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# THE REVIEW

Our November survey saw a slight tapering in New Zealand's construction sentiment, a trend that was more pronounced in the buildings market, whereas segments of the infrastructure market continued to strengthen.

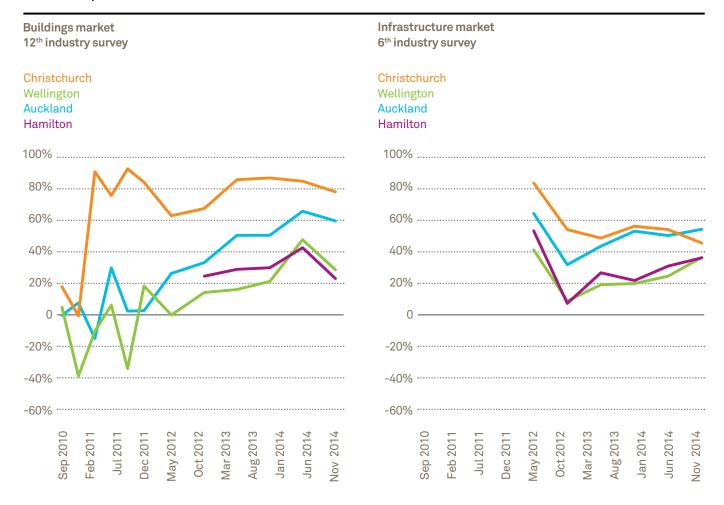
The outlook for the buildings market eased: 52 percent now expect increased investment in buildings over the next 12 months, down from 89 percent in our May 2014 results.

The outlook in infrastructure was steadier with 40 percent of respondents expecting investment levels to rise over the next three years, compared to 56 percent in May. The stability provided by the Central Government election outcome may have helped steady this investment outlook for respondents (who were surveyed post-election). The net workload outlook for infrastructure continued to strengthen in the North Island.

In this report we also examined some of the key elements of Auckland's liveability, such as meeting the housing and transport infrastructure challenges of a growing city. Improving the quality of Auckland's urban intensification would help in the city's housing challenge (according to 81 percent of respondents), while 70 percent would like to see a broader application of user pays as an infrastructure funding mechanism.

In Christchurch, net workload expectations remain high. Those working in the market report rising momentum as the flow of information about projects has helped investment planning. However, there are ongoing concerns about cost escalation as the industry struggles with resource and capacity limitations; 56 percent of respondents now rate this as a key barrier to rebuild progress.

#### Workload expectations trend



Note: Industry sentiment in the buildings market has been surveyed since 2010, while the infrastructure market and the Hamilton region have been tracked since 2012. This chart shows the trend in net workload expectations.

# KEY INDICATORS

WORKLOAD AND INVESTMENT EXPECTATIONS

Infrastructure optimism rises

47%

47 percent expect more infrastructure work across the North Island, compared to 43 percent previously Auckland infrastructure boom

57%

57 percent expect growth in Auckland infrastructure projects over the next three years Buildings outlook more conservative

52%

52 percent expect increased investment in the buildings market over the next 12 months, down from 89 percent six months ago Residential growth continues

58%

58 percent expect to see further uplift in residential development

INDUSTRY SPOTLIGHT

User pays infrastructure gains ground

70%

70 percent of respondents want to see a greater application of user pays as a mechanism for funding Auckland's infrastructure Push for better urban intensification

81%

81 percent of respondents see the quality of urban intensification as key to Auckland's housing challenge Rebuild momentum grows

78%

78 percent of respondents working in the Canterbury market believe the majority of rebuild works will occur in 2016-2017

Public-Private Partnerships value increases

42%

42 percent of respondents now see greater value in PPPs, compared to 33 percent 12 months ago

# INFRASTRUCTURE MARKET

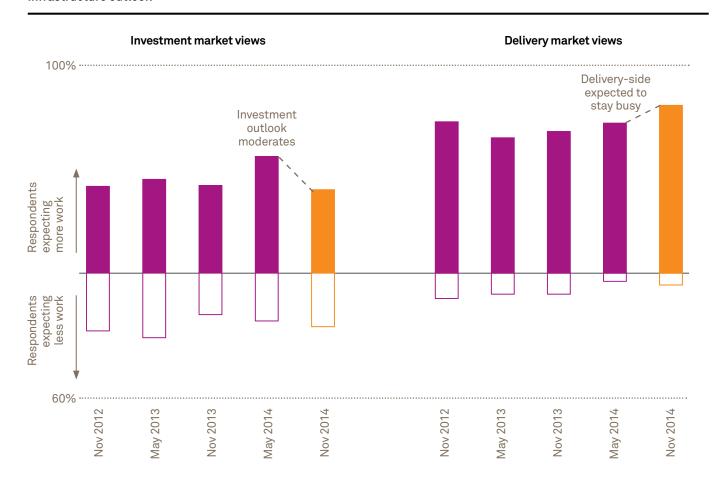
# EXPENDITURE AND WORKLOAD EXPECTATIONS

Parts of the infrastructure market are expecting investment to ease while several major projects get underway.

