

Auckland's Procurement Forum

PROACTIVE ENGAGEMENT OF AUCKLAND'S BUILDING AND CONSTRUCTION INDUSTRY



Contributing organisations

DATA SUPPLIED AT A DETAILED LEVEL

Auckland Council Property Auckland Council Stormwater (IES) Auckland Transport Contact Energy Counties Manukau District Health Board Department of Corrections Genesis Energy Inland Revenue Department New Zealand Defence Force NZ Transport Agency NZ Police Public Private Partnership Special Purpose Vehicles (PPP) University of Auckland Vector

Watercare

Waterfront Auckland

DATA SUPPLIED AT A SUMMARY LEVEL

KiwiRail

Ministry of Education

The Warehouse

Waitemata District Health Board

UNABLE TO SUPPLY DATA FOR THIS REPORT ONLY

Auckland District Health Board

Manukau Institute of Technology

Transpower

Waterfront Auckland

WILL SUPPLY DATA AT A FUTURE DATE

Auckland Council - Parks and Recreation

Housing New Zealand Corporation

PARTICIPATING IN AUCKLAND PROCUREMENT FORUM BUT UNABLE TO PROVIDE DATA AT THIS POINT

Auckland Airport

Chorus

Progressive Enterprises

Telecom NZ

SUPPORTED BY

Property Council New Zealand Statistics New Zealand Construction Clients' Group NZ RCP Rider Levett Bucknall



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How to use this Report

This is the fourth report of the Auckland Procurement Forum and represents the data collated since March 2012 – highlights were provided to industry in November 2013. This revised and updated Report will be improved in both depth and extent as the data set is built up – so care needs to be taken in its interpretation.

The Report sets out to assist both client and supply side organisations in understanding the future state and nature of the Auckland construction market. Its main aim is to support improved efficiency and drive out wasted effort from construction planning and delivery processes.

The data presented in this Report is extracted from a series of forward spending profiles. It should be noted that forecast data can change at any point.

The scope of the information at this point in time covers the public sector and some elements of private sector capital expenditure (new build and refurbishment and upgrading projects). The data refers to spend across financial years from 1 July to 30 June – where exceptions are known they are noted in the text.

GENERAL NOTES:

- > Contributing organisations have predominantly supplied data for three years exceptions are noted.
- > Report No.1 was issued on 5 March 2012 and was well received by the industry.
- A supply side perspective has been added, specifically with a Trade Division split of potential work by value being included.
- More detail has been added into the client spend sectors providing a clear picture of the type of spend areas.
- > Data has been provided on an "add and omit" basis.
- > New client organisations have provided data.
- > A time-based/trend comparison has been included.

Changes for Report No.4

High level data from this Report was first showcased at the Forum's annual industry event on 27 November 2013 and has since been updated for this formal Report No.4.

The changes are to the headline figures (a slight downward adjustment in overall forward spending), a realignment of the year to year comparisons. This was caused by an error in data provided and some minor calculation inaccuracies. As well as the points noted above, improvements include:

- funding has been split into committed expenditure (under contract or out to tender) and proposed expenditure (planned)
- > highlights from the updated data for the previous period are included.

Also, it should be noted that through Report No.4 we have:

- worked with UNITEC and the industry on a regional forward employment and skills demand model and this Report's data is included in the resultant study
- reviewed Report No.4 data with the MBIE Productivity Partnership's National Construction Pipeline (published in December 2013), Canterbury Forum's Construction Pipeline and the National Infrastructure Unit's Infrastructure Evidence Base (released in January 2014).

Report No.4

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NEXT STEPS:

Auckland Pipeline Report No.5 is expected to be published in July 2014 and will include:

- deeper analysis of trade division expenditure
- > alignment with Statistics NZ's historic data set for Auckland's construction sector to compare historic spend profiles and planned expenditure
- > the new annual spend profile from organisations' financial year/three year plans
- > alignment with:
 - the regional forward employment and skills demand model noted above
 - Christchurch Procurement Forum's next report
- > a review of alignment with National Infrastructure Unit (NIU) data
- a geospatial model (GIS) will be developed to display the data geographically, in collaboration with Auckland Transport
- > wider industry expenditure data derived from specialist industry sources
- > a profile of organisations' actual delivery compared with their spending commitments, that is, actual spend per time period against their proposed/committed expenditure for the same quarter.



Economic update

The global economic prospects in 2014 could simply be described as "encouraging".

This assessment follows nearly six years of unprecedented financial hardship since the 2008 Global Financial Crisis (GFC) with periods of recession in several countries. It appears that the global economy is regaining some vigour, confidence is improving and stronger balance sheets are encouraging capital expenditure. The stronger growth in richer countries is expected to boost demand for the exports of developing countries and contribute to the continuance of their growth.

New Zealand experienced real GDP growth bounce back in 2011, growing 2.6% over the year despite a devastating earthquake in Canterbury in February 2011. The lift in GDP growth was characterised by strong primary production and an improvement in services activity, offsetting the continued weakness in the construction sector. However, growth in the middle of 2012 was weaker with GDP growth of 0.5% across both the June and September quarters, supported by activity in the construction sector. The Canterbury rebuild was, as expected, a significant driver of growth through 2012, gaining real momentum in the first half of 2013.

TABLE 1 NEW ZEALAND MARKET DATA RELATIVE TO SYDNEY AS 100 BASE

CITY	2003	2004	2005	2006	2007	2008	2009	2010	2011			2014 (F)	Relativities Sept 13
Auckland	7.0	10.0	5.0	4.0	1.0	2.0	1.0	0.0	0.0	0.0	1.0	4.6	82
Christchurch	5.9	10.0	4.5	4.0	3.0	1.5	1.5	4.6	3.0	4.7	5.1	6.6	89
Sydney	6.0	7.0	4.5	4.5	3.5	4.5	0.0	1.0	2.2	1.2	2.0	3.5	100
Wellington	5.0	9.0	4.8	4.0	3.0	2.0	1.0	1.5	1.0	1.5	2.0	4.1	88

New Zealand's economy is now firmly in an economic expansion phase.

