



economics

Note to:

Society of Local Government Managers

**FORECASTS OF
PRICE LEVEL CHANGE ADJUSTORS TO 2019**

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Forecasts of price level adjustors to 2019

1 Introduction	3
1.1 Input or output adjustors, capital and expenditure items.....	4
1.2 Comparison with LTNZ forecasts.....	4
1.3 General price inflation.....	5
2 BERL's assessment of the economy	6
2.1 Variables used in forecasting.....	6
2.2 BERL's assessment – short term.....	6
2.3 BERL's assessment – medium term.....	8
2.4 Inflation outlook	8
3 Forecast for adjustors	9
3.1 Additional adjustors	10
3.2 Note – regional fuel taxes and ETS	11
4 Changes since our last forecast.....	14
4.1 New data	14
4.2 Updated economic forecasts	14
4.3 Renewed formulas.....	15
5 Construction of the indicators.....	16

Tables

Table 1 Forecast of economic driver variables: % per annum change	6
Table 2 Adjustors: Index Jun 2008 = 1000	9
Table 3 Adjustors: % per annum change.....	9
Table 4 Adjustors: total % change from June 2008.....	10
Table 5 Additional adjustors: Index Jun 2008=1000.....	10
Table 6 Additional adjustors: % per annum change	11
Table 7 Additional adjustors: total % change from June 2008	11
Table 8 Actual data versus previous forecasts for the year end 30 June 2008	14
Table 9 Current versus previous forecast of New Zealand Economy	15
Table 10 Indices used for each adjustor	17

1 Introduction

These notes have been prepared for the Society of Local Government Managers (SOLGM).

This document contains forecasts for price level change adjustors for local authorities (LAs) to use in their budget processes consistent with their Long-term Council Community Plans (LTCCP). It incorporates the latest actual data to June 2008 and forecasts the adjustors to June 2019. This is an update of the provisional projections with the latest June quarter 2008 figures.

Our earlier reports (2005, 2006, and 2007) outlined the approach and methodology, and discussed alternative adjustors and reasons why the particular adjustors were chosen for forecasting.

The forecasts provide a medium-term view of the likely movement of these adjustors, rather than movement over the next year or two. There will always be unexpected reasons why individual costs might rise faster or slower in a particular year. However, this does not necessarily mean that the medium-term forecast will, or should be, adjusted. Likewise there will always be regional differences in the rate of change for a particular adjustor. These adjustors are forecast at the national level and councils may need to consider if there is information to show that a difference might be expected at the regional level.

BERL has forecast one adjustor for each of the following nine categories for the period to 2019.

1. roading and transports costs.
2. property, reserves and parks costs.
3. water - clean and dirty - including pipeline costs.
4. staff costs.
5. energy costs.
6. other – adjustor for local government costs.
7. pipeline costs (a sub-component of water costs)
8. earthmoving costs (a sub-component of property, reserves and parks)
9. private sector salary and wage costs (a sub-component of adjustors 1 to 4 above)

1.1 Input or output adjustors, capital and expenditure items

The issue of applying adjustors to costs based on input type and/or to activities based on output groups was extensively discussed (see earlier reports). Previously, it was agreed that individual LAs should apply the adjustors as they determine appropriate in the light of guidelines provided by SOLGM in the LTCCP Jigsaw document and its successor *Piecing it Together*. LAs will also need to consider the most appropriate approach given their own accounting systems and processes.

In this context, the adjustors above do not clearly fall into input or output classes.

It may assist some LAs to view three (staff, energy, and other) of the adjustors as applicable to input costs. A further three (roading, property and water) adjustors have been constructed in order to be applicable to appropriate input categories, where these activities are contracted out by the LA. However, where these activities remain in-house LAs can use these adjustors for the appropriate output group if they so wish.

The primary focus of the set of adjustors is on operating expenditure. The adjustors may be used on capital expenditure items as the indices include a combined forecast of operating and capital costs. However, because of this mixture in the composition of these indices, they may understate (or overstate) the change in the prices of capital expenditure items.

