

LAND TRANSPORT NEW ZEALAND

REVIEW OF


PROFESSIONAL SERVICES COSTS

Reviewer


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Reviewed by


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August 2006

DISCLAIMER

This is a final report. It has been prepared in the discharge of Land Transport New Zealand's legal responsibility to audit the performance of approved organisations in relation to activities approved by Land Transport NZ . A draft of the report has been referred to those road controlling authorities visited during the fieldwork, for comment. It has been modified as noted in the text in light of the corrections advised with comment on the final; draft report.

The findings, opinions and recommendations in the report are based on an examination of a sample only, and may not address all issues existing at the time of the audit. So readers are urged to seek specific advice on particular matters and not rely solely on the report.

While every effort has been made to ensure the accuracy of the report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to Land Transport NZ.

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1 EXECUTIVE SUMMARY

1.1 Review Dates

A review of a sample of territorial local authorities' (authorities) professional services costs in the 2004/05 year was carried out 8 - 25 May, 2005. This review was conducted as part of Performance Monitoring Group's business plan for 2005/06.

1.2 Scope of Review

- To review professional services costs in a sample of territorial local authorities.
- To review practices in allocating professional services work to in-house staff and to consultants.
- To determine any commonalities that underlie the costs of professional services in relation to Land Transport Programmes.
- To assess the values of different road controlling authorities' policies in their obtaining of professional services in relation to the performance of the roading network.
- To report the conclusions of the review together with any recommendations.

1.3 Review Conclusions

- This review covers professional services work being carried out by a sample of eighteen road controlling authorities, with a total value approved for financial assistance of \$11.8 million. The total sum approved upon which financial assistance was paid to all authorities in 2004-05 was \$58.7 million.
- Good practices identified were that fourteen asset managers obtain professional services from a mix of in-house staff and from consultants. Three of those with contracted out services are re-establishing or expanding the roles of in-house staff. One other is investigating expanding contracted out Road Asset Maintenance Management system (RAMM) related services. The balance between the two areas of source is kept under review, using the twin criteria of standard of service delivered and cost.
- Roading asset managers are cost-conscious; they are striving to maintain a balance between service to their councils, ratepayers and road users, and the costs of providing those services. Those making, or proposing to make changes in procuring professional services, are doing so for this reason.
- Higher professional services inputs of human resources (but not necessarily costs) lead to reductions in road maintenance costs.
- Authorities with apparently high ratios of inputs, professional services costs relative to maintenance costs, do not show up as expensive when outputs, the demands on the network, pavement condition achieved, and expenditure in relation to Council resources are considered.
- Two authorities reviewed are identified as being under-resourced. In one case, an independent report to the Council had identified this same issue.

- No commonalities or direct relationships could be found between the cost of professional services and outputs as measured by roading indices Condition Index and Smooth Travel Exposure.
- A direct parallel was found between traffic density, measured as vehicle kilometres travelled (VKT) per kilometre of network and resources of people per kilometre. There is an inverse relationship between traffic density and total maintenance cost per kilometre.
- Total subsidised expenditure per person engaged in asset management and professional services shows two characteristic levels. The cost of consultants' services is identified as a significant reason for the high cost band. One authority has a very low traffic density, together with a low level of capital development of the network as reasons for its particularly low level of expenditure in relation to staffing levels.

2 RECOMMENDATIONS

The following is a summary of recommendations and suggestions. The appropriate section of the report should always be referred to for the full statement in its context.

2.1 Recommendations

The report contains no specific recommendations. Asset managers are balancing levels of service achieved against costs of those services. The principal problem identified in this review is one of under-resourcing in a limited number of councils.

2.2 Suggestions

That:

- (a) Authority 15* review the level of resources it is applying to road asset management (refer sections 5.6 & 7.2);
- (b) Authority 17* review the level of resources it is applying to road asset management and related professional services (refer sections 5.6 & 7.2).

*Note: The relevant Councils have been advised separately of this finding of the review.

3 REVIEW FINDINGS

3.1 Objective 1 : Review Professional Services Costs

To review professional services costs in a sample of territorial local authorities.

This objective has been achieved.

Eighteen territorial local authorities were visited 8 - 25 May, 2006.

3.2 Objective 2 : Review Allocation Practices

To review practices in allocating professional services work to in-house staff and to consultants.

My conclusion is that councils obtain their professional services from a mix of in-house staff and from consultants. There is a trend for those that had fully contracted out professional services to re-establish in-house staff to deal with routine matters. This is being done partly for cost reasons and partly to provide a more immediately responsive service to ratepayers and asset managers.

3.3 Objective 3 : Determination of Commonalities

To determine any commonalities that underlie the costs of professional services in relation to Councils' Land Transport Programmes (LTPs)

Councils consistently seek better service for the public and cost minimisation for ratepayers in their policies for purchasing professional services. This has been a strong influence in most using a mix of in-house resources and consultants. Roading asset managers keep service and cost aspects under review.

Asset managers had a preference for in-house staff for routine work, for their greater sense of "ownership" of the network, and for cost reasons.

No commonalities or direct relationships could be found between the cost of professional services and outputs as measured by roading indices Condition Index and Smooth Travel Exposure.

Where respondents were able to show the fall of professional services costs between broad activities structural maintenance, corridor maintenance, safety works, and network management, there was a general consistency except for a small authority that has a network built on very good subgrades and has a low proportion of commercial traffic. Professional services costs related to safety works were separated very inconsistently. Six of the seven authorities providing this information recorded numerically and proportionately small inputs into safety works.

Resources available to councils as measured by full-time equivalent staffing per kilometre of network show a direct relationship to traffic density, the distance travelled by road users per year on the network divided by network length.

An inverse relationship exists between maintenance expenditure per kilometre and traffic density. This is likely to reflect a dominance of traffic related costs at high traffic densities, and fixed costs dominating at low traffic densities.

Total subsidised expenditure per full-time equivalent person does not vary according to traffic density. Three levels of expenditure are apparent:

- a "high" band at \$1.6-1.7 millions per person;
- a "middle" band at \$0.7-1.1 millions per person; and
- a "low" band below \$0.6 millions per person.

"High" expenditure authorities include three that have commented on having high costs of consultants, one with a high maintenance cost Land Transport Programme (LTP), and one that appears to be under-resourced.

"Low" expenditure authorities include one where the cost per person of professional services is high relative to other authorities of comparable traffic density, but which has low maintenance and total subsidised expenditure. My conclusion is that the low cost levels are a benefit of past policies that are now depressing current maintenance needs. Low maintenance needs are a major factor in the case of the other "low" expenditure authority.

3.4 Objective 4 : Assess Values of Policies

To assess the values of different authorities' policies in their obtaining of professional services in relation to the performance of the roading network

Council's policies vary in their modes of obtaining professional services, but this does not seem to affect the outcomes when considered in terms of road condition.

In two authorities Council policies on staffing and costs appeared to be affecting the level of the resources brought to network management and specialist expertise adversely.

3.5 Objective 5 : Report Conclusions

To report the conclusions of the review together with any recommendations.

I conclude that councils' roading asset managers are cost-conscious; that they are striving to maintain a balance between service to their councils, ratepayers and road users, and the costs of providing those services. Those making, or proposing to make changes, are doing so for this reason.

Higher professional services inputs of human resources (but not necessarily costs) lead to reductions in road maintenance costs.

Authorities with apparently high ratios of inputs, professional services costs relative to maintenance costs, do not show up as expensive when outputs, the demands on the network, pavement condition achieved as measured by Land Transport NZ's pavement indices, and expenditure in relation to Council resources (number of full-time equivalent people engaged) are considered.

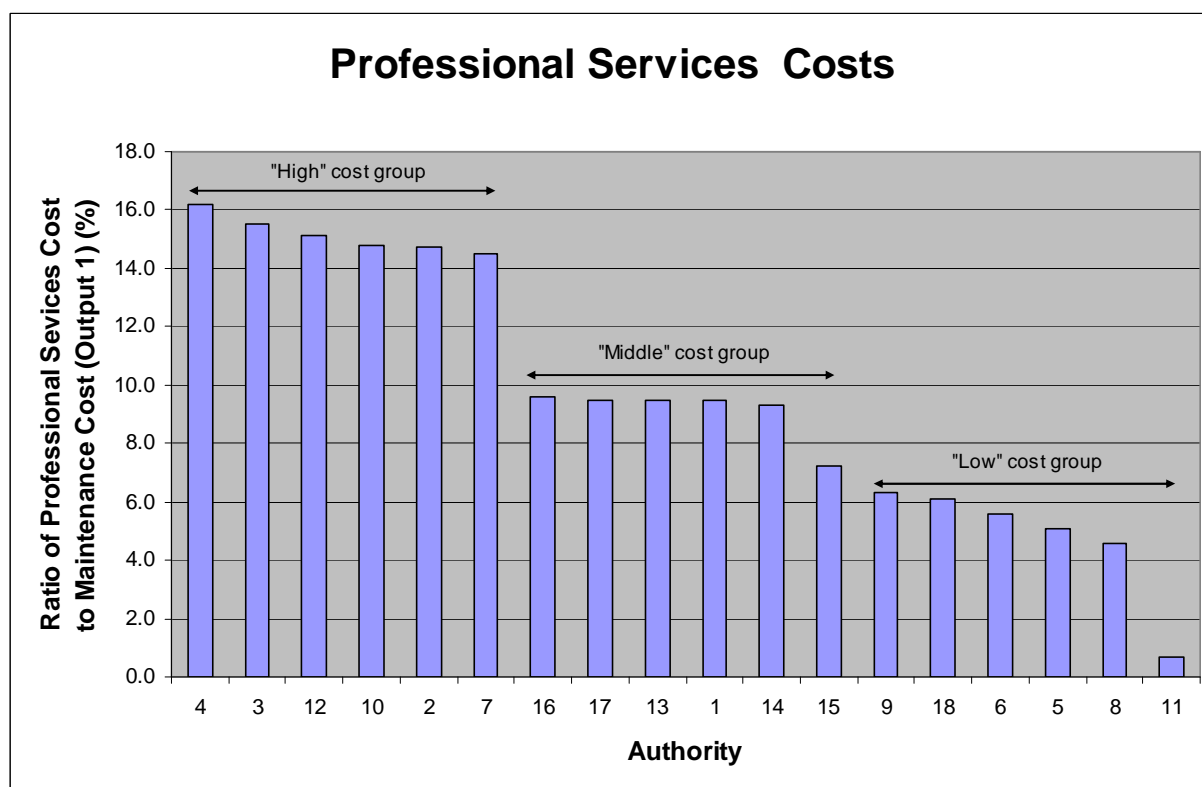
Two authorities in the review were determined to be markedly under-staffed by comparison with their peers and in terms of a threshold identified in a previous Transfund New Zealand report, report No. PM00/875A, dated July 2001, "Survey of Local Authority Maintenance Management Processes".

4 SURVEY SAMPLE & RANKING

A sample of 18 road controlling authorities was chosen for this review. The sample was chosen using the bar-charts of Professional Services costs in relation to the cost of Output 1, Maintenance of Local Roads, as distributed as an attachment to General Circular 05/11 published 23 November, 2005.

The authorities chosen consisted of three groups that appeared to have proportionately high Professional Services costs; to have Professional Services costs in the middle of the range for all territorial local authorities; and to have proportionately low Professional Services costs. The three groupings show as steps in the ordinates of Graph 1.

Graph 1: Authorities Reviewed as Ranked by Ratio of Professional Services Costs to Maintenance Costs



For the purposes of this review, individual authorities are not specifically identified. They have been ranked in terms of traffic density (total vehicle kilometres travelled per annum divided by total network length) as shown in Graph 2. Vehicle kilometres travelled were taken from RAMM records and network length values were obtained from the Land Transport NZ's "Network Statistics 2004/05".

The "high" cost group (authorities from 4 to 7 as shown in Graph 1) includes four authorities that are primarily urban. Two employ consultants only and both plan or are moving to again employ in-

house staff. This is being done partly to reduce costs and partly to have professional services people readily available in the office.

The “middle” cost group (authorities 16 to 15, see Graph 1) include one urban authority. The others are rural, with towns up to regional centres in size.

The “low” cost group (authorities 9 to 11, as shown in Graph 1) are equally divided between urban and rural. Two of the urban authorities have not been claiming their full entitlements under Work Categories 17, Professional Services, and 95, Administration. Authority 11 has its network management work carried out by its physical works contractor under a performance-based contract. A sum is claimed under Work Category 17, as negotiated with Land Transport NZ.

Traffic densities for the authorities included in the survey are as set out in Graph 2 and Table 1. The surveyed authorities have been divided into three groups for analysis purposes:

- “High” traffic density: Authorities 1-6;
- “Middle” traffic density: Authorities 7-12; and
- “Low” traffic density: Authorities 13-18.