RLB TENDER PRICE INDEX SERIES (% CHANGE) AS AT SEPTEMBER 2013

Profits in the construction sector fell during the recession, but are now beginning to recover. Profitability worsened as sales fell and profit margins contracted. Businesses were hard-pressed to pass on increasing costs in the face of weaker demand. Many businesses were also loathe to let go staff, who had been difficult to secure in the lead up to the recession. Construction firms became more cautious about borrowing and were also helped by lower interest rates. Profitability is beginning to recover, but margins remain low. As the economy recovers, construction companies' profitability will improve with higher turnover, fattening margins and increased leverage.

Within New Zealand global dairy prices have increased to three year highs, the Canterbury rebuild is gaining pace, and the Auckland housing market is becoming heated due to near-record low mortgage rates and housing supply shortages. After years of restraint and cost-cutting, corporate and household spending are on the rise.

China's expanding middle class, as a global driver, is increasingly seeking to educate its children at schools abroad. Their money, if it's allowed to follow their children, will probably not go into US Federal Bonds like China's foreign exchange reserves. Rather, such funds could flow directly into property markets in Australia, New Zealand, USA and the UK or listed shares around the world, potentially driving up prices.

Locally, Auckland has led the cyclical recovery, accompanied by more jobs, incomes and spending. Growth in jobs has stalled, but the region is on an artificial high due to rapidly rising house prices and debt. Surging house prices in Auckland are a risk to financial and economic stability. Whilst central government spending may be reducing, increased private investment and a steady rise in residential construction will underpin the construction sector within Auckland over the next few years.



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The Christchurch rebuild has continued to gain momentum in recent months with a number of large projects being confirmed and Government acquisitions of key sites well progressed. Christchurch's non-residential market conditions currently remain relatively competitive, with main contractors still looking to secure projects for the next 12 months and beyond.

The Wellington market continues in a reasonably flat pattern and the tender market continues to remain very competitive. Margins across all contracting sectors remain tight, which is ensuring competitiveness in securing new work. With the shallow pool of current and expected large projects, it is likely that this contracting market will be with us well into 2014.

Non-residential building is coming out of hibernation, led by Canterbury post-earthquake rebuilding work. There is a broader acceleration in other parts of the country too. The recovery will be gradual as risk appetite for new investment is still low and there is not much demand for additional space yet. As the economy grows, demand is returning and will boost non-residential construction in 2014 and 2015. Canterbury is leading the charge across all categories of building. While the initial surge in activity was outside Christchurch city, activity is now picking up most strongly in the centre. The rebuild programme should continue to accelerate over the next year.



TABLE 2 CONSTRUCTION MARKET ACTIVITY CYCLE MODEL

According to Colliers' 2014 Global Investor Sentiment research released in September 2013, "investors are in an expansion mood, with 70% planning to expand property portfolios in the next six months. US buyers are the most ambitious in a global context. Some funds, particularly in Europe, have been under increasing pressure lately to spend capital that has been raised and deliver returns, having held back investment during the financial crisis. Now, a clearer economic outlook and improving capital values is releasing pentup demand for real estate and boosting volumes. Investors are optimistic about the progress of property investment turnover going forward, particularly in the US and UK, where steady improvement is expected in 2013 and 2014."



Sydney Wellington This sentiment corresponds with **RLB's Construction Market Activity Cycle** results for Q1 2014. Forecast construction cost increases for 2014, according to RLB offices in key cities include: Macau 9%, Hong Kong 8%, **Christchurch 6.5%**, Honolulu 5%, New York 4.8%, Doha 4.5% and Sydney 3.5%.

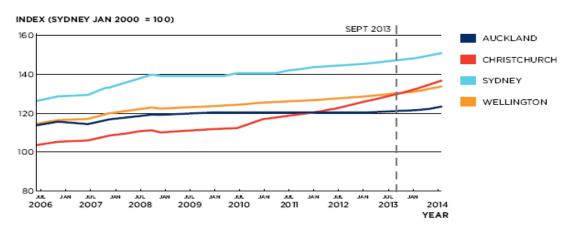


FIGURE 1 TENDER PRICE INDEX – SYDNEY BASE

The tender price index graph shows the changing costs of works over time, relative to Sydney's base 100 at January 2000, and is based upon Rider Levett Bucknall models of CBD/CBD fringe commercial office and residential multi-storey construction.

Analysis provided by RLB - January 2014





Client type	Market	Industry Sector (NZSIC)	Organisation
Government	Horizontal	Power Infrastructure	Genesis Energy
			Contact Energy
			Transpower
			Vector
		Rail	Auckland Transport
			KiwiRail
		Roading	Auckland Transport
			NZTA
		Water	Auckland Council Stormwater
			Watercare
		Misc.	Public Private Partnership Special Purpose Vehicles (PPP)
Government	Vertical	Education	University of Auckland
	-		Massey University
			Ministry of Education
			Unitec
		Hospitals	Counties Manukau DHB
			Waitemata DHB
		Misc.	Dept. of Corrections
			NZDF
			NZ Police
		Office	Inland Revenue
		Social, Cultural & Religious	Auckland Council Property
Private		Industrial	KiwiRail
		Office	The Warehouse
		Retail	The Warehouse

TABLE 3 CONTRIBUTING ORGANISATIONS BY SECTOR

NOTES:

- Not all organisations contributed data for this Report (see inside front cover).
 Sectors and sub-sectors (see Section 3) are the industry standards used by Statistics NZ (NS Standard Industrial Classification (NZSIC)).
- Auckland Council Property data includes a small social housing element.
 Social housing is included in "Social Cultural and Religious" Sector.
- > Vector is listed on the NZ Stock Exchange, with Auckland Energy Consumer Trust (AECT) as the major shareholder.
- The "Office" Sector for Report No. 4 is included elsewhere.
 NZTA = NZ Transport Agency, NZDF = New Zealand Defence Force, DHB = District Health Board.



Section 1: Report highlights

This Section provides an overview of currently visible work for the next three years in Auckland's construction market. The predominately public sector data shows a flat market going forward as expenditure remains constrained for these clients. The increasing impact of potential construction inflation means that further pressure will be felt. However, the inability of a number of organisations to provide accurate data for the full three years does mean that the perceived dip in that year may not occur. There are three reasons for this loss of clarity:



- expenditure constraints ahead of State Owned Enterprises privatisation
- the need to match peer group capital expenditure levels.

