below and is detailed in Appendix C.

The sub-options shown in green are deemed worthy of further consideration whilst red indicates sub-options that are not deemed worthy of further consideration in the short to medium term.

Figure 5.1



5.2 Structural Change

This broad category has involved consideration of structural change through reform of current delivery structures to form new roads authorities.

The diagram above indicates that six of the structural change sub options are worthy of further exploration, given the benefits which could potentially be delivered through enhanced integration, standardisation and economies of scale. However, such a move has to be carefully considered for a number of factors such as accountability and ability to deliver.

Any structural change would need to be balanced against the important need to maintain local accountability. For example, a single national authority, or a number of regional authorities could potentially delocalise accountability, and appropriate governance arrangements would need to be put in place to re-secure local accountability.

There are reforms forthcoming, which will employ the combination of national governance and local accountability of partnerships (Police and Fire Reform) and joint national and local governance partnerships (Health and Social Care Reform), but these are not yet implemented or tested. Given time, useful lessons for potential future governance arrangements may well be learnt from these reforms.

Change in delivery structures is likely to have significant impacts upon existing contractual arrangements in relation to the business cases made for those contracts when they were let and the wider linkages into the construction sector. For example, Transport Scotland and North Lanarkshire Council have in place medium to long term contractual arrangements $(5-10.5~{\rm years})$ with large scale consortiums covering multiple Local Authority areas. It should also be noted that there are perhaps a greater number of infrastructure cross council interdependencies affected by the delivery of roads services which are often co-commissioned with other council services. Any new roads authority created could inherit contracts that could constrain its ability for integration, standardisation and economies of scale.

The creation of regional or a national roads authority would require a full legislative process and a subsequent implementation schedule. The Improvement Service advised that this could create a substantial risk that existing developments in service improvement could become frozen in the medium-term whilst awaiting structural and legislative reform to be progressed and implemented.

For the above reasons, it would only be possible to implement structural change in the medium to long term. Nonetheless, further consideration of structural change could take place in the short to medium term. Indeed, the management of reform and improvement should be done carefully to preserve such an opportunity by planning towards a convergence point when all roads authorities would be contractually free to allow radical alternative options to be explored.

In conclusion, it was found that there was compatibility between the results for the objectives and the overall assessment as shown in Appendix C.

5.3 Shared Services

This broad category has involved consideration of shared service arrangements through integration of roads services with other services within a local authority as well as sharing of services between local authorities and / or the trunk roads authority.

The outcome of the assessment of the seven sub-options, shown in Figure 5.1 above, is that the wider implementation of shared services is worthy of detailed investigation now. Although each sub-option will have different operating contexts and challenges across roads authorities they are empowered to enter into partnership, consortia or joint service arrangements in order to meet their duty to provide best value.

One of the seven sub-options includes the standardisation of strategies to be developed across Scotland and because of the relative ease of implementation can be pursued straightaway by all roads authorities.

Therefore, over the short-term there should be open and formal collaboration on shared services between local and trunk roads authorities, and on efficiency and productivity improvement within existing roads authorities. However, national support for shared service sub-options will be essential.

In order to assist existing roads authorities, it is recommended that there is the need for central resources to be in place to drive and support such work across Scotland. This would include preparations of tool kits for the development of sub-options, benchmarking and base-lining support, technical support for sub-options appraisal and business case development, and support for change management and implementation.

In conclusion, it was found that there was compatibility between the results for the objectives and the overall assessment as shown in Appendix C.

6 Other Matters

Whilst all of the following matters have not been subjected to assessment during this research study, they have been recognised as potential constraints or opportunities which will need to be looked at in more detail in future work on any of the options.

6.1 Contract Types

There are various delivery models for roads services covering both operational and contractual arrangements. They all involve a client and contractor relationship.

Some examples include:

- Managing Agent Contracts (MAC)
- Managing Agent / Term Maintenance Contract
- Construction Management Partnerships e.g. North Lanarkshire Public Private Partnership
- Highways Maintenance Private Finance Initiative (PFI) and Public-Private Partnership (PPP).