Therefore, BERL has also separately forecast the last three adjustors (pipelines, earthmoving, and private sector wages) for LAs requiring a more precise adjustor for capital items. These can be applied, as appropriate, to costs based on inputs.

1.2 Comparison with LTNZ forecasts

In the report completed by the Local Government Rates Inquiry, there was a comparison made between BERL's transport adjustors and Land Transport New Zealand (LTNZ) forecasts. The section in the Inquiry's report is a summary of a report completed by GHD. The GHD report (available at ratesinquiry.govt.nz) was more direct and said that:

“This raises a very significant issue. In discussing this with LTNZ staff, they are strongly of the view that the figures used for transport by BERL significantly understate the cost escalation occurring in the transport industry. In other words, many councils by using the BERL indicators may significantly understate their future operating costs.”

We were not approached for our comment or view on this comparison. We have not completed a detailed analysis of the LTNZ forecasts, but we note that the GHD report says that the LTNZ data allows for both 'scope increases and price increases'. This focus differs

significantly from our price forecasts. In other words the LTNZ forecasts include adjustments for increases in the volume of transport work completed as well as increases in the price, whereas BERL has only forecast the change in prices.

1.3 General price inflation

For comparative purposes, the average level of price inflation over the forecast period is expected to remain consistent with the current Policy Targets Agreement between the Minister of Finance and the Governor of the Reserve Bank. The relevant phrase in this agreement, which target inflation as measured by the Consumer Price Index (CPI), states:

“... the policy target shall be to keep future CPI inflation outcomes between 1 per cent and 3 per cent on average over the medium term.”

2 BERL's assessment of the economy

This section outlines the underlying assumptions used in the updated forecasts and our assessment of the New Zealand economy.

2.1 Variables used in forecasting

A set of core economic variables were used to generate the estimated equations. To generate forecasts for each of the adjusters, these estimated equations required forecasts of the core economic variables.

Table 1 lists the path of the economic variables used in the generation of the forecasts for the adjusters. These economic forecasts are BERL's assessment of the likely medium-term path of the New Zealand economy.

The forecasts from June 2009 to June 2011 come directly from BERL's latest quarterly forecasts. The forecasts over the medium term are consistent with projections from BERL's CGE¹ model of the New Zealand economy.

Table 1 Forecast of economic driver variables: % per annum change

Year ending	Nominal GDP	Real GDP	Non-hsg invtmt	Employment
Jun 08	6.1	2.6	3.8	1.1
Jun 09	3.0	0.9	2.8	0.8
Jun 10	4.3	2.4	2.0	1.3
Jun 11	4.5	2.6	2.2	1.9
Jun 12	4.6	2.7	2.5	1.9
Jun 13	4.7	2.7	2.8	2.0
Jun 14	4.7	2.7	3.1	2.0
Jun 15	4.8	2.8	3.3	2.0
Jun 16	4.9	2.8	3.6	2.0
Jun 17	5.0	2.8	3.9	2.0
Jun 18	5.0	2.9	4.1	2.0
Jun 19	5.1	2.9	4.1	2.1

2.2 BERL's assessment – short term

This section outlines BERL's assessment of the short-term prospects for the New Zealand economy.

¹ Computable general equilibrium

The New Zealand economy is taking a hit in its solar plexus as the global financial markets continue to haemorrhage. The problem is the New Zealand economy does not have that much fat with which to absorb these hits. And with news of the Lehman Brothers filing for bankruptcy, the Bank of America purchase of Merrill Lynch, and the bailout of AIG (American International Group), our numbers for the prospects facing the New Zealand economy may well be on the optimistic side.

There is now an increasing possibility of a significant impact on the real (production) side of the global economy arising out of this financial turmoil. Credit ratings and credit availability are now compromised in many parts of the globe, with investor confidence extremely shaky at best. In amongst this, global monetary authorities are grappling to avert a stagnation scenario. Recent declines in world oil prices may help, but the thought that the inflation genie has already been let loose is undoubtedly limiting the ability of central banks to respond to the credit crunch.