Graph 2: Authorities Reviewed as Ranked by Traffic Density

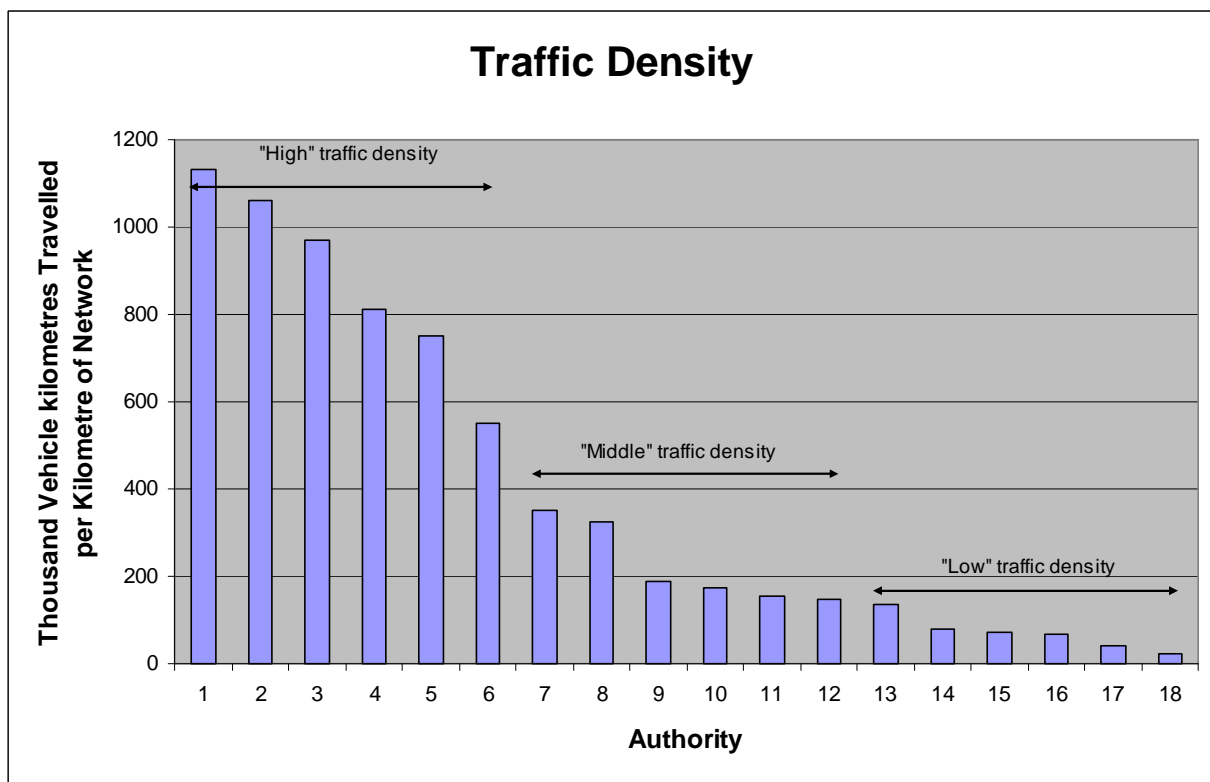


Table 1: Traffic Density

Authority	Vehicle Kilometres Travelled p.a. (VKT millions)	Network Total Length (Km)	Traffic Density (VKT thousands/Km)
1	800	671	1133
2	721	679	1060
3	617	562	971
4	182	224	811
5	518	487	751
6	128	229	552
7	146	375	351
8	14	42	325
9	231	1058	189
10	200	1254	174
11	144	1048	154
12	211	1432	147
13	131	796	136
14	200	600	78
15	174	2432	72
16	37	566	66
17	58	1422	41
18	17	703	24

5 ANALYSIS OF DATA

5.1 Background Information

The following Tables 2-4 contain background data that was assembled in advance and confirmed with the relevant Council officers during fieldwork.

Table 2: Physical Statistics of Authorities in the Sample

Authority	Total Network Length (Km)	Total Sealed Length (Km)	Total Urban Length (Km)	Vehicle Kilometres Travelled 2004/05 (Millions)	VKT: Five-Year Trend (%)
1	672.1	669.8	631.1	800.1	+1.0
2	677.7	676.9	621.2	721.2	-3.3 ⁽¹⁾
3	575.6	573.3	527.4	619.6	+7.1
4	224.0	223.0	183.5	181.7	+6.7
5	487.0	483.9	487.0	518.1	+16.3
6	232.9	231.6	151.8	128.4	+0.2
7	379.9	362.0	226.3	145.8	+2.1
8	41.4	40.1	39.4	13.6	0.0
9	1051.1	963.1	162.2	231.4	+6.0
10	1263.1	1080.5	294.9	200.0	-1.4 ⁽¹⁾
11	1021.9	721.8	129.5	143.8	-0.2
12	1457.5	763.0	161.6	210.7	-0.1
13	796.4	514.9	111.0	131.0	+2.2
14	617.3	356.6	125.6	46.8	-0.0
15	2359.0	1296.0	141.0	174.2	+0.0
16	587.6	300.2	97.4	37.5	+0.1
17	1462.4	601.6	73.2	57.7	+1.4
18	703.4	193.5	51.1	17.0	-0.2

⁽¹⁾ Note: Apparent changes in vehicle kilometres travelled (VKT) are affected by changes to the state highways designated within these authorities.

The higher traffic density authorities (authorities 1-6) are primarily urban in nature. The middle range (authorities 7-14) has mostly councils with significant regional townships, ranging up to former city status (i.e., prior to the 1989 local government re-organisation).

Changes in traffic volumes over five years should be read with caution as they are a mix of measured and estimated values for each authority's network. They are "best available" figures as currently recorded in RAMM. The quality of VKT data has been improving in accuracy with time as

more systematic traffic counting has been adopted by councils. I have not found it practicable to distinguish between councils as to the reliability of counts, either in 2004/05, or in 2000/01.

Sealed networks condition and the five-year trends in condition are shown in graph 3, the values of Condition Index being taken from Table 3 which follows the graph. This illustrates the generally satisfactory condition of sealed pavements managed by those councils included in this review.

Graph 3: Networks Condition for Authorities Reviewed, as Ranked by Traffic Density

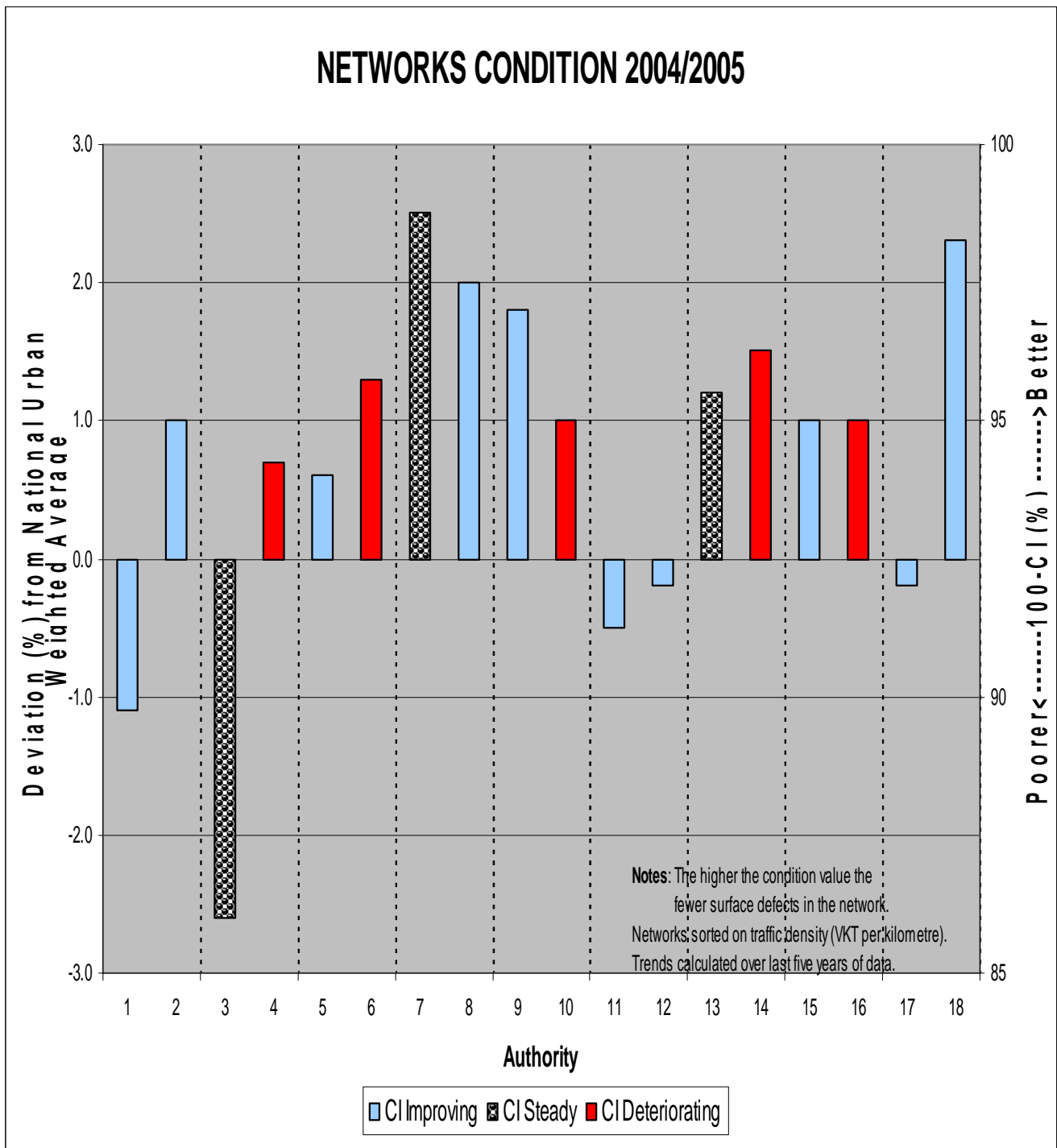


Table 3: Network Condition for Authorities in the Sample

Authority	Condition Index (CI)	CI Five-Year Trend	Smooth Travel Exposure (STE) (%)	STE Five-Year Trend
1	4.2	Improving	74	Improving
2	2.1	Improving	60	Steady
3	5.7	Steady	77	Steady
4	2.4	Deteriorating	80	Steady
5	2.5	Improving	81	Steady
6	1.8	Deteriorating	74	Steady
7	0.6	Steady	79	Steady
8	1.1	Improving	96	Steady
9	1.3	Improving	93	Deteriorating
10	2.1	Deteriorating	90	Steady
11	3.6	Improving	95	Steady
12	3.3	Improving	91	Steady
13	1.9	Steady	92	Steady
14	1.6	Deteriorating	90	Steady
15	2.1	Improving	98	Steady
16	2.1	Deteriorating	91	Steady
17	3.3	Improving	95	Steady
18	0.8	Improving	98	Steady

The national mean value of Condition Index for all territorial local authority sealed roads networks in 2004/05 was 3.1. The corresponding mean value for Smooth Travel Exposure was 89%. Thus, the six authorities shown as having deteriorating network condition or smoothness over the past five years have index values better than the national mean for local authority roading. They are not necessarily cause for concern. Other factors that must be considered when assessing network condition and trends include the rate of deterioration, and councils' forward maintenance plans.

Authority 3 is one that has been going through a period of relatively high expansion of its built-up area. Authority 3 representatives commented that the costs incurred in preparing and in consulting with the public on formal plans and on proposed projects of any size are increasing rapidly, which has had a marked effect on the trend of increasing professional services costs. Other councils' representatives commented similarly.

A representative of authority 6 said that in 2000/01 his council did not claim the full subsidisable cost of professional services, thus making the five-year trend appear higher than it actually was. He commented that it was his Council's intention to stop claiming under this work category because the cost of Council's administration was too high.

Authority 12 had suffered a loss of professional services staff in 2004/05, resulting in the Council having to employ consultants where normally it would use its business unit staff. This caused a sharp increase in costs in that year.

I was told by council representatives that factors affecting the relative increases in professional services costs over the past five years include:

- A number of authorities have had a cyclic increase in the extent of Resealing and Area-wide Pavement Treatment;
- RAMM and Deighton Total Infrastructure Management System (dTIMS) surveys and operations costs have increased significantly;
- Formal asset management and related planning has been creating a larger and increasing workload ; and
- Consultants' charges per hour for labour are appreciably higher than those for council business units. I was also told that the rate of inflation for consultants' labour costs is higher than for councils' own staff costs, 5% per annum as opposed to 3% being cited.

Table 4: Costs Changes for Authorities in the Sample

Authority	Total Cost of Maintenance, Output 1: 2004/05 (\$000)	Maintenance Cost Five-Year Trend (%)	Professional Services Cost 2004/05 (\$000)	Prof. Services Cost Five-Year Trend (%)
1	14223.7	+33	1350.1	+46
2	153231.1	+16	2254.9	+14
3	8705.6	+34	1349.2	+104
4	2257.6	+18	365.0	+40
5	6804.4	+80	345.6	+55
6	2182.7	+21	122.0	+71
7	3174.5	+33	459.9	+44
8	360.4	+34	16.4	-8
9	7688.2	+29	486.0	+2
10	9423.5	+14	1394.2	+37
11	8021.3	+18	55.0	+25
12	6554.1	+50	991.2	+115
13	4571.5	+52	434.0	+26
14	3160.2	+12	294.6	+3
15	5056.7	+38	366.4	+4
16	3352.3	+35	321.1	+28
17	3919.0	+47	372.3	+74
18	1510.7	+22	92.3	+45

5.2 Assessment of Road Condition as an Outcome of Management

Graphs 4 and 5 below illustrate the relationships between road condition as measured by Condition Index in relation to maintenance costs per kilometre and vehicle kilometres travelled. Table 5 contains the values from which these graphs were prepared.

The mean value of Condition Index as calculated for all territorial local authorities' sealed networks, 3.1, is plotted as a horizontal green line on each graph.