These need to reflect the location, geographic areas covered, and any existing contracts. Where contracts are already in place, consideration would need to be given to their type and term and how these impact on any proposed change to service delivery.

There is merit in reviewing the relative benefits of each contract type in any future work.

6.2 Legislation

A review was carried out by Dundas & Wilson on current legislation covering roads, local government, EU procurement and employment which informed the assessment process on the likely need for any legislative change and human resource implications.

6.3 Application of VAT

Local authorities currently benefit from a special refund mechanism under section 33 of the 1994VAT Act. This allows local authorities to reclaim VAT on "non-business" activities. The same regime does not operate for central government, of which Transport Scotland is part. There is a considerably more restricted list of activities for which central government can reclaim VAT in full. In practice, this means that while central government can reclaim VAT paid on maintenance costs for the existing roads network, the same is not necessarily the case for roads capital works. Indeed Transport Scotland has confirmed that VAT on roads construction costs can only be recovered where land has previously been used for a road scheme. In the event that the land has not previously been used for roads, VAT cannot be recovered. This is a significant difference in the VAT regime between local and central government and is therefore an important financial consideration for any future models. As part of further work to develop feasible options, consideration would need to be given to the tax position (both direct and indirect) of any change from current arrangements.

7 Conclusions

The Option 30 work has provided the opportunity to carry out a strategic research study to identify the optimum arrangements for the management and maintenance of roads in Scotland for Local Authorities and the Scottish Government to consider. The generic options identified have been subjected to a qualitative assessment using professional judgement against objectives and assessment criteria, both of which are outcome-focussed. It has also been subject to a Peer Review by representatives from SCOTS, COSLA, SOLACE, Transport Scotland and the Improvement Service. The assessment approach takes account of the work of the Christie Commission on the future delivery of public services and has been endorsed by COSLA leaders.

7.1 Key Findings

- Delivery of roads services in each of the 33 roads authorities varies with a wide range of management arrangements and roads services being delivered as part of an integrated front line service model as opposed to a standalone one. Current arrangements are unlikely to be sustainable and indeed some local authorities are already implementing or seeking to implement change from existing delivery models. As such, there appear to be wider opportunities to improve the delivery of road services over the short, medium and long term.
- 2. The various approaches to financial reporting across roads authorities should be standardised, where possible. This should be linked to any work developing more robust Key Performance Indicators and benchmarking in the wider public services. In addition, there should be further research work undertaken on international best practice.
- 3. A range of options have been reviewed for reconfiguration of the delivery of roads services that could potentially generate economies of scale and fuller utilisation of existing capacity and skills. These have been classified into two broad categories:
 - a. Shared Services (Option C) and sub-options range from specific maintenance works through to maximum sharing of a complete roads service. These approaches could involve local and/or trunk road authorities. The qualitative assessment found that all seven sub-options can be taken forward in the short to medium term. If the anticipated benefits of shared services are not sufficiently realised over the short to medium term, then exploration of structural change should be accelerated
 - b. Structural Change (Option B) and sub-options incorporate reform of the current structure of road authorities to form a new roads authority or authorities. The qualitative assessment carried out identified that six sub-options met the objectives and initial screening assessment criteria. The implementation of any such structural change is likely to be in the medium to long term. Structural change should only be considered if the anticipated benefits of shared services are not sufficiently realised. In any event, any structural change is likely to require detailed assessment in the shorter term and consideration of any necessary convergence of contractual commitments.
- 4. The standardisation of a variety of strategies could be developed pan Scotland in the short term and progressed as a pilot.

7.2 Way Forward

Building on the key findings of the report, further work is needed to take forward key action points to develop robust baselines and benchmarks for change. It is recognised that this is out of scope of the level of capacity available to all roads authorities, therefore it is proposed this work is progressed by.

Creating a central resource, overseen by Scottish Ministers and COSLA, to take forward the design and delivery of a package of shared service initiatives. This team should lead the programme and provide support to roads authorities to develop robust baselines and benchmarks for change to ensure a rigorous social, economic or financial appraisal of alternative options in the short to medium term. This will provide an appraisal framework for shared service options and for any future options for structural reform.