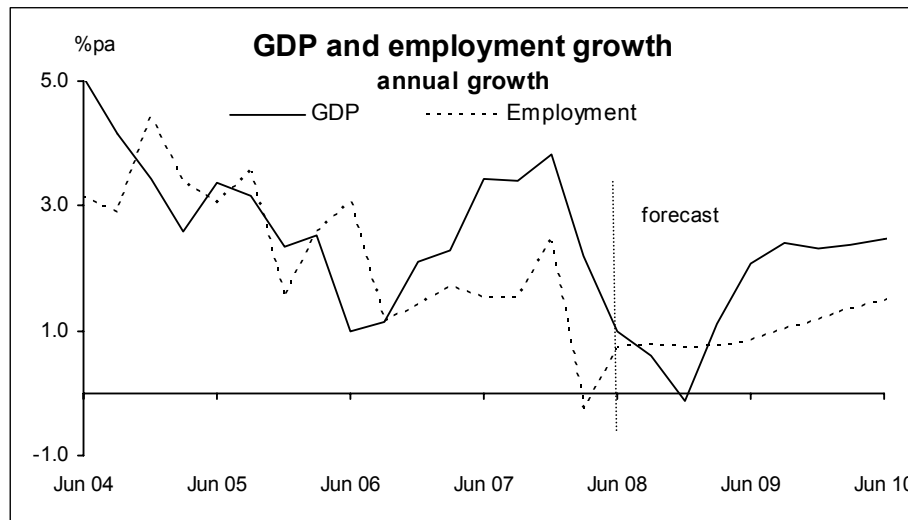
In amongst this rather dire global scene lies a small open economy in the South Pacific. This economy is now being forced to a halt by interest rate actions some two to three years prior to the onset of the credit crunch. Our timing couldn't have been worse.

Consequently, this month's 50-basis-points cut in the Official Cash Rate (OCR) by the Reserve Bank of New Zealand (RBNZ) was undoubtedly welcome news. Easing petrol prices, along with the drying up of global funds have helped the RBNZ in their decision to bring forward their expected OCR reductions.

The RBNZ has made the right call, albeit belatedly. The issue now is whether the RBNZ can continue in this relatively aggressive vein. Income tax cuts on the horizon will keep the RBNZ vigilant, but the global financial crisis is now the largest influence on demand and inflation pressures. With renewed weakness of the US dollar, the risks of a sudden collapse in the NZ dollar have receded. However, the NZ dollar will continue to slide gradually as the combination of reduced interest rate differentials, a large current account imbalance, and world financial uncertainty reduces the quantum and influence of speculative flows.

Meanwhile, core indicators may suggest the worst is past. The BERL State of the New Zealand Economy (SONZE) basket of indicators has clawed its way back to a -4 balance. From the depths of -12 earlier this year, this is indeed an improvement. However, this improvement is on the back of some rather fortuitous meat export volume figures and a tentative turn in inherently fickle business confidence figures.

GDP growth is expected to average a miserly 0.2% in the year to March 2009. Thereafter, a modestly recovery export sector, assisted by some belated government investment expenditures, sees average GDP growth claw its way to 2.2% in the following March years.



2.3 BERL's assessment – medium term

BERL's assessment of the medium term prospects for the New Zealand economy is based on CGE model projections of the New Zealand economy from 2008 to 2019.

Our assessment of the New Zealand economy is one of weakness, but with noticeable positive influences over medium term. As noted above, these positives are: favourable terms of trade, growth in the Asian markets (although the growth has been slowing), and a continued surge in public sector investment spending.

2.4 Inflation outlook

In response to a sluggish economy, international financial fallout, and an imploding residential housing market, the RBNZ came out with a surprise 50-basis-points cut in the OCR to 7.5%. This was, in part, an effort to 'encourage' banks to lower mortgage rates further, as the commercial banks had already priced a 25-point cut prior to this month's monetary policy announcement. Subsequently, several banks have lowered their flexible rates, and fixed rates are likely to follow in due course.

However, this, combined with upcoming tax cuts does not bode well for inflation in the short term. Granted oil prices are falling dramatically to around US\$90 per barrel from US\$150 in July this year; the depressed economy and housing market discourage demand and limit the ability of producers to raise prices. However, we don't expect inflation in general to fall significantly over the medium term.