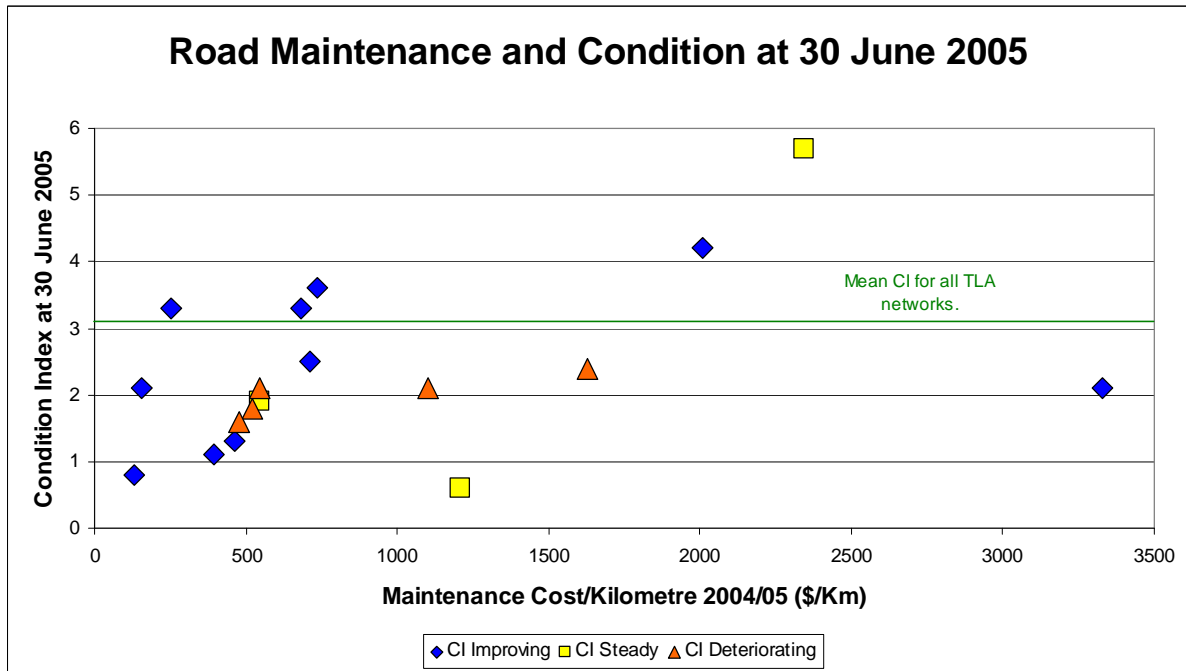
Five authorities from the sample are shown as having a deterioration in network condition as measured. In all cases their networks are in better condition than the national mean value. I believe this trend can be an acceptable outcome in their cases.

Those councils having networks in the best and improving condition vary greatly in nature. Four have excellent underlying geology for road-building and low traffic volumes. The other has a wide variety of ground conditions but has benefited from a sustained programme of upgrading and sealing pavements from some 20-25 years ago.

The four highest cost authorities are primarily urban. The three highest of these also have the highest traffic flows of the sample.

The three lowest cost authorities and five lowest traffic volume authorities are South Island ones, primarily rural in nature.

Graph 4: Road Condition in Relation to Maintenance Cost



Graph 5: Road Condition in Relation to Network Use

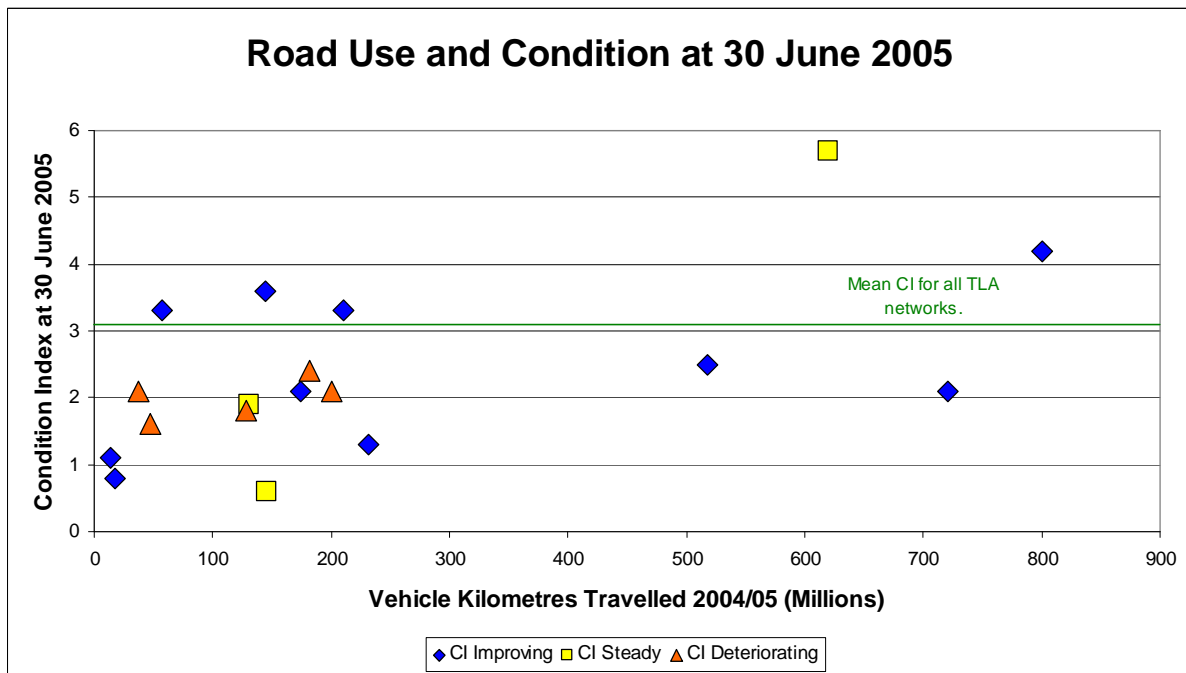


Table 5: Road Condition in Relation to Maintenance Cost

Authorities Surveyed	Condition Index (CI)	Condition Index (CI) Trend	Maintenance Cost per Kilometre (\$/Km)	Vehicle Kilometres Travelled p.a. (VKT millions)
1	4.2	Improving	2009	800
2	2.1	Improving	3327	721
3	5.7	Steady	2344	617
4	2.4	Deteriorating	1629	182
5	2.5	Improving	710	518
6	1.8	Deteriorating	524	128
7	0.6	Steady	1210	146
8	1.1	Improving	396	14
9	1.3	Improving	462	231
10	2.1	Deteriorating	1104	200
11	3.6	Improving	737	144
12	3.3	Improving	680	211
13	1.9	Steady	545	131
14	1.6	Deteriorating	477	200
15	2.1	Improving	155	174
16	2.1	Deteriorating	546	37
17	3.3	Improving	255	58
18	0.8	Improving	131	17

5.3 Councils' Policies

The professional services procurement policies of Councils included in the sample are summarized in Graph 6 and Table 6.

Graph 6: Summary of Councils' Policies

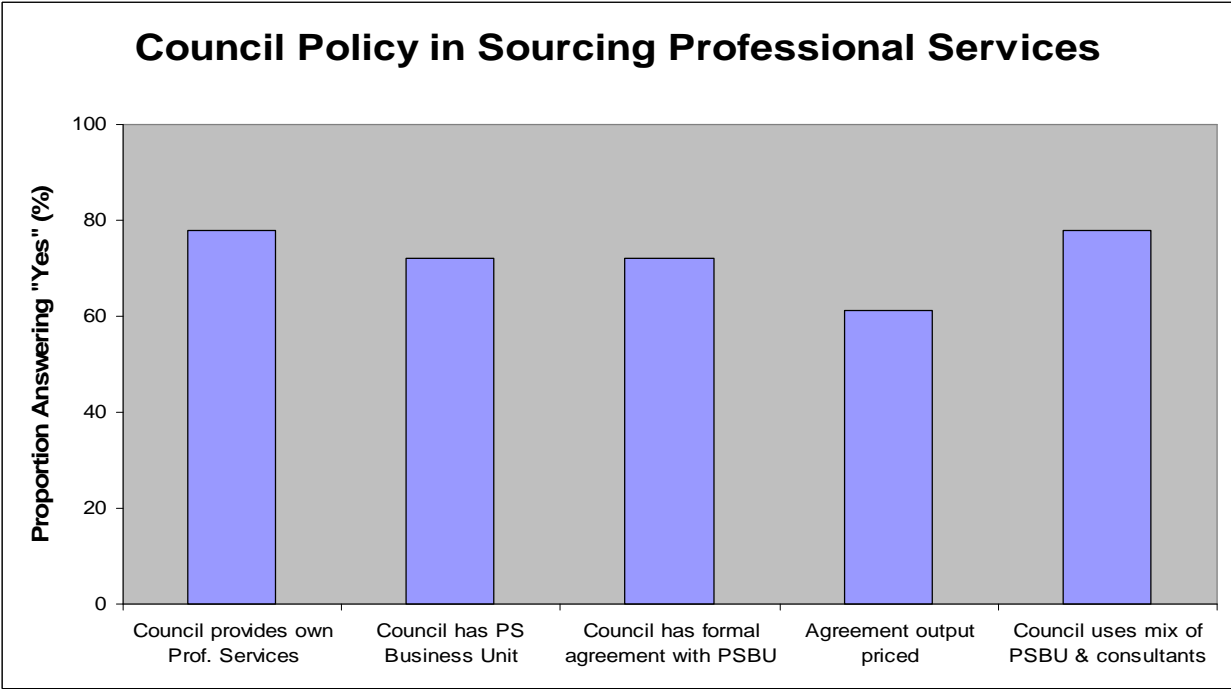


Table 6: Summary of Councils' Policies

Council:	Number thus	Proportion of Sample (%)
Provides own professional services:	14	78
Has professional services business unit:	13	72
Has formal Agreement with Professional Services Business Unit (PSBU):	13	72
Has their Agreement output priced:	11	61
Uses a mix of PSBU and consultants:	14	78
Totals:	18	100

Most councils used a mix of in-house staff and consultants to provide professional services inputs. Perceived advantages of in-house sources as described by roading asset managers lay in council staff:

- Being quicker in response to asset managers needs and timetables;
- Providing asset managers with a "smart buyer" capability;
 - [Note: A "smart buyer" is defined as one that:
 - Assesses competition for the work being tendered;
 - Defines the outcomes sought on council's behalf;
 - Defines the performance required of suppliers; and
 - Monitors the outputs received.]
- Bringing local knowledge and are easily accessible in emergencies;

- Relating better to ratepayers;
- Relating better to council objectives; and
- Being better able to take account of the street environment in designing and supervising work.

In addition,

- The total cost of providing professional services are lower with in-house staff than when consultants are used (i.e. provide greater value for money.);
- The council may wish to retain its in-house capability in a small rural community; and
- Councils are better able to hold a critical mass of staff resource to service the needs of managers of the councils' other assets.

Disadvantages quoted for business units were:

- "Problem in common with other employers, of getting capable people."
- "Council decided accounting costs are not insignificant and that it will not continue to claim the costs of in-house professional services."
- "Performance of business unit sometimes less than sought, either outputs or costs. Responsiveness can be slow. Relatively narrow skill base."

Consultants were stated generally to be used as a supplement to in-house resources, to provide specialist expertise, and to enable the smoothing of fluctuations in business unit design workloads. There is a trend for councils to place greater reliance on their in-house resources for routine design and supervision work.

Three councils that have formerly relied totally on consultants have decided to establish business units in the near future. One other council is likely to make more use of consultants in future.

One of four councils that have contracted out the supply of all professional services has a performance specified maintenance contract. Under this contract, all services normally supplied by a business unit or consultant are provided by the maintenance contractor.

Specific comments from councils that have been using consultants as their main provider of professional services are:

- "Competitive rates provided by consultant, well established network team familiar with Council's policies and practices in managing the network."
- "Splits asset management and professional services providers. Staffing risks reduced and succession planning improved. Professional services provider strengthened and similarly improved."
- "Consultant has supplied a high standard of professional services. Network is in good condition, maintenance cost per kilometre are competitive, crash history below average for

Group C. Planned change is philosophic, rather than from dissatisfaction. Cost savings sought.”

- “All consultants are based out of town and unlikely to be able to get in during a civil defence emergency.”

Changes proposed by councils in the sample were:

Table 7: Proposed Administrative Changes

Proposed Change:	Reasons Stated:
Set up a professional services business unit in 2006/07.	Overhead costs not being claimed.
Bring some unsubsidised tasks back in-house from consultants.	Extent of “dayworks” unexpectedly high and not easily defined in advance.
Increase relevant staff number from one roading asset manager only, with further (unspecified) changes to follow in 2006/07.	Philosophic change. Cost savings sought.
Possible contracting out of some RAMM functions.	To gain more security of supply: council has one RAMM engineer who works in isolation.
Continue to review outsourcing and to consider the benefits of any potential changes.	Seek financial benefits; risk management considerations.
Considering restructuring asset manager and design services roles.	To improve and optimize service delivery.

Other comments made by council representatives in this context were:

- Maintaining good relationships with ratepayers is important to Councils;
- Asset management planning requirements are placing greater demands on professional services;
- Costs of statutory public consultations are growing rapidly;
- Council would like updated guidance on which professional services costs should be treated separately prior to the start of each financial year so that ledger codings can be modified accordingly;
- 2¼% is not sufficient to cover asset management and consultation costs as required by various statutes. There is some confusion on what costs are eligible under this allocation *; and
- Serious concerns if Land Transport NZ proposes to alter charging criteria unless reimbursed for actual costs.