This is reviewed in further detail in Appendix B. As noted in this Report's economic update, other groups of clients and investment streams will have a significant impact on the market going forward.

TABLE 4A COMMITTED AND PROPOSED EXPENDITURE OVERTHREE YEARS (\$M)

			2013/14
	Committed	Proposed	Total
Horizontal expenditure	1,380	484	1,864
Vertical expenditure	167	270	436
Industry expenditure	1,546	754	2,301

			2014/15
	Committed	Proposed	TOTAL
Horizontal expenditure	1,248	554	1,802
Vertical expenditure	208	493	701
Industry expenditure	1,455	1,047	2,502

			2015/16
	Committed	Proposed	TOTAL
Horizontal expenditure	911	770	1,681
Vertical expenditure	96	416	512
Industry expenditure	1,007	1,186	2,193

			3 YEAR
	Committed	Proposed	TOTAL
Horizontal expenditure	3,538	1,808	5,347
Vertical expenditure	471	1,179	1,650
Industry expenditure	4,009	2,987	6,996

NOTES:

> Committed (under contract or out to tender) and proposed expenditure (planned) data are broken out for the first time in this Report.

> Both types of expenditure are included - new build (NB) and capital refurbishment (CR) - see also Table 11.

> Financial years are 1 July to 30 June unless otherwise noted.

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TABLE 4B SUMMARY EXPENDITURE (\$M)

	2013/14	2014/15	2015/16	3 YEAR
Horizontal expenditure	1,864	1,801	1,681	5,347
Vertical expenditure	436	701	521	1,650
Industry expenditure	2,301	2,501	2,193	6,996

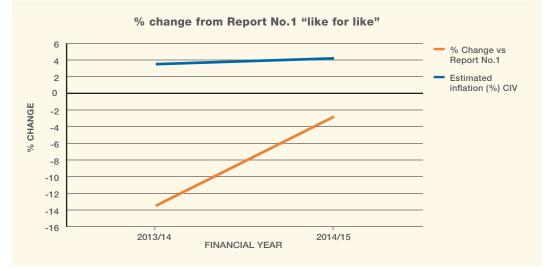
TABLE 5 "LIKE FOR LIKE" EXPENDITURE CHANGES (%) ANDINFLATIONARY PRESSURES (%)

% Change vs. Report No. 1	-13.4%	-2.8%
Estimated Inflation (%) CIV	3.5%	4.2%

NOTE:

• The "like for like" data set has been adjusted by omitting some organisations that supplied data for Report No.3 but not Report No.4.

FIGURE 2 CHANGES BETWEEN REPORT NO.1 AND REPORT NO.4 AND PREDICTED INFLATION



NOTES:

- Report No.4 contains revised data for earlier time periods (i.e., Report No. 3 and new client set therefore Figure 2 is a 'like for like' comparison, baselined in 2012).
- Inflation data is from Statistics NZ, provided through the NZIER forecast in the RLB forecast 69 document.
- > Expenditure is aggregated by the primary sector of the supply organisation.
- Inflation Cost Index Value (CIV) has not been applied to the totals.
- Estimated inflation is derived from CIV and Capital Goods Prices Index Non-Residential Building (CGPI-NRB) data and is given as general estimate only.
- Horizontal and vertical split is derived from analysis of organisations' key construction delivery mode.



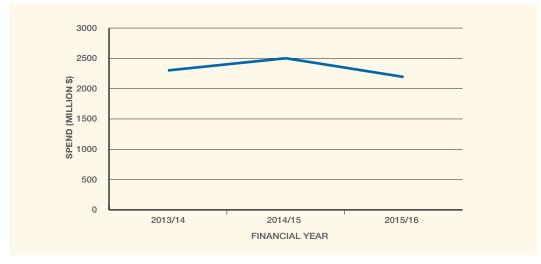
TABLE 6 ORGANISATIONS' TOTAL FORWARD CONSTRUCTIONEXPENDITURE (\$M)

ORGANISATION	EXPE	NDITURE (MILLI	ON \$)	3 YEAR
	2013/14	2014/15	2015/16	TOTAL
Auckland Transport	672	719	654	2,044
NZTA	540	524	402	1,466
Watercare	316	359	428	1,103
Ministry of Education	100	155	133	388
Auckland Council Property	107	167	105	379
University of Auckland	73	160	91	324
Vector	108	96	96	300
Auckland Council Stormwater	80	71	77	227
KiwiRail	152	36	25	213
Dept. of Corrections	43	64	62	169
Counties Manukau DHB	57	35	18	110
NZDF	18	50	10	78
Unitec	14	9	36	59
Waitemata DHB	14	20	14	48
Massey University	5	26	13	44
Remainder of Data Set	3	12	30	45
TOTAL INDUSTRY SPEND	2,301	2,502	2,193	6,996

NOTE:

• Top 15 public sector organisations only shown individually.

FIGURE 3 TOTAL INDUSTRY FORWARD CONSTRUCTION EXPENDITURE



NOTES:

> Transpower and others (outside the Top 15 set as defined by Table 6) were able to provide only one year of data for Report No.3.

• This includes both proposed and committed expenditure.



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Section 2: Supply side review

This Section allows suppliers to review the forward pipeline of work from their own point of view and through the sectors and sub-sectors in which these organisations trade and compete. It is again worth noting the reasons already outlined for the drop in expenditure in 2015/16.



Supply side expenditure is divided into two types – with organisations either being in the vertical or horizontal industry. These are then further divided into trade-specific sectors within each. Historic project expenditure is the basis for this analysis with further work being undertaken to transform the client data provided for this Report into supply side data and split into sub-sectors. They also represent "all up" construction costs – according to Rider Levett Bucknall.