3 Forecast for adjustors

Table 2 lists the forecast indices for each of the adjustors for the period from the year ended June 2008 to the year ended June 2019. The figures in grey are based on actual data up to the June quarter 2008.

Table 2 Adjustors: Index Jun 2008 = 1000

Year ending	Road	Property	Water	Energy	Staff	Other
Jun 06	918	928	941	912	932	910
Jun 07	963	964	925	874	959	940
Jun 08	1000	1000	1000	1000	1000	1000
Jun 09	1050	1022	1089	1098	1028	1061
Jun 10	1084	1050	1130	1121	1055	1098
Jun 11	1116	1082	1164	1147	1083	1134
Jun 12	1148	1111	1197	1177	1113	1160
Jun 13	1175	1142	1229	1213	1140	1188
Jun 14	1203	1174	1269	1248	1169	1213
Jun 15	1230	1208	1306	1289	1198	1239
Jun 16	1258	1245	1351	1331	1229	1267
Jun 17	1288	1277	1393	1376	1268	1297
Jun 18	1319	1306	1438	1422	1303	1328
Jun 19	1349	1336	1486	1472	1343	1362

Table 3 lists the annual percentage change for each of the adjustors.

Table 3 Adjustors: % per annum change

Year ending	Road	Property	Water	Energy	Staff	Other
Jun 06	5.7	3.9	11.9	25.8	3.5	4.6
Jun 07	4.9	3.9	-1.7	-4.2	2.9	3.3
Jun 08	3.8	3.7	8.1	14.4	4.3	6.4
Jun 09	5.0	2.2	8.9	9.8	2.8	6.1
Jun 10	3.3	2.7	3.8	2.1	2.6	3.5
Jun 11	2.9	3.1	3.0	2.3	2.7	3.3
Jun 12	2.9	2.6	2.8	2.6	2.7	2.3
Jun 13	2.4	2.8	2.7	3.0	2.5	2.4
Jun 14	2.3	2.8	3.3	2.9	2.5	2.1
Jun 15	2.2	2.9	2.9	3.3	2.5	2.2
Jun 16	2.3	3.0	3.5	3.3	2.6	2.3
Jun 17	2.4	2.6	3.1	3.3	3.2	2.3
Jun 18	2.4	2.2	3.2	3.4	2.7	2.4
Jun 19	2.2	2.3	3.3	3.5	3.1	2.5

Table 4 lists the total (or cumulative) percentage change from the year ended June 2008 for each of the adjustors. This table can be used to calculate the increase of future year expenses based on 2008 costs.

Table 4 Adjustors: total % change from June 2008

Year ending	Road	Property	Water	Energy	Staff	Other
<i>Jun 09</i>	5.0	2.2	8.9	9.8	2.8	6.1
<i>Jun 10</i>	8.4	5.0	13.0	12.1	5.5	9.8
<i>Jun 11</i>	11.6	8.2	16.4	14.7	8.3	13.4
<i>Jun 12</i>	14.8	11.1	19.7	17.7	11.3	16.0
<i>Jun 13</i>	17.5	14.2	22.9	21.3	14.0	18.8
<i>Jun 14</i>	20.3	17.4	26.9	24.8	16.9	21.3
<i>Jun 15</i>	23.0	20.8	30.6	28.9	19.8	23.9
<i>Jun 16</i>	25.8	24.5	35.1	33.1	22.9	26.7
<i>Jun 17</i>	28.8	27.7	39.3	37.6	26.8	29.7
<i>Jun 18</i>	31.9	30.6	43.8	42.2	30.3	32.8
<i>Jun 19</i>	34.9	33.6	48.6	47.2	34.3	36.2

3.1 Additional adjustors

Forecasts for the additional adjustors are summarised in the following three tables (Table 5 to Table 7).