*Note: The 2¼% level established for Work Category 95, Administration, is stated in the Programme & Funding Manual as being to provide “financial assistance to territorial authorities which support a commitment to [good management of the Land Transport Programme].” This is expected by Land Transport NZ to be a contribution towards

those costs incurred in assembling LTPs that are not covered under work Category 17, Professional Services.

5.4 Councils' Practice

A set of questions were designed to try and assess the fall of costs by work activity, (e.g. management of network maintenance, traffic signs, traffic signals, & etc). It quickly became clear that ledgers accounts were structured to meet the formal accounting requirements of Land Transport NZ, after which council managers usually sought to keep codings as simple as possible. Thus no complete picture can be established of the pattern of use of professional services providers' resources. The following graphs have been prepared using the information available.

The questions and responses referred to in Graphs 7-9 ask about professional services activities as set out in Table 8, below. Multiple answers have been given to the questions as most councils have used a mix of suppliers of professional services. Columns "Supplier of Professional Services" and "Cost allocated to" record the number of "Yes" responses received to each question, thus recording how authorities included in our sample source professional services and claim financial assistance on those services. Work Category 17 is "Professional Services" and Work Category 95 is "Administration" as defined in the Land Transport NZ's Programme and Funding Manual.

Table 8: Professional Services Activities

Question		Supplier of Professional Services			Total cost of Prof. Services			Cost Allocated to:	
		PSBU (N ^o)	Other Internal (N ^o)	Const-ants (N ^o)	PSBU (\$000)	Other Internal (\$000)	Consul-tants (\$000)	W/C 17 (N ^o)	W/C 95 (N ^o)
24	Management of network maintenance;	13	4	8	1579	57	1164	13	1
25	Management of traffic signs;	13	2	4	319	0	160	13	1
26	Management of traffic signals;	4	1	3	263	50	102	6	0
27	Management of temporary traffic control at roadworks;	11	2	5	10	2	112	10	4
28	Management of crash analysis system;	8	5	3	19	31	32	0	0
29	Management of renewals (Reseals) contracts;	13	4	8	1241	127	380	14	5

Question		Supplier of Professional Services			Total cost of Prof. Services			Cost Allocated to:	
		PSBU (N ^o .)	Other Internal (N ^o .)	Const- tants (N ^o .)	PSBU (\$000)	Other Internal (\$000)	Consul- tants (\$000)	W/C 17 (N ^o .)	W/C 95 (N ^o .)
30	Management of rehabilitation (Area-wide Pavement Treatment) contracts;	12	3	7	526	148	286	11	2
31	Management of preventive maintenance contracts;	9	1	7	65	0	22	9	1
32	Management of construction contracts;	10	5	9	1022	250	915	9	4
33	Preparing project feasibility reports for capital projects;	9	4	12	434	0	290	11	3
34	Investigating, preparing and evaluating physical works tenders;	12	5	12	175	10	359	13	4
35	Development of asset management plans, activity management plans, etc.;	6	8	18	75	131	218	8	5
36	Implementation of asset management plans, activity management plans, etc.;	9	10	3	20	115	20	7	7
37	Development of safety management systems;	8	7	14	15	39	58	5	4

Question		Supplier of Professional Services			Total cost of Prof. Services			Cost Allocated to:	
		PSBU (N ^o)	Other Internal (N ^o)	Consl- tants (N ^o)	PSBU (\$000)	Other Internal (\$000)	Consul- tants (\$000)	W/C 17 (N ^o)	W/C 95 (N ^o)
38	Implementation of safety management systems;	10	8	4	7	62	32	4	5
39	Development of environmental management systems;	1	5	4	10	50	60	1	3
40	Implementation of environmental management systems;	1	5	3	5	35	30	1	4
41	Management and reporting of RAMM database and pavement deterioration model, systems and condition and smoothness surveys;	9	4	15	191	18	884	14	4
42	Performance of condition and smoothness surveys;	6	1	15	1	0	331	13	3
43	Performance of SCRIM surveys;	2	0	6	5	0	20	5	0
44	Management of bridges databases;	10	7	11	76	11	62	11	4
45	Management of streetlighting databases;	10	10	8	87	0	55	8	1
46	Management of other databases;	7	5	6	20	0	45	7	1

Question		Supplier of Professional Services			Total cost of Prof. Services			Cost Allocated to:	
		PSBU (N ^o)	Other Internal (N ^o)	Const- tants (N ^o)	PSBU (\$000)	Other Internal (\$000)	Consul- tants (\$000)	W/C 17 (N ^o)	W/C 95 (N ^o)
47	Cyclic condition assessments of bridges and reporting on these;	8	3	14	17	0	141	11	2
48	Cyclic condition assessments of streetlighting and reporting on these;	9	3	9	5	3	59	10	3
49	Cyclic condition assessments of other assets and reporting on these;	8	5	8	0	2	65	8	3
50	Transportation planning, traffic management and strategy studies;	3	7	8	72	674	633	3	1
51	Undertake traffic count surveys;	9	2	10	54	434	237	12	2
52	Legalisation of existing road reserves;	7	8	10	14	82	22	7	4
53	Provide management consultancy services;	6	8	8	6	107	76	6	2
54	Provide property management services;	1	8	1	0	155	50	1	2
55	Active management of Council's roading assets;	10	10	3	75	338	33	8	5
56	Other tasks.	5	3	10	0	8	52	5	2

Totals (\$000):	6153	2639	6909	15701
Proportion of total:	39%	17%	44%	100%

Where possible, road asset managers supplied available information or estimates from which Graphs 7-9 were prepared. Values are stated and the several questions summarised by their listed number in Table 8, above. Multiple answers have been given as most councils have used a mix of suppliers of professional services.

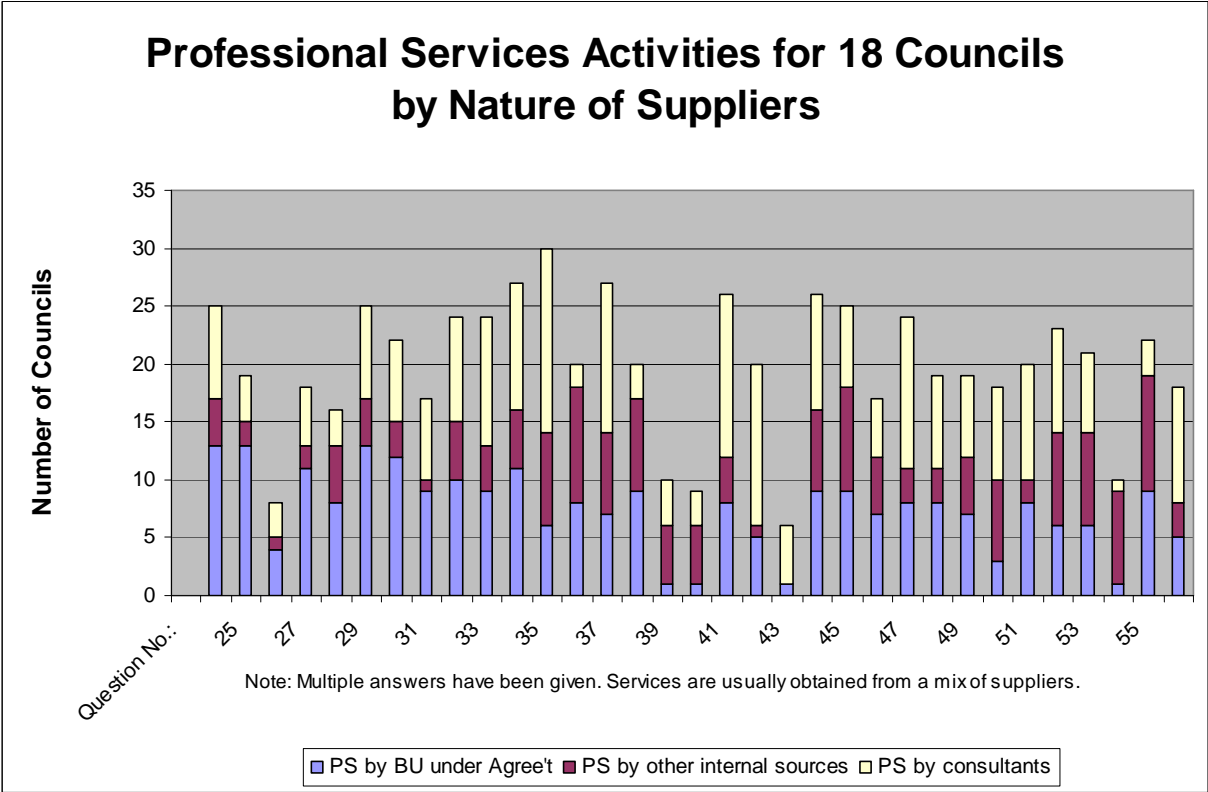
Graph 8 has the answer to question 24, "Management of network maintenance;" inflated where, because of lack of information, the costs of services asked about in subsequent questions are not able to be separately identified.

Based records of costs held by Land Transport NZ, the distribution between the different types of suppliers is as indicated in Table 9 below. They differ from the totals shown at the foot of Table 8 because that table contains estimated and incomplete values.

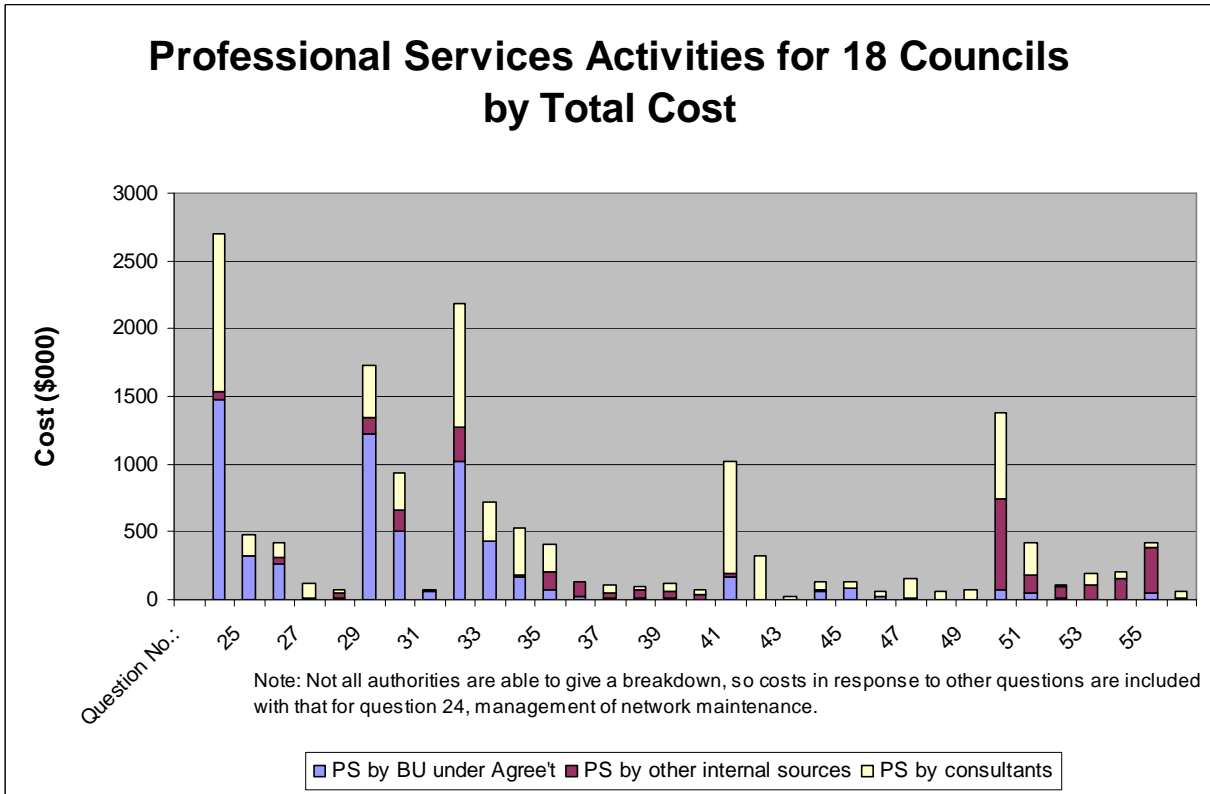
Table 9: Cost of Professional Services by Source

Type of Supplier	Est. Cost (\$000)	%
In-house business unit	6453	40
Other internal sources	2639	17
Consultants	6909	43
Totals:	16,001	100