	201	2013/14		2014/15		5/16
	NB	CR	NB	CR	NB	CR
Earthworks & Civils	22	22	27	41	21	27
Structure	25	27	39	37	36	23
Envelope	29	30	50	44	40	29
Finishes	34	52	62	93	52	59
Services	39	76	64	119	56	74
On-Costs and FF&E	36	43	55	71	50	46
TOTAL	186	250	296	405	254	258
YEAR TOTALS	;	436		701		512

TABLE 7 VERTICAL TRADE DIVISION EXPENDITURE (\$M)

NOTES:

"On-costs and FF&E" are defined as furniture, fittings and equipment.

• NB = new build.

• CR = capital refurbishment.

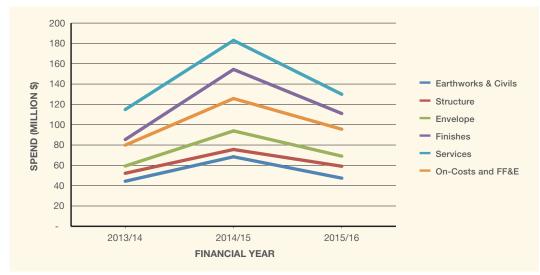


FIGURE 4 VERTICAL TRADE DIVISION EXPENDITURE (\$M)

NOTES:

Trade-specific sectors are noted here as "skill sub-sector" to differentiate them from other use of "Sectors" in this Report.

This graph represents the expenditure in each supply side trade division and is not cumulative.



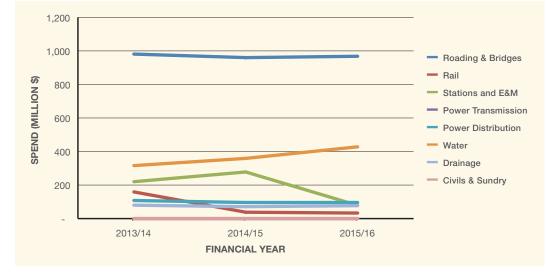
11



	2013/14	2014/15	2015/16		
		MILLION (\$)			
Roading & Bridges	981	960	968		
Rail	159	38	33		
Stations and E&M	220	278	79		
Power Transmission	-	-	-		
Power Distribution	108	96	96		
Water	316	359	428		
Drainage	80	71	77		
Civils & Sundry	-	-	-		
TOTAL	1,864	1,802	1,681		

TABLE 8 HORIZONTAL TRADE DIVISION EXPENDITURE (\$M)

FIGURE 5 HORIZONTAL TRADE DIVISION EXPENDITURE

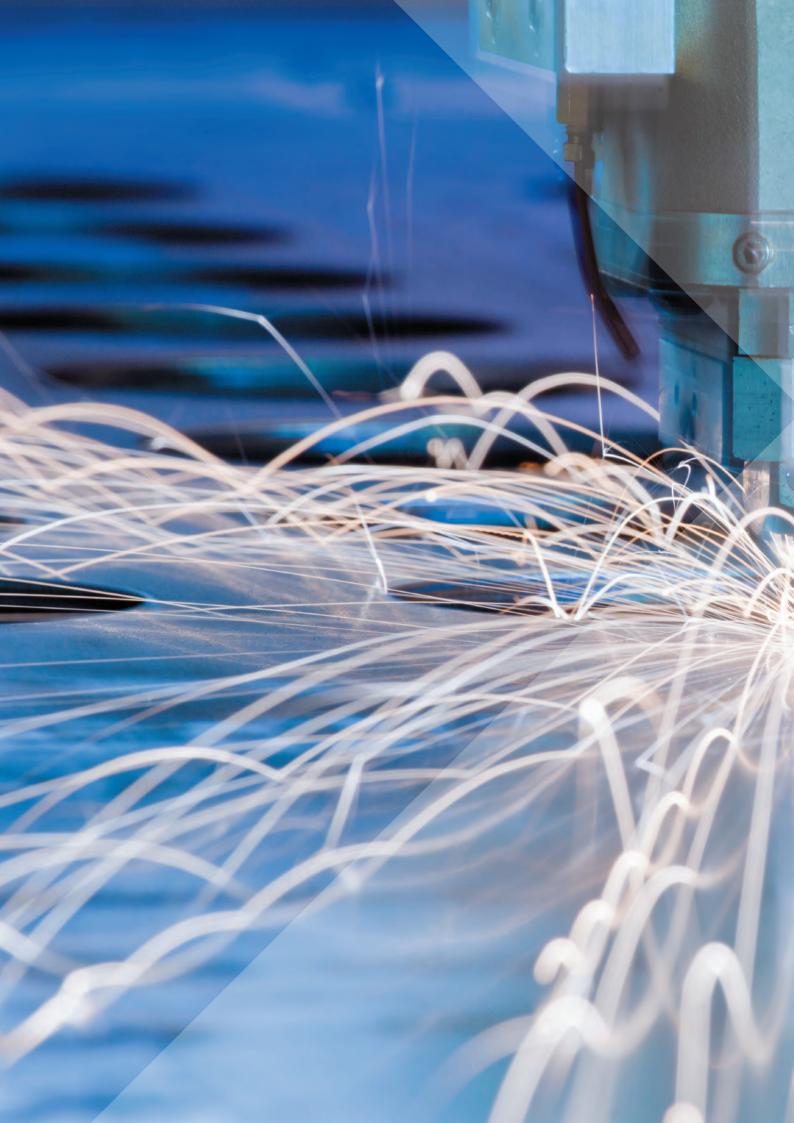


NOTE:

> This graph represents the expenditure in each trade division and is not a cumulative total.



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Section 3: Split by client sectors



TABLE 9 HORIZONTAL SECTOR EXPENDITURE (\$M)

SECTOR	SKILL SUB-SECTOR	2013/14	2014/15	2015/16
		EXPE	NDITURE (MILLI	ION \$)
IT/Telecoms	Buildings	-	-	-
	Civils	-	-	-
	Networks	-	-	-
Power Infrastructure	Generation	-	-	-
	Transmission	-	-	-
	Distribution	108	96	96
Rail	Track & Civils	159	38	33
	Stations, E&M	221	278	79
Roading	Roading & Bridges	981	960	968
Water	Buildings	-	-	-
	Civils	87	77	142
	Networks	309	353	363
Misc.		-	-	-
TOTAL		1,864	1,802	1,681

NOTE:

The power infrastructure sector has provided construction expenditure data but none is committed to changes in the skill sub sector of generation capacity specifically, i.e., for this Report there is no planned construction expenditure provided from these clients.