Table 5 Additional adjustors: Index Jun 2008=1000

Year ending	Pipelines	Earthmoving	Pvte sector labour
<i>Jun 06</i>	939	912	939
<i>Jun 07</i>	965	962	968
<i>Jun 08</i>	1000	1000	1000
<i>Jun 09</i>	1038	1036	1027
<i>Jun 10</i>	1065	1071	1058
<i>Jun 11</i>	1099	1109	1092
<i>Jun 12</i>	1134	1147	1119
<i>Jun 13</i>	1170	1186	1146
<i>Jun 14</i>	1206	1230	1174
<i>Jun 15</i>	1244	1277	1214
<i>Jun 16</i>	1291	1321	1245
<i>Jun 17</i>	1341	1362	1277
<i>Jun 18</i>	1388	1405	1312
<i>Jun 19</i>	1438	1451	1342

Table 6 Additional adjustors: % per annum change

Year ending	Pipelines	Earthmoving	Pvte sector labour
Jun 06	4.1	1.0	-0.4
Jun 07	2.8	5.5	3.1
Jun 08	3.6	4.0	3.4
Jun 09	3.8	3.6	2.7
Jun 10	2.6	3.4	3.1
Jun 11	3.2	3.5	3.2
Jun 12	3.1	3.4	2.5
Jun 13	3.2	3.4	2.4
Jun 14	3.1	3.7	2.4
Jun 15	3.2	3.8	3.4
Jun 16	3.8	3.4	2.6
Jun 17	3.9	3.1	2.6
Jun 18	3.5	3.2	2.7
Jun 19	3.6	3.3	2.3

Table 7 Additional adjustors: total % change from June 2008

Year ending	Pipelines	Earthmoving	Pvte sector labour
Jun 09	3.8	3.6	2.7
Jun 10	6.5	7.1	5.8
Jun 11	9.9	10.9	9.2
Jun 12	13.4	14.7	11.9
Jun 13	17.0	18.6	14.6
Jun 14	20.6	23.0	17.4
Jun 15	24.4	27.7	21.4
Jun 16	29.1	32.1	24.5
Jun 17	34.1	36.2	27.7
Jun 18	38.8	40.5	31.2
Jun 19	43.8	45.1	34.2

3.2 Note – regional fuel taxes and ETS

Note, the imposition of regional fuel taxes were not included in the projections. We understand that Statistics New Zealand (SNZ) have not decided how they will treat this factor within their definition of producer prices. The issue is whether SNZ view the tax as a charge for a particular good or service, or as a revenue-raising tool. Our judgement is that the fuel tax could well be excluded from the definition of producer prices. However, this situation may change depending on further deliberations by SNZ.

3.2.1 Emissions Trading Scheme

In a similar vein, the impact of the proposed Emissions Trading Scheme (ETS) has not been explicitly incorporated into our forecasts. Again, the interpretation by SNZ as to the

implementation of this ETS has yet to be established. In addition, a critical component in assessing the impact of the ETS – i.e. the price of CO₂ emission units – remains uncertain.

As a guide, information from documents prepared for the Ministry for the Environment and the Treasury is summarised below.

With a price for emission units of \$25 per tonne of CO₂:

- petrol price increase by 6.1c per litre (GST incl) – approx 3% on current price
- diesel price increase by 6.7c per litre (GST incl) – approx 4.5% on current price
- wholesale electricity price increase by 1.4c per kwh
- retail electricity price increase by 2c per kwh (GST incl)
- wholesale gas price increase by \$1.40 per GJ
- Retail gas price increase by \$1.70 per GJ (GST incl)

However, the price for European Union Allowances emission units has varied over the past nine months between 20€ and 30€ per tonne of CO₂. The latest price is close to 25€, which is approximately NZ\$50 per tonne at current exchange rates. In approximate terms, this would double the impacts listed above.

These influences are likely to have a particular impact on the energy cost adjustor, as well as the road cost adjustor (given this has the road transport inputs PPI as one its constituents).

Note, though, that the influence of the ETS on the cost adjustors will be a *single, one-off* impact on the level of the relevant indices listed in Table 2 and Table 5. The importance this one-off lift in the price level (i.e. on the level of each of the cost adjustors) depends on the weight of each item in each constituent index.

As an indication of the likely across-the-board impact, petrol costs accounts for 5.38% of the households' CPI, while another 3.82% is taken up by electricity, gas and other energy costs. Assuming a price of emission units of NZ\$50 per tonne of CO₂, would lift the overall consumer price level by a *one-off* 1.1% (i.e. *not* 1.1% per annum).