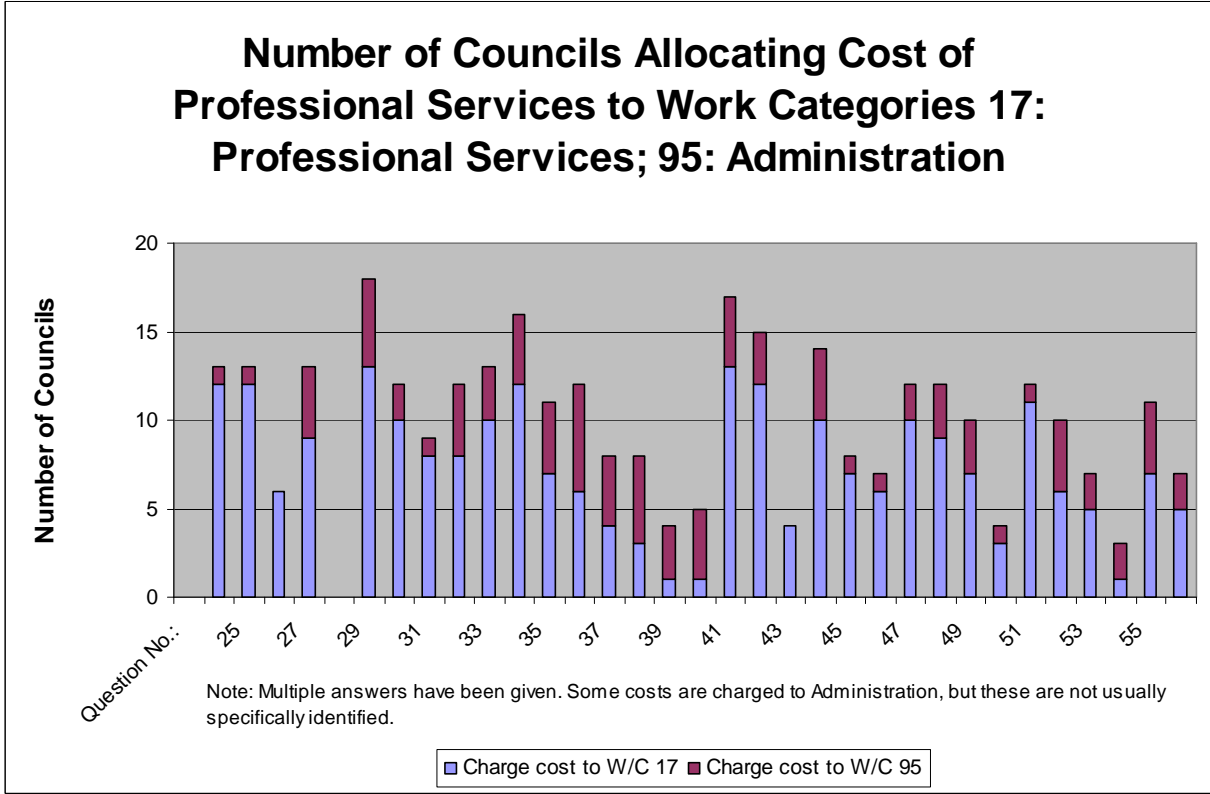
Graph 7: Source of Professional Services Activities



Graph 8: Cost by Source of Professional Services Activities



Graph 9: Charging of Professional Services Activities



The generic activities in maintenance;

- Structural maintenance;
- Corridor maintenance;
- Safety works; and
- Network management;

were assessed for the seven authorities that could supply breakdowns by Land Transport NZ maintenance work categories. These are set out in Tables 10 and 11, and are plotted in Graphs 10 and 11 below. Authorities 1, 3 and 8 are urban. Those authorities providing this information recorded numerically and proportionately small inputs into safety works. Other, urban authorities commented that works such as Minor Safety Works tended to have disproportionately high professional services costs because of the extent to which ratepayers expect consultation to proceed. This aspect of costs has not shown up in the limited sample analysed below.

Table 10: Professional Services Costs by Nature of Work

Authority	Network Length (Km)	Structural Maint'nce (\$000)	Corridor Maint'nce (\$000)	Safety Works (\$000)	Network Man'ment (\$000)	Totals (\$000)
1	672.1	666.0	245.0	15.0	424.0	1350.0
3	575.6	409.6	308.2	54.2	19.1	791.1
8	41.4	2.4	5.2	0	6.0	13.5
9	1051.1	320.3	65.9	8.6	91.2	485.9
13	796.4	111.2	9.6	0	29.6	150.5
14	617.3	202.5	24.3	22.6	60.0	309.3
15	2359.0	271.2	66.0	7.3	22.0	366.4

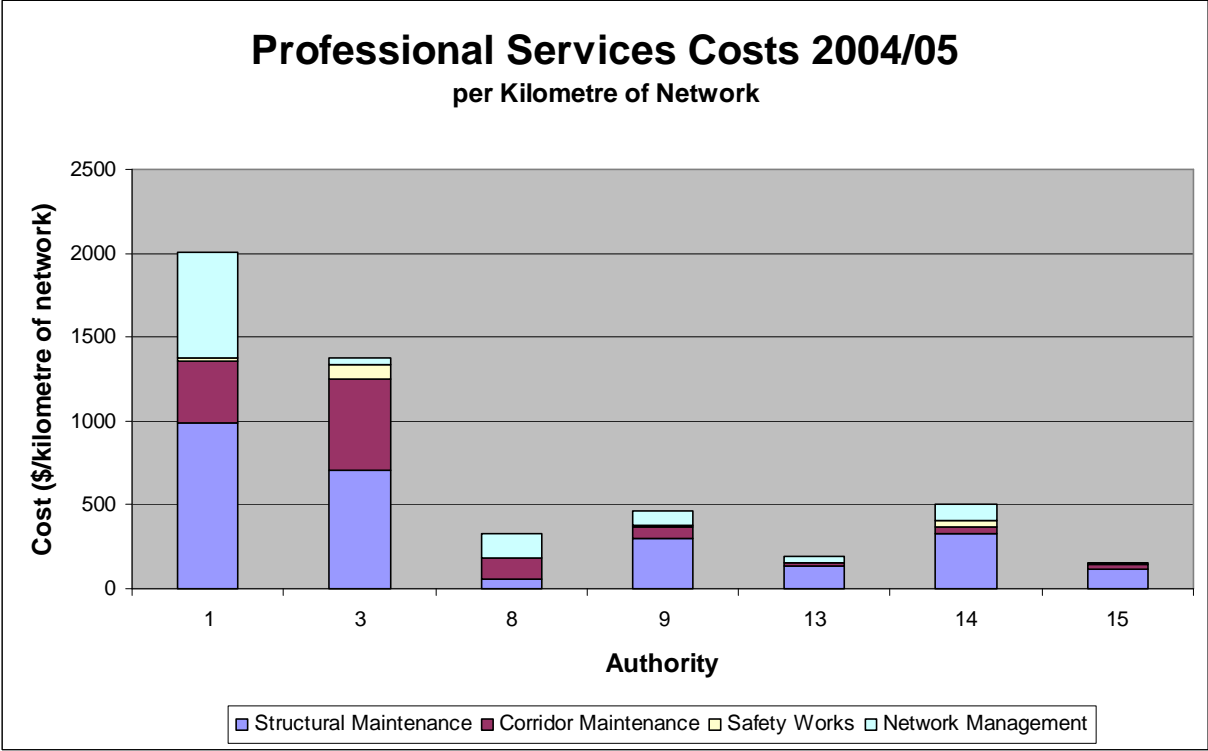
Table 11: Professional Services Costs/Kilometre by Nature of Work

Authority	Structural Maint'nce (\$/Km)	Corridor Maint'nce (\$/Km)	Safety Works (\$/Km)	Network Man'ment (\$/Km)	Totals (\$/Km)
1	991	365	22	631	2009
3	712	535	94	33	1374
8	58	125	0	145	328
9	305	63	8	87	462
13	140	12	0	37	189
14	328	39	37	97	501
15	115	28	3	9	155

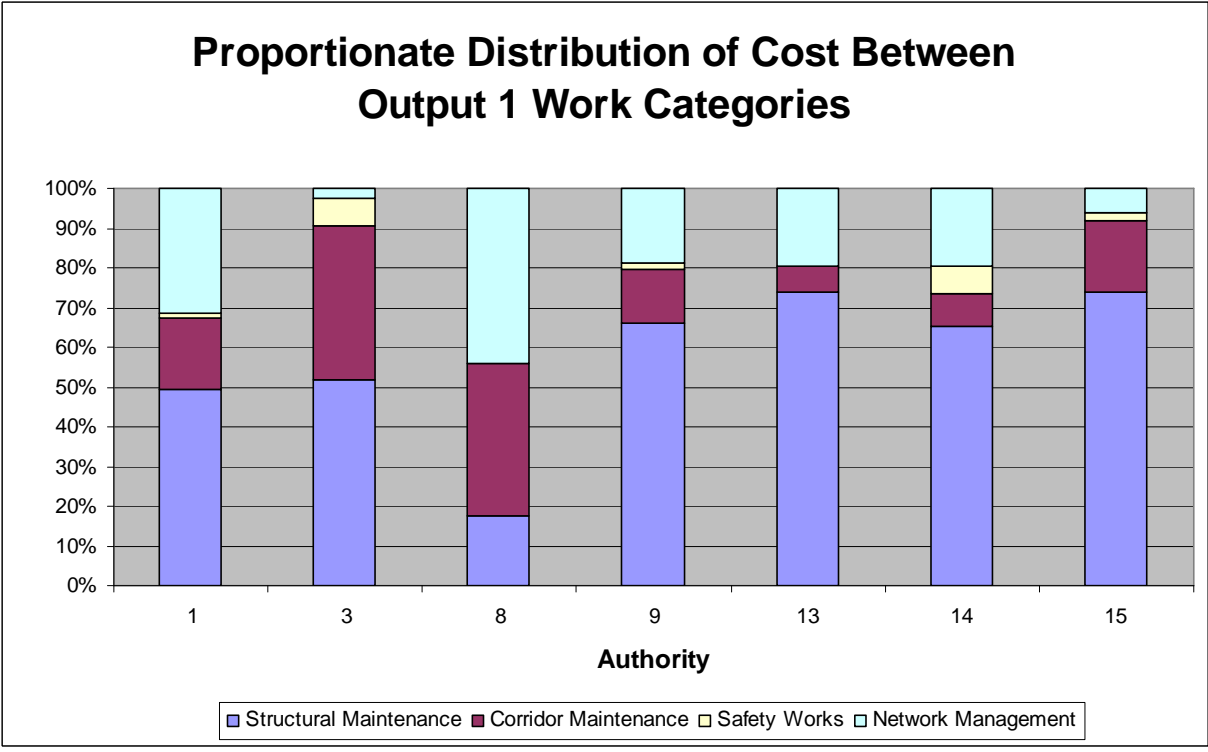
Authorities 3 and 8 show a high proportionate expenditure on corridor maintenance. Authority 8 is a small one that is committed to renewal of a life-expired street lighting system, a disproportionately high cost for it.

The other authorities are primarily rural, with townships ranging up to regional centre in size. Authority 14 has a higher proportion of safety-related expenditure. Authority 15 has a number of small rural townships in an extensive rural area, hence the lesser emphasis on safety engineering.

Graph 10: Professional Services Costs by Nature of Work



Graph 11: Proportionate Professional Services Costs by Nature of Work



5.5 Outcomes of Delivery of Professional Services

Of the 18 authorities in the sample, eight declared themselves highly, very, or well satisfied with the balance they have between in-house and external suppliers of professional services. A further seven declared themselves satisfied. The balance, three, are planning changes.

Two are setting up their own in-house business units and another is considering bringing unsubsidised tasks back in-house. Until now, they have relied on consultants.

The third planning changes expects to contract out the updating of RAMM inventories, programming and reporting, to give better security of supply. A council representative commented that it has one engineer working on RAMM, in isolation from his peers.

Councils' representatives' reasons for satisfaction or dissatisfaction with in-house business units and with consultants as suppliers are stated in section 5.3 above.

Using a similar approach to that adopted in section 5.2 to determine relationships between sealed road networks condition and professional services costs, Graph 12 was prepared:

Graph 12: Road Condition in Relation to Professional Services Costs

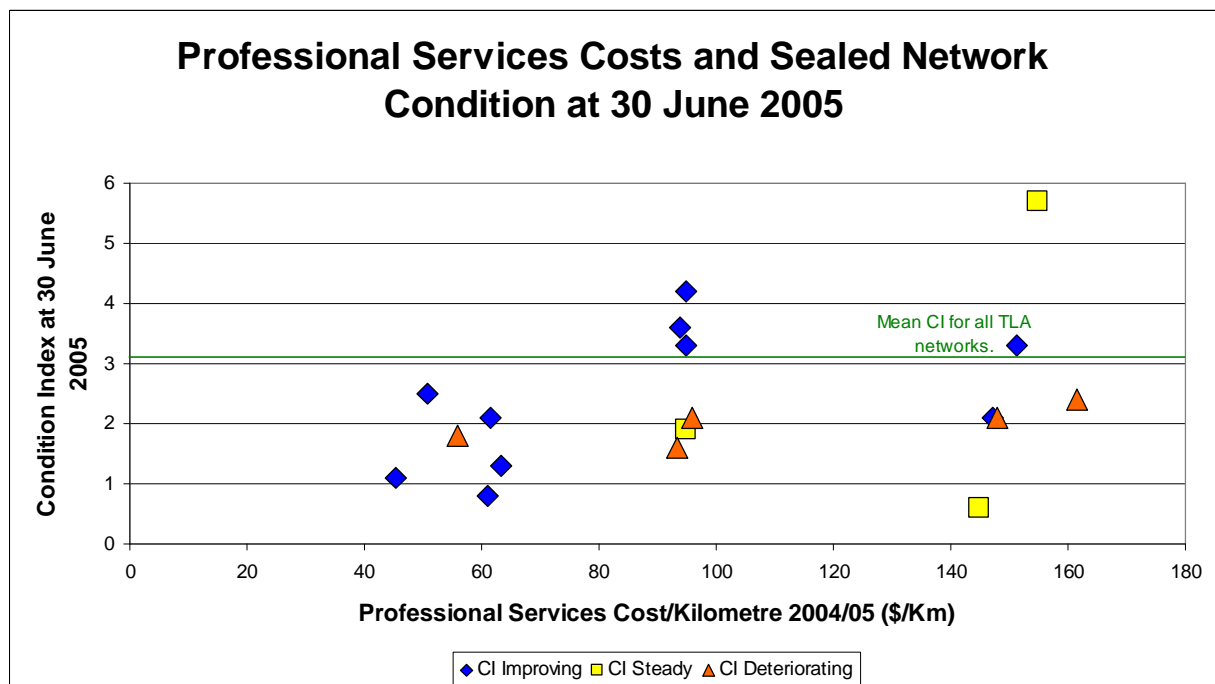


Table 12: Road Condition in Relation to Professional Services Costs

Authority	Condition (CI) Index	Condition Index (CI) Trend	Professional Services Cost per Kilometre (\$/Km)
1	4.2	Improving	95
2	2.1	Improving	147
3	5.7	Steady	155
4	2.4	Deteriorating	162
5	2.5	Improving	51
6	1.8	Deteriorating	56
7	0.6	Steady	145
8	1.1	Improving	45
9	1.3	Improving	63
10	2.1	Deteriorating	148
11	3.6	Improving	94
12	3.3	Improving	151
13	1.9	Steady	95
14	1.6	Deteriorating	93
15	2.1	Improving	62
16	2.1	Deteriorating	96
17	3.3	Improving	95
18	0.8	Improving	61

The relationships found between road condition, costs, and other factors in Graph 4 are not apparent in Graph 12. Some of the apparently low professional services cost authorities in Graph 12 do not claim the full extent of their eligible costs. Some of the high professional services costs authorities appear to be more reflecting specific circumstances, e.g. losses of in-house staff, or peaks in long-term planning costs. High maintenance costs are not always reflected in high professional services costs, and vice versa.