SECTOR	SKILL SUB-SECTOR	2013/14	2014/15	2015/16	
		EXPENDITURE (MILLION \$)			
Education	Tertiary	92	195	140	
	Primary & Secondary	100	155	133	
Hospitals		71	55	32	
Hotels		-	-	-	
Housing		-	-	-	
Industrial		3	3	1	
Office	High & Mid Rise	3	12	-	
	Low Rise/Campus style	-	-	-	
Retail		-	-	30	
Social, Cultural & Religious		107	167	105	
Misc.		61	114	72	
TOTAL		436	701	512	

TABLE 10 VERTICAL SECTOR EXPENDITURE (\$M)

NOTES:

Client sectors align to Statistics NZ survey sectors (See Table 3).

> Not all client sectors are fully represented in this Report, i.e., other (Housing New Zealand Corporation), power infrastructure & IT/

telecoms.

Includes both committed and proposed expenditure.

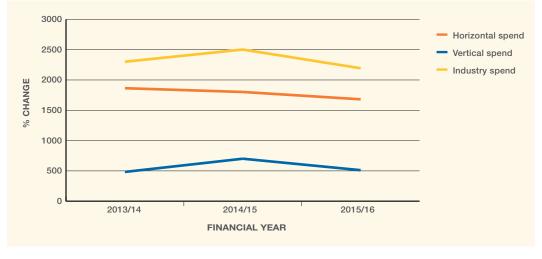
• Skill sub-sector "E & M" = electrical and mechanical construction or fit-out.

• Data will be added over subsequent updates.

* This Report covers only a selection of private sector, SOEs, central government and local authorities.

Report No.4 15

FIGURE 6 THREE YEAR EXPENDITURE PROFILES



NOTES:

> This graph represents the spend in each Trade Division and is not a cumulative total.

• No Transpower data was provided for this report.

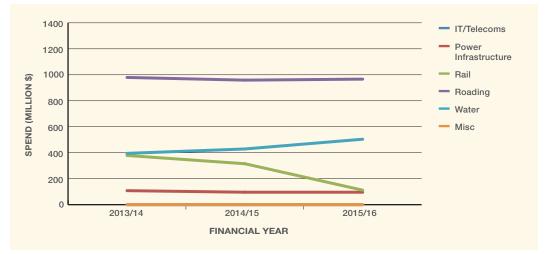
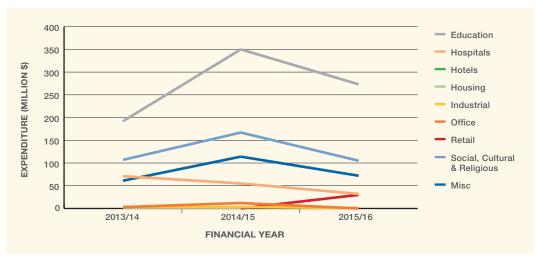


FIGURE 7 HORIZONTAL BREAKDOWNS

FIGURE 8 VERTICAL BREAKDOWNS



NOTES:

• Financial years are 1 July to 30 June, unless otherwise noted.

· Expenditure is split by sector (NZSIC).



Section 4: Changes from Report No.3

These Figures show how clients have changed their expenditure intentions for both committed and proposed expenditure for each sector. They are designed to help the supply side of the industry develop a picture of how sectors are changing as clients review their priorities, and the resultant impact on spending plans and commitments in the shorter term.



FIGURE 9 CHANGES IN EXPECTED SECTOR EXPENDITURE BETWEEN REPORT NO. 3 AND REPORT NO. 4 (3 YEAR TOTAL)

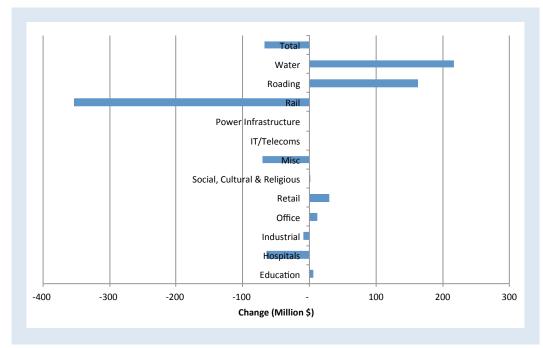
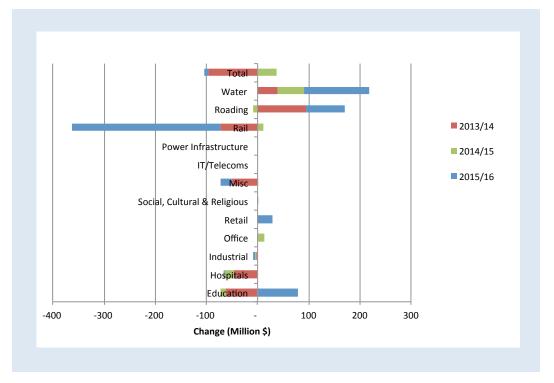




FIGURE 10 YEARLY CHANGES IN EXPECTED SECTOR EXPENDITURE BETWEEN REPORT NO.3 AND REPORT NO.4



NOTE:

>

Figures 9 and 10 show the changes in the expected total spend which occurred after the production of Report No.3. They include committed and proposed expenditure.



Section 5: Split by type of work

The splits in this Table should allow the supply side to review work availability from an organisational basis and, therefore, to review their own fit to that organisation.