The particular options pursued should be appropriate to the varying operating contexts of different road authorities. Nonetheless, the programme should engage all authorities. This resource should also be responsible for ensuring best practice and experience is shared across Scotland.

Appendix A

Project Brief

Appendix A Project Brief

National Roads Maintenance Review Brief for Option 30 'Explore the Optimum Delivery of Road Maintenance Services'

Background

The National Roads Maintenance Review is now entering its third phase with previous phases comprising:

- Phase 1 Evidence gathering (working groups + stakeholder feedback).
- Phase 2 Option sifting and outline economic appraisal.

Phase 3 comprises the implementation of selected options and further study and economic appraisal of others. This phase is due to conclude around May 2012 and it is likely that further phases of work will be required thereafter in order to implement any initiatives which are demonstrated to provide improved efficiency/value. Detailed study work might also be required of any options which can be demonstrated to enhance value but which are not sufficiently well developed for immediate implementation. For example, any option requiring strategic or legislative change is likely to require widespread consultation and further detailed consideration of the consequential impacts that such changes might bring, in addition to the improved efficiency. The Phase 1 and Phase 2 reports provide further details of the various options developed and are available at:

http://www.transportscotland.gov.uk/road/maintenance/road-maintenance-review

Option 30 - Explore the Optimal Delivery of Road Maintenance Services

One of the key recommendations of the Review is to undertake an assessment of the optimum arrangements for the management and maintenance of roads in Scotland and it is this piece of work that this brief addresses.

The remit for this work is to:

Undertake a comprehensive research and appraisal study of road maintenance delivery structures and recommend whether the current structure should be amended.

The work will be based on the following principles

A focus on an exploration/review/amendment of existing structures and not wholesale change/reduction of roads authorities functions, although radical change may well be considered and, by mutual agreement, pursued if deemed appropriate;

- Continued local governance by elected members for any local structure;
- Outcome focussed, based on deliverability and compatibility with Christie Commission recommendation and Public Sector Reform principles.

There are a number of potential options to be assessed against the current arrangements. These include, but are not limited to:

- Option A Status Quo Incorporating use/re-use of existing delivery models.
- Option B Vertical integration Local, regional, and national roads authorities, and any combination of those three tiers, carrying out management and maintenance services;

- Option C Horizontal integration A delivery mechanism determined by the most efficient, economic and effective management and maintenance of (shared) services
- Option D A combination or combinations of Options B and C
- Option E A wholly new means of road maintenance delivery based on United Kingdom and international best practice.

Each option shall also take into account:

- Existing contracting and management approaches;
- Opportunities for introducing new contracting approaches to increase flexible working and framework agreements;
- Joint collaboration, working arrangements, and operational collaboration between all road authorities;
- Integrated service arrangements within local authorities (for example the current Glasgow City Council model);
- Shared services across smaller consortia of local authority councils; and
- Local processes compared with local circumstances.

Furthermore, each option will be assessed against its impact on:

- Cost / benefit (economic and financial appraisal)
- Current Legislation
- Service delivery more specifically democratic accountability, accountability to local communities, ability to deliver local priorities, governance, funding and transition arrangements
- Future requirements and sustainability
- Any other risk not identified through the above

It is possible that this work could involve a number of phases. If the study concludes that the status quo provides the best arrangements in economic, social and democratic terms then work would conclude in May 2012. If evidence gathered indicates that improvements could be realised through an amendment of delivery structures then work could continue beyond May 2012, if mutually agreed by Steering Group Delivery Partners. This may lead to a wider and formal consultation with road maintenance partners', Local Authority Officers, and Elected Members/Council Leaders where appropriate.

Management of the commission

The work will report to the steering group via a dedicated working party comprising representatives of the key Steering Group partners

The work will be subject to final acceptance of COSLA and the Minister on completion and might also be referred to COSLA for agreement at interim stages, as determined by the Steering Group.