Table 13: Ranking of Authorities (Highest Value to Lowest)

Traffic Density (VKT/Km.)	Maintenance Cost (\$/Km)	Professional Services Cost (\$/Km)	Professional Services Cost/Maint'ce Cost (%)	Condition Index and Trend
1	2	2	4	7
2	1	10	3	18
3	3	1	12	8
4	5	3	10	9
5	4	12	2	14
6	6	9	7	6
7	8	7	16	13
8	7	13	17	10
9	11	17	13	16
10	10	15	1	2
11	9	4	14	15
12	13	5	15	4
13	16	16	9	5
14	14	14	18	17
15	12	6	6	12
16	17	18	5	11
17	18	11	8	1
18	15	8	11	3

Notes:

1. Red type in the table indicates a group of authorities having a high traffic density.
2. Black type similarly indicates the authority is one selected for an apparently middle range traffic density.
3. Blue type indicates the authority is one selected for an apparently low traffic density.
4. Highest values in the columns are at the top of the table, reducing down the page.
5. Condition Index values therefore go from "worst" to "best" down the page.
6. Condition Index values are ranked first by numerical value, then by trend, deteriorating, steady, or improving, in succession.

This comparison in Table 13 began by selecting equal numbers of authorities from "high", "middle", and "low" ratios of traffic density. Maintenance costs followed the same pattern with variations but it is clear that professional services costs and road condition do not relate well to either of the first two parameters.

When trends in the outcomes Condition Index and Smooth Travel Exposure were similarly sorted by:

- Maintenance cost per kilometre;
- Professional services cost per kilometre;
- Ratio of professional services costs to maintenance cost;
- Vehicle kilometres travelled;
- VKT per kilometre of network;
- Maintenance cost per VKT;
- Professional services cost per kilometre;
- Population;
- Maintenance cost per person; and
- Professional services cost per person;

no clear patterns could be discerned.

When asked about factors which might affect councils' need for and cost of professional services inputs, eleven authorities cited:

Table 14: Factors Influencing Increasing Professional Services Costs

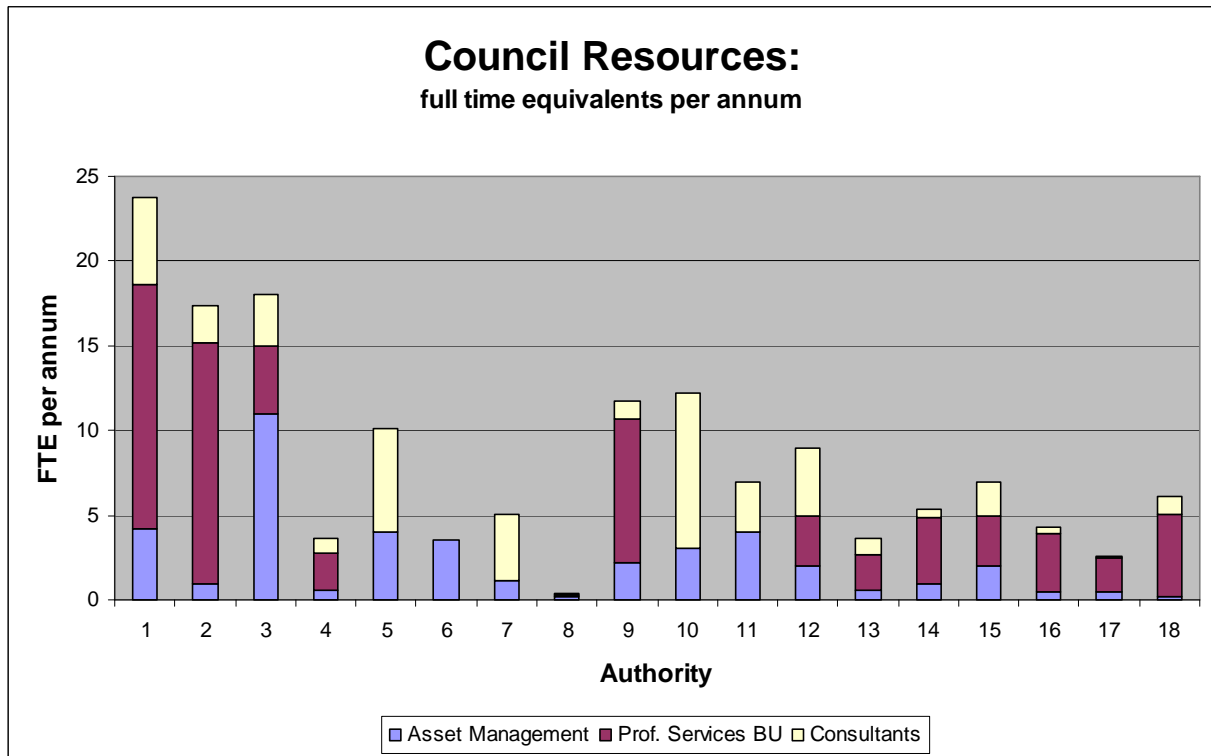
Factors	No. of Authorities Citing Factor:
High rate of population growth	4
High rate of subdivision or industrial growth	3
High rainfall	4
Growth in cost of salaries and overheads	2
Costs of statutory formal planning	2
Costs of one-off studies	1
Increased cost of RAMM surveys, validation & management, commencing adoption of dTIMS	1
Thin and weak pavements/increasing Resealing & AWPT programme	2
Peat subgrades	2
Effects of hot, dry summers on unsealed pavements	1
High proportion of older drivers in local population	1
Associated costs of maintaining footpaths & street furniture	1

5.6 Council Resources

Councils were asked to provide information on staffing resources expressed in full-time equivalents and broken down by task and role they work in, asset management, in-house business unit, or consultants. Where no direct information was available, "best estimate" values were asked for. These last were all in the "consultants" role. Five authorities did not have an in-house business

unit. One of these employed its own staff to provide professional services, the others did not. Graph 13 summarises the responses received and Graph 14 relates them to network length. As with the other graphs in this report, councils are ranked in order of descending traffic density, vehicle kilometres travelled per annum divided by network length.

Graph 13: Council Resources for Roading Management



Graph 14: Council Resources for Roading Management

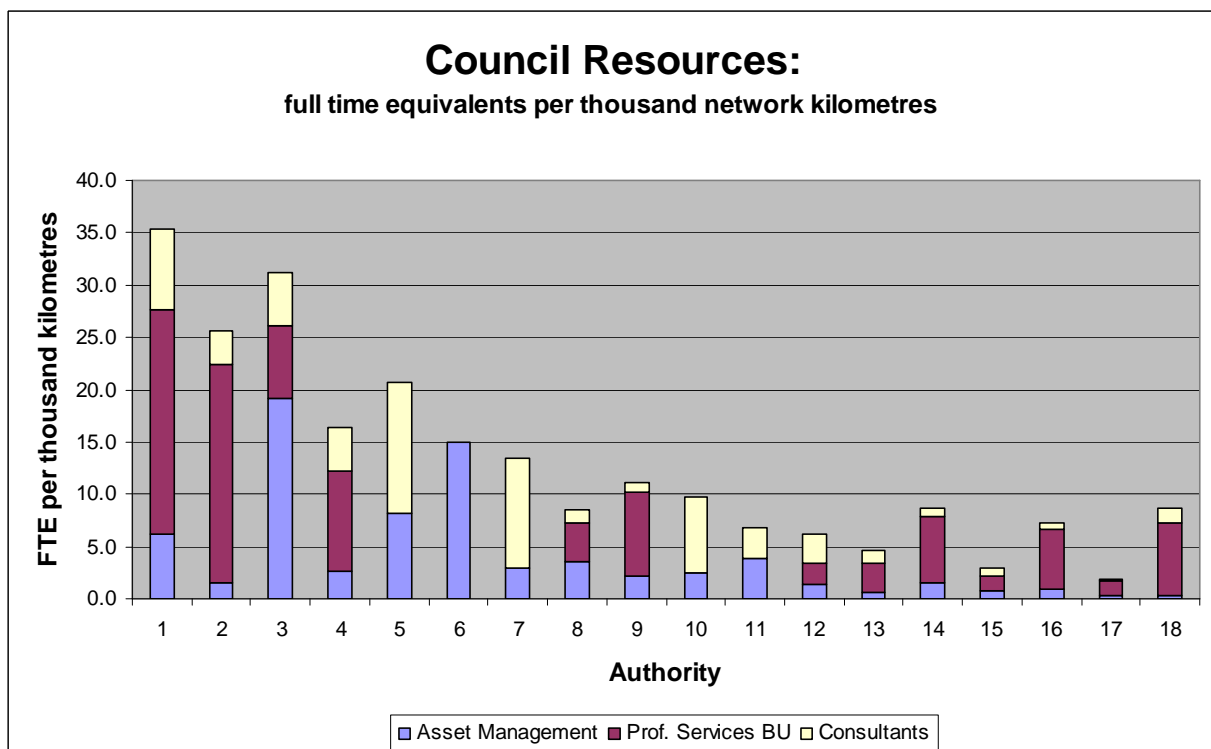


Table 15: Council Resources for Roading Management

Authority	Staffing: Full-time Equivalents			Staff per Thousand Network Kilometres			
	Asset Mgmt (N ^o)	PSBU (N ^o)	Consultants (N ^o)	Asset Mgmt (N ^o /KKm)	PSBU (N ^o /KKm)	Consultants (N ^o /KKm)	Totals (N ^o /KKm)
1	4.2	14.4	5.2	6.2	21.4	7.7	35.4
2	1.0	14.2	2.2	1.5	21.0	3.2	25.7
3	11.0	4.0	3.0	19.1	6.9	5.2	31.3
4	0.58	2.2	0.9	2.6	9.7	4.1	16.4
5	4.0	0	6.1	8.2	0	12.5	20.7
6	3.5	0	0	15.0	0	0	15.0
7	1.1	0	4	2.9	0	10.5	13.4
8	0.2	0.2	0.1	3.6	3.6	1.2	8.5
9	2.2	8.5	1.0	2.1	8.1	1.0	11.1
10	3.1	0	9.1	2.5	0	7.2	9.7
11	4.0	0	3.0	3.9	0	2.9	6.8
12	2.0	3.0	4.0	1.4	2.1	2.7	6.2
13	0.6	2.1	1.0	0.7	2.6	1.3	4.6
14	1.0	3.8	0.5	1.6	6.2	0.8	8.7
15	2.0	3.0	2.0	0.8	1.3	0.8	3.0
16	0.5	3.4	0.4	0.9	5.8	0.7	7.3
17	0.5	2.0	0.1	0.3	1.4	0.1	1.8
18	0.2	4.9	1.0	0.3	7.0	1.4	8.7

Note: Graphs 13 and 14, and Table 15 have been amended in light of corrected data received at the comment stage.