MARKET ORGANISATION	201	3/14	201	4/15	201	5/16
	NB TOTAL	CR TOTAL	NB TOTAL	CR TOTAL	NB TOTAL	CR TOTAL
Horizontal Auckland Transport	455	217	499	220	433	220
NZTA	540	-	524	-	402	-
Watercare	316	-	359	-	428	-
Vector	55	53	53	43	53	43
Auckland Council Stormwater	80	-	71	-	77	-
KiwiRail	125	24	10	23	-	24
Transpower	-	-	-	-	-	-
Remainder of Data Set	-	-	-	-	-	-
ertical Ministry of Education	52	48	108	47	95	38
Auckland Council Property	56	51	48	119	25	80
University of Auckland	3	70	20	140	3	88
KiwiRail	-	3	-	3	-	1
Dept. of Corrections	33	10	32	32	55	7
Counties Manukau DHB	12	45	-	35	-	18
NZDF	18	-	50	-	10	-
Unitec	-	14	3	6	19	17
Waitemata DHB	9	5	11	9	6	8
Remainder of Data Set	3	4	24	14	42	2
ΤΟΤΑΙ	1,756	545	1,811	691	1,648	545

TABLE 11 NEW RILLI D AND CADITAL REFURRISHMENT EXPENDITURE (\$M)

NOTES:

 \bullet NB = new build, including capital works, rebuilding and expansion works.

• CR = capital refurbishment, including capital refurbishment of existing facilities, which covers major repairs and upgrades.

Section 6: Client expenditure by project size

The following three pie graphs (Figures 11 to 13) show the percentage split by project size for each year for three sizes of project. As the size of supply-side organisation relates to the size of the project they are able (or want) to take on, data in this Section should allow suppliers to review the availability of work by project size to ascertain a fit with their own delivery capacity. Such data may also be used to review potential market capacity against any growth plans or business development models.

FIGURES 11, 12 AND 13 COMPARISION OF THE RELATIVE SIZE OF PROJECTS FOR EACH OF THE NEXT THREE YEARS

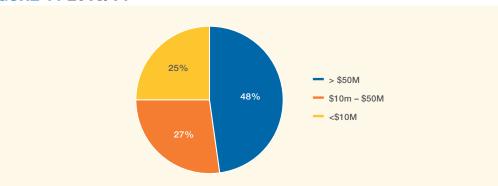


FIGURE 11 2013/14

FIGURE 12 2014/15

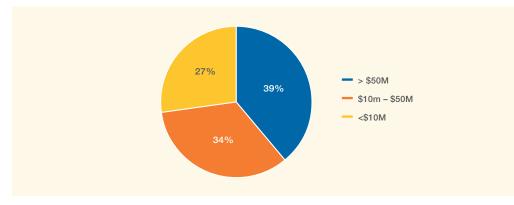
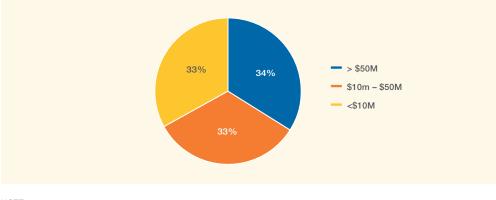


FIGURE 13 2015/16



NOTE: The pie charts do not provide comparative totals between years , i.e., they each are the same size.



Section 7: Client expenditure by region

Table 12 provides insight to the geographical distribution of work around the greater Auckland region. It will be most useful for smaller companies. This Table also provides some insight to which areas could experience the greatest resourcing pressure. The relative mobility of the construction sector and high percentage of spend that can not be attributed to a specific region needs to be noted when reviewing this Table.



TABLE 12 REGIONAL EXPENDITURE

Region	2012/13	2013/14	2014/15		
	EXPE	EXPENDITURE (MILLION \$)			
North and East	708	722	588		
Central and East	289	272	388		
Southern	209	244	148		
Pan Auckland	1.094	1,264	1,069		
Total	2,301	2,502	2,193		

NOTES:

Regional boundaries are defined broadly around the old Council groupings.

Where no specific regional data was given, data is applied to "Pan Auckland".

• Where proposed work extends across regions it is attributed to "Pan Auckland".

• Where organisations only provided high level (annual data) this is included in "Pan Auckland".



Appendix A: Updated extracts from Report No.3



It has come to our attention that there were errors in the data previously supplied and as a result only high level results from Report No.4 were presented to the Auckland Forum Annual Meeting on 27 November 2012. These errors affect both Report No.3 and the high-level results presented, and have now been corrected. As data from a previous Report is always used in the current Report for comparison purposes, this means that such revised data needs be included to be republished.

Table 4 and Table 9 from Report No. 3 have been revised and are published below.

ORGANISATION	EXPE	3 YEAR		
	2013/14	2014/15	2015/16	TOTAL
Auckland Transport	760	708	796	2,264
NZTA	407	514	469	1,390
Watercare	316	326	325	967
Ministry of Educaton	134	157	98	389
Auckland Council Property	107	167	105	379
Vector	108	96	96	300
University of Auckland	70	120	60	250
KiwiRail	154	39	29	222
Dept. of Corrections	43	64	62	169
Stormwater	40	52	54	146
Counties Manukau DHB	57	35	18	110
Waterfront Auckland	54	32	21	107
Auckland DHB	46	18	-	64
AUT	40	22	-	62
Waitemata DHB	14	20	14	48
Remainder of Data Set	47	96	55	198
TOTAL INDUSTRY SPEND	2,397	2,466	2,202	7,065

TABLE 4 ORGANISATIONS' TOTAL EXPENDITURE

NOTES:

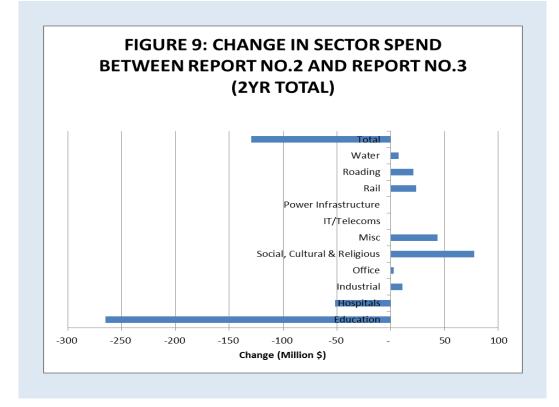
• Table and Figure identifiers refer to Report No.3 only.

Errors in data provided and data entry errors corrected.

• The top 15 public sector organisations only shown.