Deliverables

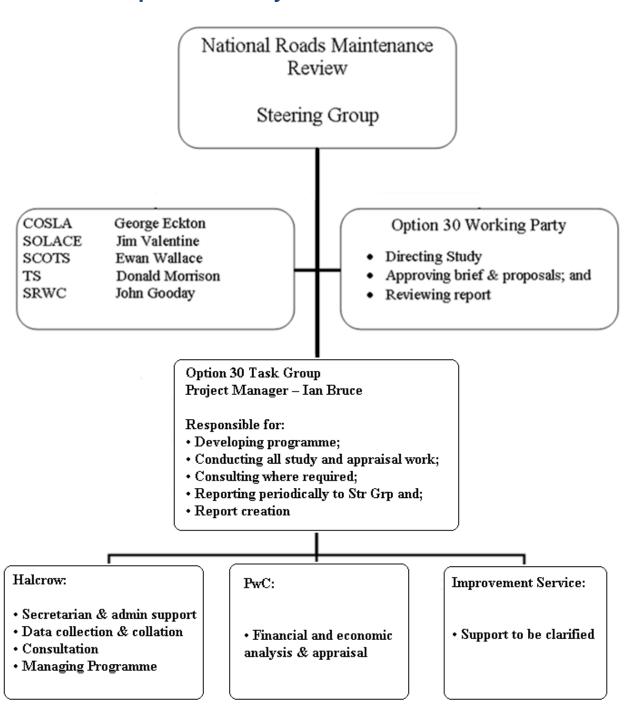
This commission will initially develop this brief into a project plan and programme for approval by the Roads Maintenance Review Steering Group. This programme may also be referred to COSLA by the Steering Group for consideration.

A report will be required in time for the Roads Maintenance Review Steering Group meeting on 24th April 2012 for finalisation by the end of May, containing findings and recommendations for improvements and setting out the steps envisaged in future phases to implement those recommendations, should they be accepted by the Steering Group partners.

Appendix B

Organisational Chart

Appendix B Organisational Chart for Delivery of Option 30 Study



Appendix C

Overall A	Assessr	ment of	Generic	Options

Appendix C Overall Assessment of Generic Options

Option B - Structural Change	Objectives	Overall Assessment	Commentary
Option B sub-options			
B1a - Existing local roads authority with all trunk roads in their area			Implementation challenges due to legislative change and existing contracting arrangements. Potential ongoing affordability pressures. Deliverability only in longer term.
B1b - Existing local roads authority including certain trunk roads in their area			Improved local accountability and added social and economic wellbeing. Implementation challenges due to legislative change and existing contracting arrangements. Deliverable in medium term.
B2a - New roads authority covering two or more Council areas for local roads by agreement			Improved affordability and ability to deliver. Provides choice and meets public sector reform goals. Implementation challenges due to legislative change. Deliverable in medium to long term.
B2b - New roads authority covering two or more Council areas including local and certain trunk roads by agreement			Improved affordability and ability to deliver. Provides choice and meets public sector reform goals. Improved accountability and social and economic wellbeing. Implementation challenges due to legislative change. Deliverable in medium to long term.
B2c - New roads authority covering two or more Council areas including both local and all trunk roads by agreement			Improved local accountability and added social and economic wellbeing. Implementation challenges due to legislative change and existing contracting arrangements. Deliverable only in the long term.
B3a - New regional roads authorities across Scotland for local roads			Improved affordability. Implementation challenges due to legislative change. Reduced local accountability. Deliverable only in the long term.
B3b - New regional roads authorities across Scotland for trunk roads			Potential ongoing affordability pressures. Implementation challenges due to legislative change. Deliverable in the medium to long term.
B3c - New regional roads authorities across Scotland for local and trunk roads			Improved affordability and ability to deliver. Implementation challenges due to legislative change. Deliverable only in the long term.
B4a - A new national roads authority with a single HQ			Significant and complex implementation challenges due to legislative change and existing contracting arrangements. Significantly reduced local accountability and fit to public sector reform criteria. Improved affordability in the long term. Deliverable only in the long term.
B4b - A new national roads authority with regional/local hubs			Significant and complex implementation challenges due to legislative change and existing contracting arrangements. Reduced local accountability and fit to public sector reform criteria. Improved affordability in the long term. Deliverable only in the long term.