Thus, lifting all the cost adjustors in Table 2 and Table 5 by 1.1%² would be a crude first approximation to incorporate the likely impact of the ETS. A more refined method would

² That is, the 1349 figure for the level of the road cost adjustor for 2019 Table 2, could be lifted to 1364. Consequently, the cumulative 34.9% figure for 2019 in Table 4 would become 36.4%.

increase the road and energy adjustors by more than the 1.1% average, while lifting others by less the 1.1% to acknowledge the larger impact on these emission-related categories. Once the ETS becomes established³ and a price for NZ emission units can be observed the above calculations can be undertaken, and projected, with more rigour.

In the interim, we caution Local Authorities to ensure these two issues (regional fuel tax and ETS) are explicitly identified for special treatment in any contracts that use Statistics New Zealand price indices (e.g. in price/cost escalation clauses).

³ Petrol is to be included in 2009 and electricity in 2010.

4 Changes since our last forecast

This section looks at the changes that have occurred since our previous forecast in 2007. We discuss three main categories of changes: new data; updated economic forecasts; and renewed formulas.

4.1 New data

Since our provisional forecast in August, there has been new data released from Statistics New Zealand for the June quarter 2008, which covers all of the indices tracked in this report.

It should be stressed that this data covers the immediate short-term situation. This data should NOT be used to shift the proper focus of the cost adjustors – which is the medium to longer-term horizon.

Table 8 below compares the actual movements in the indices tracked to 30 June 2008 with the previously forecast movement.

**Table 8 Actual data versus previous forecasts
for the year end 30 June 2008**

Adjustor	Actuals	Previous forecast
Road	1390	1373
Property	1289	1284
Water	1451	1396
Energy	1612	1493
Staff	1206	1188
Other	1379	1334
Pipelines	1460	1453
Earthmoving	1393	1410
Pvte sector labour	1188	1183

The table shows that the forecast was relatively close to the actual result for the majority of the adjustors. It confirms that there is no systemic problem with our forecasts process or methods. In particular the forecasts for Property, Pipelines, and Private sector labour adjustors were close to the actual movement over the last year.

4.2 Updated economic forecasts

Although since the provisional forecast, there have been some changes in the New Zealand economic situation, these are not fundamental changes; rather they are ripple effects from the financial market overseas. Hence, we compare the current indicators of the economy to these a year ago, which would give a better picture of this economy's performance over the

medium term. The changes over a year, where relevant and/or appropriate, have been incorporated into our forecast of the likely future path of the New Zealand economy.

The table below summarises the current, compared to previous, economic outlook underpinning the cost adjustor forecasts.

Table 9 Current versus previous forecast of New Zealand Economy

Year ending	<i>Current forecast</i>	<i>Previous forecast</i>	<i>Current forecast</i>	<i>Previous forecast</i>	<i>Current forecast</i>	<i>Previous forecast</i>
	Nominal GDP	Nominal GDP	Real GDP	Real GDP	Employment	Employment
Jun 08	6.1	5.7	2.6	2.4	1.1	0.7
Jun 09	3.0	5.6	0.9	2.7	0.8	1.2
Jun 10	4.3	5.8	2.4	2.6	1.3	1.5
Jun 11	4.5	5.7	2.6	2.7	1.9	1.6
Jun 12	4.6	5.6	2.7	2.8	1.9	1.7
Jun 13	4.7	5.5	2.7	2.8	2.0	1.7
Jun 14	4.7	5.4	2.7	2.9	2.0	1.8
Jun 15	4.8	5.3	2.8	2.9	2.0	1.9
Jun 16	4.9	5.2	2.8	3.0	2.0	1.9
Jun 17	5.0	5.1	2.8	3.1	2.0	2.0
Jun 18	5.0	5.0	2.9	3.1	2.0	2.1

The main differences in the current economic forecasts are of weaker GDP and employment growth in the short-term, although over the longer-term GDP and employment growth are expected to recover from the economic downturn.