FIGURE 9 CHANGES IN EXPECTED SECTOR SPEND (2 YEAR TOTAL) BETWEEN REPORT NO.2 AND REPORT NO.3 (2013/14 AND 2014/15)



NOTE:

Figure 9 shows the changes in the capital expenditure which occurred between the publishing of Report No. 2 and Report No. 3. The figures have been normalised to take account of additional organisations providing data to make a "like for like" comparison.

Explanation

Report No.4 now takes account of these revisions.

For the sake of completeness, the changes resulting in Report No.4 were to the headline figures (a slight downward adjustment in overall forward spending), and a re-alignment of the year to year comparisons. These was caused by an error in data provided for both periods from two clients, a number of data entry inaccuracies and the additional correction of two minor arithmetical errors.

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Appendix B: 1st annual data review and discussion



This Report completes the first year of the Forum's operation. This Appendix summarises and comments on emerging patterns, specifically on five subject areas. The first four provide commentary on the findings from the first four Reports, a view of the impact of expected external workloads on the region and a projection of the impact of New Zealand's classic boom and bust construction market on the current market. The final section provides some lead-in thinking on how the Building and Construction Productivity Partnership is developing more co-ordinated information for the sector, including the forthcoming Report No.5 to be published in July 2014.

Reflections – What have the first four Auckland Pipeline Reports told us?

- To date, the public sector spending profile is flat, whilst private sector work has been depressed. Between Report No.1 and 4 nationally the change in public sector expenditure was below 0% in real terms and Statistics NZ national construction figures for 2008 - 2012 show construction growth as around -5% on average (being -23% in total).
- > A number of Ministries have seen expenditure (inside a national capped ceiling) transferred from Auckland to Christchurch - this appears likely to continue for two to three years.
- Some infrastructure expenditure has been moved between modes, causing certain supply side sectors to see significant changes in expenditure.
- > A number of organisations have set local "zero" construction budgets (outside core business activities) either from pressure to meet industry financial performance norms or in expectation of/preparation for an Initial Public Offering (IPO) of shares - this is especially true for some telecom, fibre and power generation organisations.

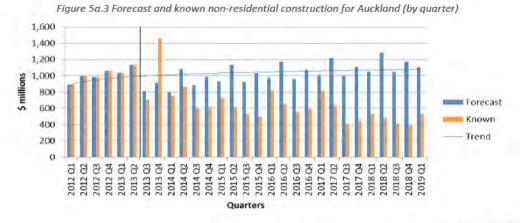
Trends – What can trend analysis tell us for Auckland?

- > Delivery and planning workloads overall, there is room for improvement in this area:
 - A number of clients have struggled to deliver significant parts of their planned portfolios this leaves a 'gap' in the planned supply sides workload. Further details on this will be provided in Report No.5.
 - A number of clients have reduced their construction planning horizons from three to two years, whilst maintaining longer term outlooks. This does not help the supply side to plan, as the longer term outlooks often include unrealisable expectations when compared with the medium term Government financial planning constraints.
- > Future demand
 - Short term two to five years

In the short term New Zealand will enter a boom period, with the industry seeing that the "wall of work" is coming - as reported by both Westpac (Report No.3) and RLB (Report No.4). This is illustrated by the following graph from the Productivity Partnership's National Construction Pipeline Report.



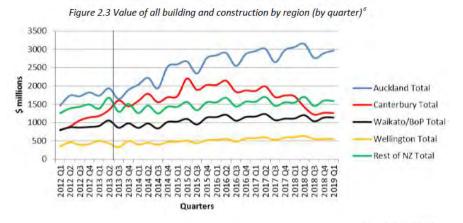




Source: Pacifecon / BRANZ

- Medium term around five years
 - The medium and long term growth projections for Auckland will outstrip the short term Christchurch rebuild "boom" – mainly driven by housing and development work. Below are details published from the National Construction Pipeline Report – this document went on to note that construction activity in Christchurch will peak in 2015 with Auckland peaking in 2016. The expectation now, as reported at the March 2014 Construction Clients' Group meeting in Christchurch, is for both of these peaks to move out at least a year.

VALUE OF ALL BUILDING AND CONSTRUCTION BY REGION (BY QUARTER)



Source: Pacifecon / BRANZ

- Medium term local government revenue is unlikely to grow, whilst expenditure demand is rising and, therefore, general "new build" work will be on a case by case basis for at least five years (except for below) – this is confirmed by medium term Treasury revenue and expenditure forecasts.
- Shifting focus the Auckland Unitary Plan and the Special Housing Areas (SHA) initiatives have focused infrastructure expenditure on quickly delivering land with the necessary consents and related infrastructure for new housing.
- Longer term six years and beyond
 - The prospective "boom and bust" cycle will tail off, although it presently looks like the boom will be longer than the last at around six years in duration.

Impacts of boom and bust cycle

Boom and bust hypothesis

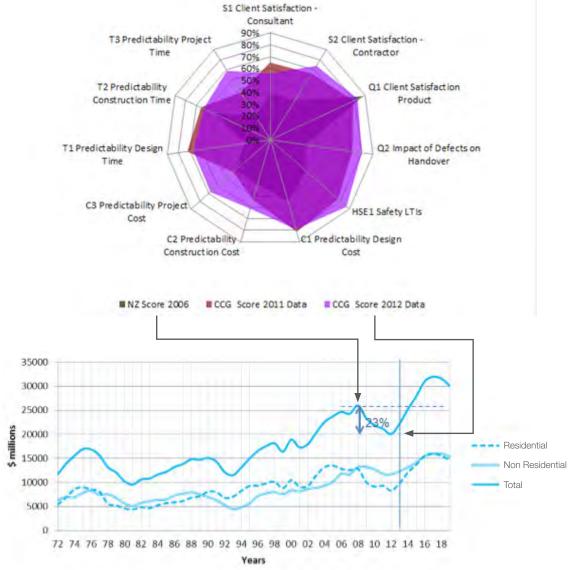
Using the recently published Construction Clients' Group National Key Performance Indicator data, and through reference to previous industry performance models (Dr Neil Allan "the New Zealand construction cycle"*), the Construction Clients' Group is putting forward a boom and bust hypothesis. Specifically that, as the construction sector is about to move into a boom market, this will lead to a significant reduction in performance - especially around quality and timeliness of project delivery - unless client organisations recognise the impacts of the boom and bust cycle and the industry's ability to deliver through that cycle. Recent analysis is provided graphically below and shows:

- > 2006 was a rising (boom) market with poor performance across the KPI suite.
- > 2011 and 2012 were recession years, with constrained spending (bust), and showed marked performance improvement.
- > 2014 16 are expected to see the economic cycle swing to growth with significant construction expenditure, led by Auckland and Christchurch.