Option C - Shared Services	Objectives	Overall Assessment	Commentary
Option C sub-options			
C1 - A roads service combined with other local authority services			Improved local accountability and added social and economic wellbeing. Meets public sector reform criteria. Implementation challenges due to existing contracting arrangements. Deliverable in the short to medium term.
C2a - Shared services for a limited or wider range of maintenance works with other local and trunk roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short to medium term.
C2b - Shared services for a limited or wider range of specialist works with other local and trunk roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short to medium term.
C2c - Shared services for a limited or wider range of professional services with other local and trunk roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short to medium term.
C2d - Shared services for a complete roads service with other local roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short to medium term.
C2e - Shared services for a complete roads service with other local and trunk roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short to medium term.
C3 - Shared services for roads policy or strategies pan Scotland with local and trunk roads authorities			Ease of implementation and ability to deliver. Improved affordability. Meets public sector reform criteria. Deliverable in the short term.

Appendix D Risks and Issues

Overview of Risks and Issues

Appendix D Overview of Risks and Issues

As part of developing the methodology potential risks and issues associated with each of the headings were identified and are outlined below:

Social and Economic Wellbeing

- Dilution or loss of local focus
- Lower quality of life for people and communities
- There is not a well-maintained road network to access services, business and new opportunities
- Poor maintenance and management results in a less safe road network

Affordability

- Set-up costs higher than anticipated
- Loss of financial control on the revenue costs results in service cuts
- Anticipated efficiencies are not achievable

Accountability

- New governance structures do not deliver local democratic accountability
- New service arrangements do not facilitate interaction with the public
- Reporting arrangements do not provide transparency and adequate performance review

Implementation

- Unforeseen legislative barriers prohibit implementation
- Inability to agree transition management functions delays implementation
- Disruption to service due to inability to change existing arrangements for employees and contractors in a realistic timeframe
- Reduction in service delivery during transition results in reputational damage

Ability to Deliver

- Lack of collaborative working results in the inability to provide an improved roads service
- One partner to consortia/joint working withdraws and results in new service e.g. shared not being viable
- Loss of expertise in roads as a result of new arrangements resulting in a skills shortage
- New operational/management arrangements result in an inability to respond and deliver timeously for road network needs

Sustainability

- Loss of a critical mass of resources results in a less sustainable service delivery and a loss of strategic & local knowledge
- Loss of key specialists during reorganisation reduces resilience of service provision

- Inadequate training & career development opportunities results in a loss of expertise, skills and capability
- New arrangements do not implement environmentally sustainable behaviours

Public Sector Reform

- New arrangements do not meet the agenda of new political administrations
- Lack of fit with other public sector organisations or stakeholders results in poor integration with wider public sector reform

Appendix E

Research on Alternative Delivery Models in the UK and Abroad

Appendix E Research on Alternative Delivery Models in the UK and Abroad

Research was carried out on alternative delivery models across the UK, Europe and Australia in order to assess current practices elsewhere and their possible relevance to this study. A summary of which is provided below:

- North Lanarkshire Council (NLC)/Amey Public Services Limited Liability Partnership - Amey Public Services is the name given to the Limited Liability Partnership. The partnership is owned approximately 33% by North Lanarkshire Council and 67% by Amey. Contracts are set for duration of 10.5 years with continual year on year efficiency savings built into the model that both parties work jointly to achieve. Amey is in charge of all maintenance of the road network and provides this service 24 hours a day 365 days a year. This is possible through emergency response teams.
- Northern Ireland Roads Service Roads Service is a business unit within the Department for Regional Development and they operate within the context of the Departments overall strategic objectives. The headquarters are based in Belfast supported by 4 divisional offices in Belfast, Coleraine, Craigavon and Omagh. Each division is divided into a number of sections that correspond to district council areas. About 90% of routine maintenance is carried out by inhouse direct service organisations. Motorways and Trunk Roads maintenance is contracted out.
- Transport for London (TfL) & London Boroughs TfL works with 33 surrounding Boroughs to try and improve transport across London. TfL and London Boroughs are currently looking towards a London Highways Alliance Contract to have a more efficient structure for road maintenance. Reasons for joining into a London Highway Alliance Contract are that the London Boroughs and TfL have a strong history of working together. Furthermore the economic downturn has caused budgets for road maintenance to be cut and working with other Local Authorities can allow the Boroughs to find efficiencies and best working practices. TfL and London Boroughs would be split into 4 areas North West Alliance area, North East Alliance area, South Alliance area and Central Alliance area.
- Hounslow Private Finance Initiative (PFI) To solve the problem of a huge backlog of maintenance work, the route of a PFI has been chosen. This is a financial arrangement that provides up front money for improvements needed now, where the payments can be spread over a longer time. Hounslow also secured a government grant of approximately £350m to spend over 25 years for much needed investment work and ongoing maintenance to the roads and pavements. Now the procurement process is well underway and the preferred bidder will finance the investment to tackle the backlog of repairs and improvement works.
- Highways Maintenance Efficiency Programme (HMEP) This is a sector led transformation programme across England designed to maximise returns from highways investment and deliver efficient and effective services. The local highway maintenance sector comprises 153 local highway authorities, the contractors that carry out maintenance work, representative organisation and professional bodies. Those involved in highways maintenance delivery, will