4.3 Renewed formulas

We adjusted the equations for this forecast to incorporate the changes in the financial market and economic activities over a year. In particular, we re-estimated the equation for the Energy adjustor. Oil prices peaked during May to August this year, pushing all oil related prices to record highs.

However, the oil prices came down sharply and settled at around US\$95 in September. Therefore, here we treated the surge of oil prices mid this year as a one-off event. In other words, there is no fundamental shift in oil prices.

5 Construction of the indicators

This section outlines how the price level indicators were constructed. This section was originally included in our August 2005 report. We report this here for ease of reference. We also include a description of the indicators and their main cost drivers.

As part of our initial pieces of work, BERL evaluated a number of LA annual plans to determine the major cost categories. This was done for three major groups of LAs: regional councils; city councils; and district councils. At the completion of this work a report was prepared that outlined the major cost categories for each of the types of councils and a suggested set of indices that could be used to approximate the movement in the costs. After discussion with SOLGM and the Office of the Auditor-General (OAG) it was decided to use six price level indicators for all LAs and an estimate of future interest rates. While this approach may not fit every LA, it balanced the need for robust and meaningful information with the need for an approach that was simple enough to use.

Based on the six adjustors that were agreed, BERL compiled a set of composite indices for each adjustor. Table 10 shows the indices that were used as the basis of the forecasts for each adjustor.

The roading, property, and water costs in a number of LAs represent three of the larger cost categories. For a number of LAs these costs are contracted out to external suppliers. The indices for these costs had to account for the changes in the costs of the inputs plus the changes in the cost of upgrade and repairs and maintenance of physical assets. For this we have included a combination of the appropriate PPI input cost indices plus the appropriate CGI indices. Because neither of these indices included salary and wage costs, we also included an index to approximate the movement in salary and wage costs.

Energy costs were included because they are an item that is usually easily identified by LAs. Our composite indices include the appropriate PPI input indices and an index to approximate the movement in salary and wage costs.

Table 10 Indices used for each adjustor

Indices used	SNZ Identifier	Description	Main Drivers
Roading/Transport			
PPI inputs - Road transport	PPIQ-SNI01	Public transport, roading	Transport industry costs
CGI - Transport ways (other construction)	CEPZ-S2CA		
Total labour costs - Private sector	LCIQ-SE49Z9		
Property, reserves and parks			
PPI inputs - Cultural and recreation services	PPIQ-SNP	Maintenance of public buildings and assets (e.g. sports grounds, parks, arts, recreation)	Repairs and maintenance of buildings; grounds maintenance, recreation services
CGI - Earthmoving and site work	CEPQ-S2CD		
Total labour costs - Private sector	LCIQ-SE49Z9		
Water			
PPI inputs - Electricity generation and supply	PPIQ-SND01	Drinking water supply and stormwater	Repairs and maintenance of water supply
CGI - Pipelines	CEPQ-S2CB		
Total labour costs - Private sector	LCIQ-SE49Z9		
Energy			
PPI outputs - Electricity generation and supply	PPIQ-SUD01	Electricity generation, supply	Electricity, gas prices
Total labour costs - Private sector	LCIQ-SE49Z9		
Staff			
All salary and wage rates - Local govt sector	LCIQ-SE13Z9	Council operations	Staff costs
Other			
PPI inputs - Local government and civil defence*	PPIQ-SNM02	Local government administration services and civil defence	Staff costs and other administration costs
Pipelines			
CGI - Pipelines	CEPQ-S2CB		
Earthmoving			
CGI - Earthmoving and site work	CEPQ-S2CD		
Private sector salary and wage costs			
Total labour costs - Private sector	LCIQ-SE49Z9		

PPI - Producer Price Index, CGI - Capital Goods Index, SNZ - Statistics New Zealand

* The official sub-industry group title of Local government administration services & civil defence has been abbreviated to Local

The staff adjustor relates to internal salary and wage costs of LAs. We have used the appropriate labour cost index (LCI) for local government as the basis for forecasting the movement in these costs.

Other costs refer to all other input costs for LAs. We have used the PPI input indices for Local Government costs to forecast the movement in these costs.

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