The expectation is for unmanaged performance to fall again. Although the supply side may be able to provide elements of the necessary resourcing for the capacity increase for this cycle, the performance of that expanding capacity will need close attention to deliver quality outcomes.



THE CONSTRUCTION CLIENTS' GROUP NZ INDUSTRY RESULTS SET AGAINST THE CHANGE IN THE NATIONAL CONSTRUCTION MARKET



NOTES

NZ industry results 2006, 2011, 2012; % projects scoring

> Data from CCG and Statistics NZ, published in the Productivity Partnership's National Construction Pipeline Report

 Reference: Allan, N. Yin, Y. and Scheepbouwer, E. (2008) Study into the Cyclical Performance of the New Zealand Construction Industry, CAENZ Centre for Advanced Engineering, Christchurch, NZ.

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Nationally – What has been gleaned from the wider picture?

- The committed Christchurch public sector expenditure profile, although only 15% of that expected market, will bring resource and price pressure to the Auckland market, as noted by Westpac and RLB in Reports No.3 and 4 respectively.
- Private sector investment intentions are less well signalled for both Christchurch and Auckland, but it is reasonable to assume significant growth from a low base.
- The housing sector (being ~50% of the Canterbury rebuild and seeing plans for up to 30,000 new consents for Auckland. Source CERA CCDU National Roadshow presentation March 2013 and Auckland Council's Special Housing Accord) is the single biggest resource and price pressure as skills are easily transferred out of the heavier construction sectors into housing. This is also well reported in the National Construction Pipeline Report through work by BRANZ.

Looking forward – How is the Partnership providing co-ordinated information to the sector?

Goals

One of the Productivity Partnership's goals is to align the three current forward workload forecasts (Auckland Pipeline, Christchurch Pipeline and the National Construction Pipeline). This will see all of the reports issued with guidance on how they can be read as a cross referenced and co-ordinated set. A second goal is to review and, if possible, define the relationship between the Productivity Partnership's Pipeline sets and the Treasury's National Infrastructure Unit's Capital Intentions Plan data. Following is a high level overview of the three reports.

PIPELINE	DATA SOURCE(S)	INFORMATION DISPLAYED BY	HORIZON	SCOPE OF DATA	NOT INCLUDED
Auckland	Directly from client organisations	Client sector and supplied side trade sector (major subcontractor level)	3 years – with a desire to raise to 5 years	Govt. Ministries & Depts, SOEs, Councils and CCOs & some larger private sector clients	Housing & private sector developers
National	Spending intentions, project data and forward economic forecasts	Regions and broad categories	5 years	All construction sectors including housing	
Christchurch	Directly from clients, other surveys and sources	Major projects and construction stages	5 years	At present from government and other public sector organisations	Private sector developers

TABLE 15 COMPARISON OF THE THREE REPORTS

The reports can be found at http://buildingvalue.co.nz/publications.



Commentary notes

This review and the views expressed in this Report are based on data supplied, Productivity Partnership sources (Christchurch Forum and the National Construction Pipeline), external information (National Infrastructure Unit data released in February 2014) and, in some areas, anecdotal client and industry feedback.

This review and discussion piece was undertaken by CE (NZ) Ltd.







Appendix C: Background information

AUCKLAND PROCUREMENT PROGRAMME

The Auckland Procurement Programme is part of the Building and Construction Productivity Partnership. The Productivity Partnership is a linking of industry and government, driving key initiatives to address the issue of low productivity in New Zealand's building and construction industry. The Partnership is bringing together high-volume procurers to develop a shared programme of Auckland's capital investment with the Auckland Procurement Programme. It aims to increase construction industry productivity by 20% by 2020. Working with a wide range of stakeholders, the Partnership is acting to bring this idea into reality through the Auckland Procurement Forum.

The Auckland Procurement Forum

The Auckland Procurement Forum is the heart of the Programme, with a three to five year plan to drive more efficient procurement and project delivery working practices.

The Forum consists of 20 plus clients. It was launched by the Minister for Building and Construction, the Hon. Maurice Williamson and Auckland Mayor Len Brown on 5 March 2012. The Forum has confirmed the expected outcomes, reviewed its critical success factors and is now in the delivery phase, producing the Auckland Pipeline Report No.4. This supply side focused review allows businesses to make better long term planning decisions.

The Auckland Procurement Programme has four measured goals:

- 1. Presenting Auckland's forward work programme.
- **2.** Raising efficiency through a modern consenting process, lifting client skills and investment in appropriate new technologies.
- 3. Driving waste from procurement.
- 4. Engaging with industry.

These goals are delivered through the Auckland Procurement Forum and the Auckland Pipeline Report. The Forum will create real value for the supply side through its Workstreams.

FURTHER NOTES ON THE DATA SET

- To be read with the Notes on page 1 and throughout the Report.
- > The data has been reconciled to a Year 0 cost for 2011, no inflation effects included.
- Where practicable, a comparison with existing current and historic data sets provided in cooperation with Statistics NZ will be given in future reports.
- NZTA and Statistics NZ: for the latest Cost Index Values for infrastructure and public transport http://www.nzta.govt.nz/resources/procurement-manual/procurement-tools.html

DATA COLLECTION

Data will be updated on a 6-monthly basis and republished overall annually for the next three years rolling forward.

DISCLAIMER:

While the authors have taken all care in preparing this Report, it should not be relied on as a comprehensive view of future capital investment in the Auckland region. The data provided is for readers' information only and does not constitute a commitment by the persons to which the information relates, or the authors, to the indicated levels of spending. Forecasts are based on data from a limited pool of third party contributors, and will change from time to time after publication of this Report.