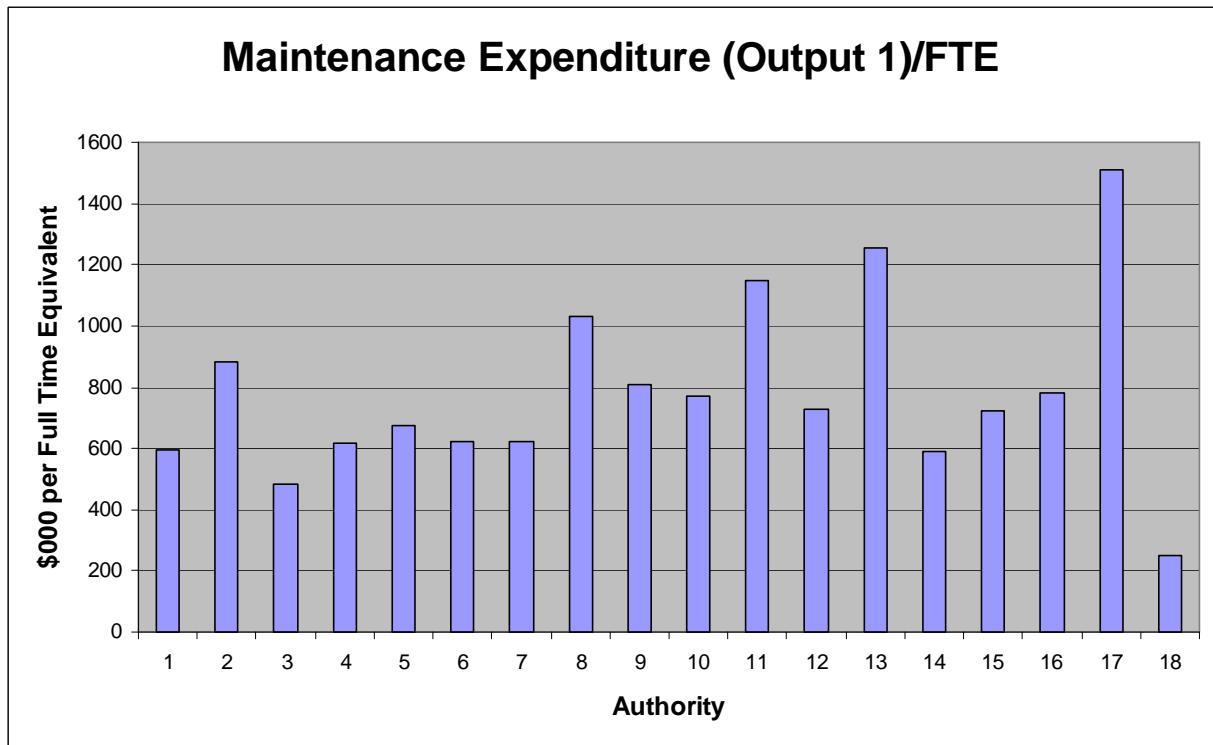
Consideration of Graph 14 suggests that authorities 15 and 17 may be under-resourced for professional services. Staff resources are related to expenditure in Graphs 15-17.

Authority 10 employs in its asset management section an engineer dedicated to managing road safety issues and to manage the council's safety management system. A further engineer is employed primarily to manage RAMM and other management systems.

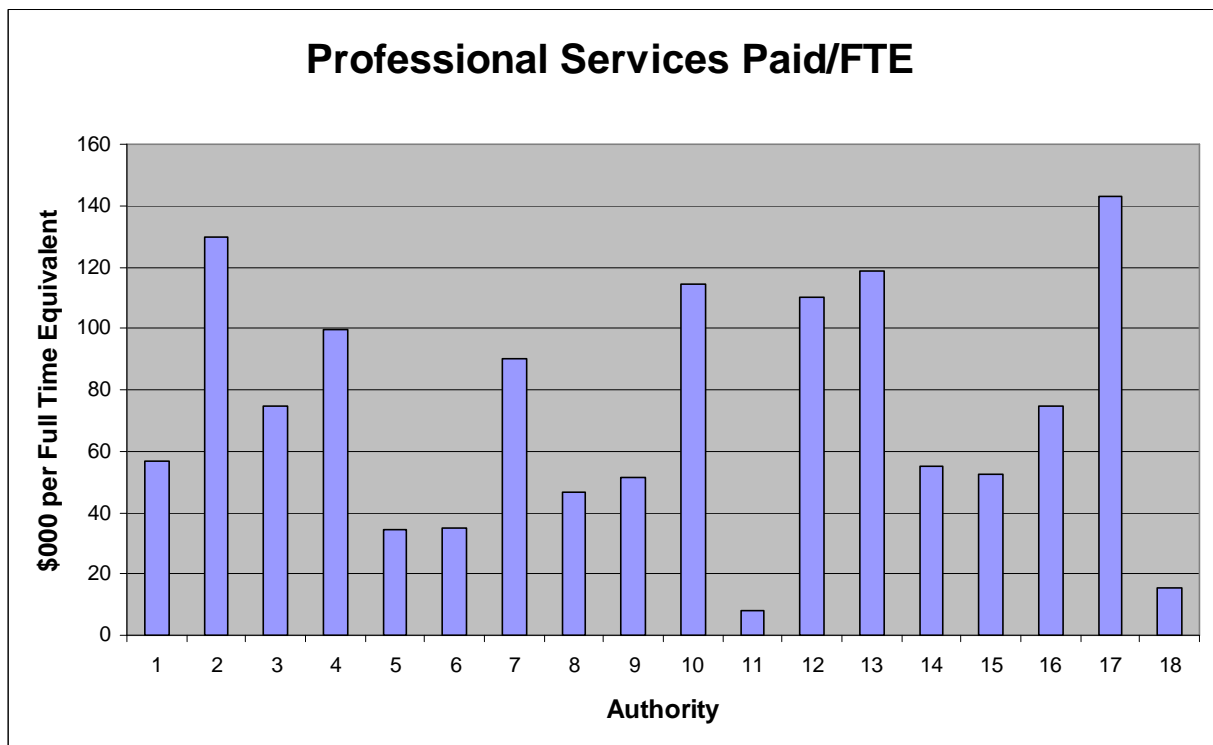
Graphs 15 and 17 show authority 15 to have normal levels of expenditure per person, which suggests that this extensive and mostly lightly used network built mainly on excellent subgrades is not technically demanding. I suggest that the critical load comes on asset managers, rather than on their suppliers of expertise and that staffing levels be reviewed.

Similarly, authority 17 appears from Graph 14 to be under-resourced, this being confirmed by the notably high levels of expenditure per person shown in Graphs 15 and 17.

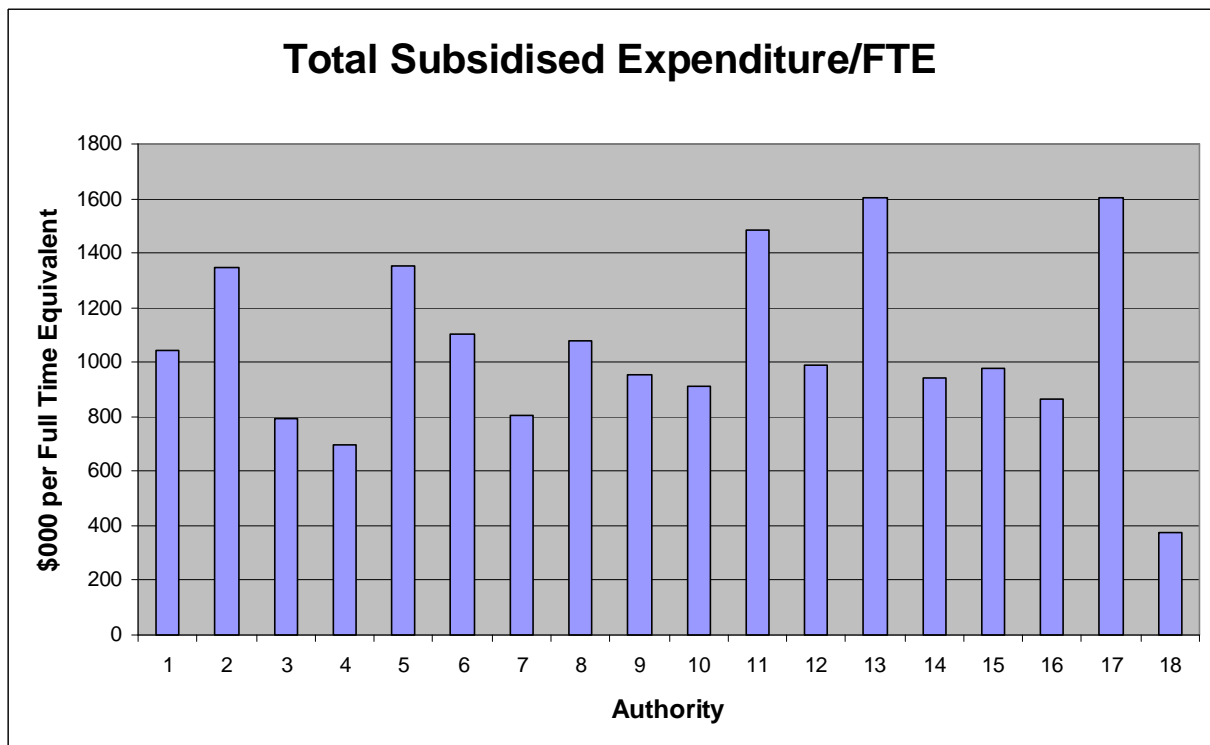
Graph 15: Maintenance Expenditure in Relation to Council Resources



Graph 16: Professional Services Costs in Relation to Council Resources



Graph 17: Total Subsidised Expenditure in Relation to Council Resources



Graph 13 shows a trend for the larger urban authorities to have higher staffing establishments, reflecting the higher demands on the network and on councils' systems.

Graph 14 shows a similar trend in resourcing levels for professional services in relation to network length as that shown in Graph 1, Traffic Density.

Graph 15 shows a trend of cost per full-time equivalent increasing as traffic density decreases. This reflects the trend of councils with less busy networks having smaller staff establishments and staffing levels relative to network length. High traffic density networks costs are dominated by high use; low traffic density networks costs are dominated by fixed costs of routine maintenance and management. Authority 18 shows as an anomaly in all three Graphs 15-17 because of its low cost structure and traffic volumes(see additional comments at the end of this section of the report).

Those trends are much weaker in Graph 16, because councils' expenditure on professional services have much greater variations in funding levels and according to how they source the services they require. Authority 11 shows up as another anomaly here because all its maintenance related professional services are supplied by the maintenance contractor under a performance-based contract.

When all councils' Land Transport Programme costs are included and plotted similarly (Graph 17), it is clear that expenditure per person is very similar across the full range of the sample. There appear to be three bands of expenditure per person:

- a “high” band at \$1.3-1.6 millions per person;
- a “middle” band at \$0.7-1.1 millions per person; and
- a “low” band below \$0.6 millions per person.

Those authorities with significantly higher maintenance or total subsidized expenditure per person are:

Authority 2: This is a major urban authority having many demands for traffic management in an extensive network.

Authority 5: This is another predominantly urban authority. Formerly the council has relied on consultants for its professional services, only having two asset management staff. It plans to establish a business unit in 2006/07.

Authority 11: This is another authority that has relied on consultants for its professional services needs, except that those related to maintenance operations are provided by the contractor under his performance-based contract. Council has four asset management staff. A sum is negotiated with Land Transport NZ regional representatives annually as a part of Council’s Land Transport Programme to provide an allocation equivalent to professional services costs. The Council is satisfied with the arrangement and that it is gaining the benefits sought.

Authority 13: The Council is satisfied with its arrangement and the results being achieved. Council representatives notes that higher costs shown in Graph 17 (*Note: Reference corrected.*) result in part from a recent re-letting of its professional services contract and partly from a cyclic increase in network needs, Reseals, Area-wide Pavement Treatment, and Bridge Renewals, especially. It has its own business unit.

Authority 17: Council relies mainly on its own business unit, supplemented for peaks in workload with consultants. I consider this high value of expenditure per person reflects likely under-resourcing by comparison with peer authorities that shows as an outlier in each of Graphs 14-17.

The Council with notably low expenditure per person, Authority 18, has the lowest traffic density of all those included in the review. It has mostly excellent subgrades and materials available for roading in its District. These factors, in conjunction with Council’s management, lead to maintenance demands and costs being relatively low, as shown in Graph 15. Council does not have a major capital development programme, so the low maintenance input is a strong influence on Council’s position in Graph 17.

6 FINDINGS

6.1 Background Information

Few obvious patterns emerge from assessment of the background information. In general, the busier networks have higher costs per kilometre of network, both for maintenance and when construction projects are taken into account. There appears to be little systematic pattern in Land Transport Programme cost changes when considered over the five years 2000/01 to 2004/05.

As noted in section 5.1, traffic volume figures are improving in accuracy, but must still be treated with caution. They are "best available" information that should improve in accuracy in time.

The low traffic density group (authorities 13-18) tend to have pavements that are in particularly good condition. Only one from this group has a Condition Index in excess of (i.e. poorer than) the value calculated for all territorial local authorities' networks, 3.1. These authorities tended to lower unit maintenance costs (\$/km. of network) than the rest of the sample. Equivalent values for the rest of the sample were spread across a wide range of values.

6.2 Assessment of Road Condition as an Outcome of Management

Network condition as measured by Condition Index is mostly steady or improving. Values for those authorities with deteriorating networks are all lower than (i.e. better than) the value calculated for all territorial local authorities. As long as this is a controlled trend, I believe there is no cause for concern in it.

Overall, I believe the trends in network condition for the authorities in the sample are acceptable.

6.3 Councils' Policies

The majority of councils included in the review rely on an in-house business unit for network management and for a base load of professional services for design and supervision of construction works. Consultants are used to take up workload fluctuations when needed or for specialist expertise.

A number of council representatives commented that by using in-house staff for roading work, they are better able to retain adequate resources to provide a design and supervision service for use with other assets owned by their council.

There is a trend for councils that have contracted out all their professional services to bring a proportion, at least, of this work back in-house.