have adopted an ambitious and long term approach to roads maintenance. This would involve seeking new and improved ways of delivering services to highway users, better management of highways assets, making use of collaborative partnerships to improve processes and outcomes and delivering a sustainable balance between meeting the needs of highway users, improving quality and minimising costs.

- **Highways Agency** The Highway Agency is an executive agency of the Department for Transport (DfT). Responsible for operating, maintaining and improving the strategic road network in England on behalf of the Secretary of State for Transport. In order to manage England's strategic network, the agency has divided the country into thirteen areas. Each area is assigned an Area Team and a contractor known as a Managing agent or Managing Contractor. Each area team, with their corresponding Managing Agent is responsible for the maintenance of the Agency roads in their area.
- Welsh Assembly The Welsh trunk road network is run by two public sector agencies, the North and Mid Wales Trunk Road Agency (NMWTRA) merger formed in April 2012 and South Wales Trunk Road Agency (SWTRA), on behalf of the Welsh Assembly. These agencies strategically manage services on the trunk road network, which are primarily delivered by local authorities (LAs). The LAs also manage their own road networks. There are, in addition, various degrees of outsourcing in discrete and term contracts by SWTRA and some LAs.
- Midlands Highways Alliance (MHA) The MHA is an unincorporated association by agreement. Its members are currently made up of 17 local authorities and the Highways Agency. The goal of this organisation is to improve performance, share best practice and make efficiency savings in the delivery of highway services by working together.
- Denmark The Danish Road Directorate is an agency of The Ministry of
 Transport and Energy. Within this organisation is an Operation & Maintenance
 department. This group contract out the entire maintenance of the road
 network. To measure the quality of the whole network it is physically
 inspected once a year.
- Finland In control of the road network is the Finnish Transport Agency, who
 report to the Ministry of Transport and Communications. The road network is
 divided into 80 contract districts. Local contactors are in charge of road
 maintenance in compliance with the service level specified by the Finnish
 Transport Agency.
- Norway The Norwegian Public Roads Administration (NPRA) operates under the jurisdiction of The Ministry of Transport and Communications. The NPRA is divided into 5 regional offices, each led by a Director General, with each region divided into 30 district offices. All state road network maintenance is contracted out in Norway. These contracts are performance based and usually last 5 years. Each district could have up to 3 or 4 contact agreements regarding road maintenance.
- Sweden The Swedish Transport Administration is responsible for the construction and maintenance of public roads and railways. The operations and maintenance of trunks roads has been contracted out entirely since 1997.

- The contracts are area specific and based on 130 operational area maintenance contracts. The contract types used are a hybrid type, which include a combination of performance based and traditional requirements for the performance level of service delivery.
- Western Australia The agency Main Roads Western Australia is split over 10 regional offices across Western Australia. In each region the services they provide are Operational Assets Management, Road Network Operations, Project Delivery and Community Engagement. Main Roads Western Australia has introduced integrated service arrangements to deliver a better service. Through Integrated Service Arrangements (ISA's) Mains Roads are targeting roads maintenance. This is controlled through each regional office and then works in partnership with an integrated service arrangement.

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