6.4 Councils' Practice

As councils have usually kept their ledgers simple, I have had to rely on roading asset managers' estimates of cost splits between professional services activities (Table 8). Activities respondents generally isolated (Table 8, Graph 8) were :

- Management of network maintenance;
- Management of renewals (Reseals) contracts;
- Management of construction contracts; and
- Transportation planning, traffic management and strategy studies.

Many of the professional services activities listed in the table and graph either only had a limited number of respondents replying, or the cost ascribed to them was small.

Graph 7 shows a consistent broad mix of types of suppliers of these activities, professional services business units, other internal resources, or consultants.

For the seven authorities able to supply professional services linked to Land Transport NZ's Programme & Funding Manual Work Categories, unit levels of expenditure on professional services measured as cost per kilometre shows a marked reduction for the busiest networks. The pairs, authorities 9 and 14, 13 and 15, have considerable physical similarities of the networks, so it is reasonable that their unit professional services costs are similar. For these authorities, the spread of cost between structural maintenance, corridor maintenance, safety works, and network management, are broadly comparable. Least consistent is the relative amount of professional services expenditure going into safety works. I conclude that councils' policies are more significant than are physical factors.

6.5 Outcomes of Delivery of Professional Services

There was a consistently high level of satisfaction with incumbent suppliers of professional services. Those councils intending or making changes had specific reasons for doing so. Overall, there was a trend to bring routine professional services back in-house where they had been contracted out.

Workloads and the sourcing of services are kept under review, though in this sample of authorities where most road asset managers declared themselves satisfied with incumbent suppliers, changes of supply source are limited in extent.

Respondents were consistent in their reasons for making these changes. Councils' own staff related better to Councils, ratepayers, and were more quickly responsive to ratepayers and asset managers, I was told. Consultants were favoured for specialist expertise, projects management, and to take up fluctuations in staff workloads.

6.6 Council Resources

For this sample, engineering resources relative to network length showed a very similar relationship to traffic densities. The major urban authorities have the highest number of full-time equivalents per thousand kilometres, with those authorities having lower use networks having approximately 5-9 full-time equivalents per thousand kilometres. On the basis of Graph 14, authorities 15 and 17 may be under-resourced.

When expenditure per full-time equivalent is compared, maintenance expenditure per person shows an irregular rising trend as traffic density reduces.

7 SUMMARY OF PROCEDURAL PRACTICE

7.1 Summary of Best Practices Identified in the Review

- (a) Most road asset managers are obtaining their professional services from a mix of in-house resources and from consultants. All were keeping the balance between sources under review, to obtain the best outcomes for their councils.
- (b) Road asset managers had two main criteria in reviewing their sources of professional services:
- The quality of service provided to their councils, ratepayers and road users, and to themselves; and
 - The cost of the services provided.

7.2 Summary of Practices Suggested to be Reviewed

- (a) Resources of people, whether in-house or consultants, have been considered in this review. Councils' professional services resources in relation to network length for the sample had a closely similar relationship to the use of the network as measured in vehicle kilometres travelled per kilometre of network.

Two authorities appeared to be under-resourced, when assessed against their peers in this review. A previous review, report No. PM00/875A, dated July 2001, "Survey of Local Authority Maintenance Management Processes", concluded that there was a threshold at 2.7 asset management staff per thousand kilometres of network, below which councils had insufficient staff to be able to adequately manage the network. Based on the findings from this review, both of these authorities fall below that threshold. One of those two has confirmed that an independent professional management adviser had separately identified this under-resourcing to the Council.

I suggest that both authorities need to review their resource levels upward, in the interests of obtaining best performance from the roading network and from the Council's management of the network.

8 METHODOLOGY

8.1 Scope of Review

A review of a sample of councils' practice in organizing and managing their supply of professional services was carried out 8 - 25 May, 2006. This Review was conducted as part of Performance Monitoring Group's business plan for 2005/06.

The objectives of the review were as detailed in the Audit Plan 2005/06: Review of Professional Services Costs (refer Appendix A).

8.2 Authority to Review (Land Transport NZ Requirement to Audit)

The Land Transport Management Amendment Act 2004, Section 69(1)(k), requires Land Transport NZ to "audit the performance of approved organisations in relation to activities approved by Land Transport NZ". The Land Transport NZ Performance Monitoring Group's Charter describes the way this statutory requirement will be performed. The charter refers to regular procedural audits and regular technical reviews of local authorities. This report is of a technical review.

The Land Transport Management Amendment Act 2004, Section 69(1)(l), requires Land Transport NZ to "assist and advise approved organisations in relation to Land Transport NZ's functions, duties, and powers under this Act and the Land Transport Act 1998". Technical reviews provide one opportunity for this.

8.3 Review Team

The review was carried out by Rob. Merrifield, Contractor.

8.4 Fieldwork

Eighteen territorial local authorities were visited and a previously forwarded questionnaire was discussed with the answers being recorded for later analysis.

8.5 Consultation on the Draft Report

All road controlling authorities whose professional services costs were reviewed were sent the draft report together with an invitation to comment on it before it is adopted by Land Transport NZ. Three authorities did not respond to the invitation despite a number of follow-up enquiries.

Letters of comment received in response to sending the final draft report are attached at Appendix B. A small number of corrections have been advised in these, which have been incorporated into the report. These corrections have tended to reinforce the findings of the report.

9 ACKNOWLEDGEMENTS

I am grateful for the time and effort spent by staff working for the territorial local authorities interviewed, in preparing for and taking part in the review. The time they spent in discussion and in obtaining information for me is appreciated.

Ron Muir, roading asset manager for Hutt City Council, assisted by working through the questionnaire in a pilot visit. I thank him and his Council for making time available for him to assist with adjusting the questionnaire before it was sent out to those councils selected for the review.

I wish to thank those Land Transport NZ Regional and other staff for who helped with the fieldwork for this review and for their contributions to discussions.

Rob. Merrifield,
Contractor.

APPENDIX A

Audit Plan 2005/06: Review of Professional Services Costs

- Sponsor:** Performance Monitoring Manager
- Project Manager:** Rob. Merrifield, Contractor
- Intended Outputs of the Review:** A report to the Land Transport NZ Chief Executive assessing the findings of the review.
- Review Objectives:**
1. To review professional services costs in a sample of territorial local authorities.
 2. To review practices in allocating professional services work to in-house staff and to consultants.
 3. To determine any commonalities that underlie the costs of professional services in relation to the DLTP.
 4. To assess the values of different TLA policies in their obtaining of professional services in relation to the performance of the roading network.
 5. To report the conclusions of the review together with any recommendations.
- Target Audience:** Land Transport NZ Chief Executive
- Review Team:** Rob. Merrifield, Contractor, Land Transport NZ Regional Office representative as available.
- Methodology:**
1. Select a sample of Authorities with high, middle range and low cost professional services costs in relation to their block maintenance allocations within LTPs.
 2. Develop and test a questionnaire to be taken to all Authorities in the sample.
 3. Collate responses and relate to network performance as measured by RAMM pavement indicators.
 4. Prepare report.
 5. Perform peer review of the draft report before being sending this to all Councils in the sample for formal comment.

Projected timing:

Stage/task	Begin	End
Define objectives, methodology	Immediate	Immediate
Arrangement of fieldwork	Immediate	Immediate
Fieldwork	8 May, 2006	26 May, 2006
Prepare draft report for comment by councils.	After fieldwork.	23 June, 2006
Preparation of final report after council comment	After receipt of council comment.	

APPENDIX B

Field Questionnaire

Questionnaire: Review of 2004/05 Professional Services Costs

_____ Council. Signed: _____ Date: _____ Position: _____

Background Information:

Date of information:

Value:

Please check the values given below.

What factors might influence roading costs,

- 1 Geographical:
- 2 Geological:
- 3 Climatic:

- 4 Length of roading network:
- 5 Length of sealed network:
- 6 Length of urban network:
- 7 "Best estimate" of vehicle kilometres traveled per year (from RAMM):
- 8 Five year trend of vehicle kilometres traveled :
- 9 Smooth Travel Exposure for all sealed network:
- 10 Five year trend of Smooth Travel Exposure:
- 11 Condition Index for all sealed network:
- 12 Five year trend of Condition Index:
- 13 Total cost of maintenance, Output 1:
- 14 Five year trend of maintenance cost:
- 15 Total cost of Professional Services Work Category 17:

- 16 Five year trend of Work Category 17 cost:
- 17 Total cost of professional services costs on assisted works not claimed under DLTP:
- 18 Five year trend of professional services costs on assisted works not claimed under DLTP:

Council Policy:

Delete Yes or No as appropriate.

19	Does Council provide its own professional services?	Yes	No
20	Does Council have a professional services business unit as required by LTNZ for subsidy to be available?	Yes	No
21	Does Council have a formal agreement for the provision of services by its professional services business unit?	Yes	No
22	Is this Agreement output priced?	Yes	No
23	Does Council use a mix of in-house business unit and consultants for professional services?	Yes	No

Council Practice:

Activity is charged to Work

Allocation:

What professional services are provided to Council by:

Delete Yes as appropriate.

Insert cost.

Delete Yes or No as appropriate.

business unit under formal Agree-ment? other internal sources? consultants ?

Total cost 2004/05 respectively:

Charge cost to Work Category 17: Professional Services Charge cost to Work Category 95: Administrative Support

		<i>Delete Yes as appropriate.</i>			<i>Insert cost.</i>			<i>Delete Yes or No as appropriate.</i>			
		business unit under formal Agree-ment?	other internal sources?	consultants ?	(\$K)	(\$K)	(\$K)	Charge cost to Work Category 17: Professional Services		Charge cost to Work Category 95: Administrative Support	
24	Management of network maintenance?	Yes	Yes	Yes				Yes	No	Yes	No
25	Management of traffic signs?	Yes	Yes	Yes				Yes	No	Yes	No
26	Management of traffic signals?	Yes	Yes	Yes				Yes	No	Yes	No
27	Management of temporary traffic control at roadworks?	Yes	Yes	Yes				Yes	No	Yes	No
28	Management of crash analysis system?	Yes	Yes	Yes				Yes	No	Yes	No
29	Management of renewals,	Yes	Yes	Yes				Yes	No	Yes	No
30	rehabilitation and	Yes	Yes	Yes				Yes	No	Yes	No
31	preventive maintenance contracts?	Yes	Yes	Yes				Yes	No	Yes	No
32	Management of construction projects?	Yes	Yes	Yes				Yes	No	Yes	No

33	Preparing project feasibility reports for capital projects?	Yes	Yes	Yes			Yes	No	Yes	No
34	Investigating, preparing and evaluating physical works tenders?	Yes	Yes	Yes			Yes	No	Yes	No
35	Development of asset management plans, activity management plans, etc?	Yes	Yes	Yes			Yes	No	Yes	No
36	Implementation of asset management plans, activity management plans, etc?	Yes	Yes	Yes			Yes	No	Yes	No
37	Development of safety management systems?	Yes	Yes	Yes			Yes	No	Yes	No
38	Implementation of safety management systems?	Yes	Yes	Yes			Yes	No	Yes	No
39	Development of environmental management strategies?	Yes	Yes	Yes			Yes	No	Yes	No
40	Implementation of environmental management strategies?	Yes	Yes	Yes			Yes	No	Yes	No
41	Management and reporting of RAMM database and pavement deterioration model, systems and condition and smoothness surveys?	Yes	Yes	Yes			Yes	No	Yes	No
42	Performance of condition and smoothness surveys?	Yes	Yes	Yes			Yes	No	Yes	No

43	Performance of SCRIM surveys?	Yes	Yes	Yes			Yes	No	Yes	No
44	Management of bridges,	Yes	Yes	Yes			Yes	No	Yes	No
45	streetlighting, and	Yes	Yes	Yes			Yes	No	Yes	No
46	other databases?	Yes	Yes	Yes			Yes	No	Yes	No
47	Cyclic condition assessments of bridges,	Yes	Yes	Yes			Yes	No	Yes	No
48	streetlighting and	Yes	Yes	Yes			Yes	No	Yes	No
49	other assets, reporting on these?	Yes	Yes	Yes			Yes	No	Yes	No
50	Transportation planning, traffic management and strategy studies?	Yes	Yes	Yes			Yes	No	Yes	No
51	Undertake traffic counting surveys?	Yes	Yes	Yes			Yes	No	Yes	No
52	Legalisation of existing road reserves?	Yes	Yes	Yes			Yes	No	Yes	No
53	Provide management consultancy services?	Yes	Yes	Yes			Yes	No	Yes	No
54	Provide property management services?	Yes	Yes	Yes			Yes	No	Yes	No
55	Active management of Council's roading assets?	Yes	Yes	Yes			Yes	No	Yes	No
56	Other tasks? <i>(Please specify what they are.)</i>	Yes	Yes	Yes			Yes	No	Yes	No
				Total cost:						

Outcomes of Process:

Please comment as appropriate.

- 57 How satisfied is Council with the balance in supply of professional services between in-house business unit and contractors?
- 58 What are Council's reasons for its satisfaction with the supply of professional services?
- 59 What are Council's reasons for its dissatisfaction with the supply of professional services?
- 60 Do you propose to change the balance between suppliers of services?
If so,
- 61 what changes do you expect to make?
- 62 why are you planning these changes?
- 63 Have you any comments to make, questions or uncertainties you wish to discuss with us?

APPENDIX C

Comment on the Final Draft Report Received from Road Controlling Authorities Included in the Audit