The investment market outlook moderated slightly following our previous survey's peak of 56 percent of respondents expecting to see an increase in infrastructure spending. Our latest result shows 40 percent expecting an increase in spending over the next three years. This is unsurprising given several recent major investment decisions have already occurred. It may also take some time for the public sector's expenditure constraints to clear after the lead-up to the election.

Optimism continued to grow in the infrastructure delivery market – as this part of the industry expects to remain busy on major projects due to come online in the next few years. The outlook for consultants and contractors in this delivery market continues to inch higher, with 81 percent expecting increased workloads over the next three years, up from 72 percent in our last survey.

#### Infrastructure outlook



Note: These measures of improving or declining expectations represent the proportion of respondent views on market direction – not the actual anticipated change in workloads.

### WORKLOAD BY REGION AND SECTOR

Infrastructure work expectations improved in the North Island, with 47 percent optimistic about workloads, up from 43 percent previously. In the South Island, there was little change in the outlook.

At a national level, there was an upturn in the proportion of respondents anticipating more work in the rail, energy and water sectors; for example 36 percent of respondents expect growth in rail projects, up from 29 percent in our May 2014 survey. Sentiment remains strong in the road sector with 60 percent expecting solid workloads over the next three years.

Less expect to see new work in telecommunications as sentiment in this sector eased by 7 percentage points. The industry does not expect high levels of investment to continue in this sector.

The outlook for Canterbury remained strong, but did ease across most sectors, whereas more improvements were seen in the North Island. Overall, infrastructure sentiment improved in North Island – Central and North Island – Lower. The region around Auckland remains the top pick for infrastructure activity, with 57 percent expecting a rise in infrastructure workloads. This is slightly more optimistic than the workload expectations over the next three years in Canterbury.

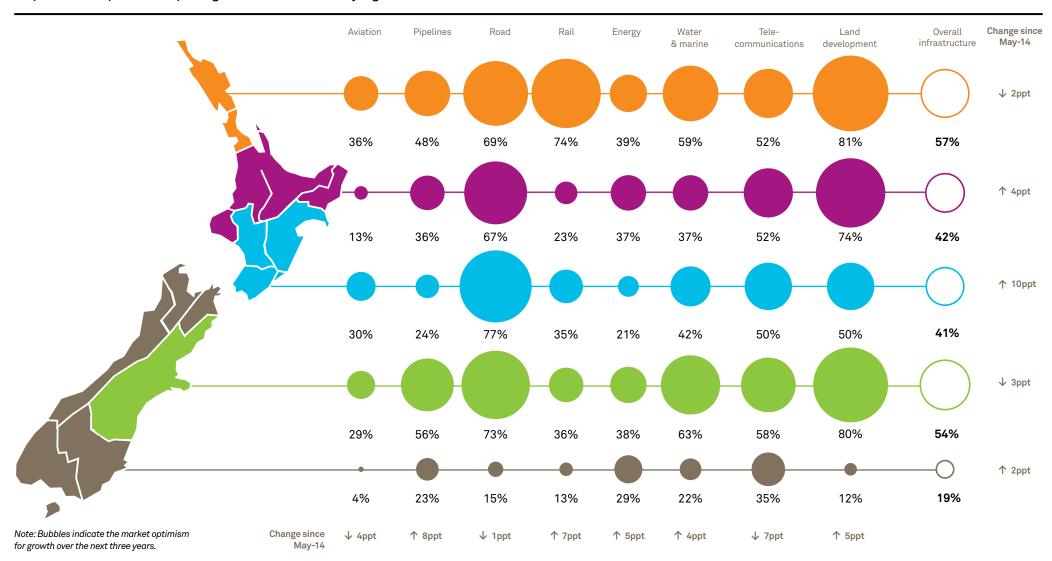
In North Island – Lower, positive sentiment in the water sector increased from 27 to 42 percent of respondents. In North Island – Upper, there was also an upturn in expectations for water sector work, encouraged by a number of relatively large wastewater or other water projects, including improvements in irrigation.

More also expected to see rises in energy sector work for this region surrounding Auckland (39 percent, up from 29 percent) – infrastructure in this area will face increased scrutiny following the extended power outages in early October. Expectations for further land development lifted in North Island – Central and North Island – Lower.

There are signs of general infrastructure investment easing as a result of funding certainty on large projects and the resources to deliver them. In the current environment, investors, including Government, are being cautious about overspending and are more focused on getting the right projects done.

Mike O'Halloran
Director Transportation & Environment, AECOM

# Proportion of respondents expecting increased investment by region



New Zealand Infrastructure and Buildings Construction Sentiment

2H 2014 6

# BUILDINGS MARKET

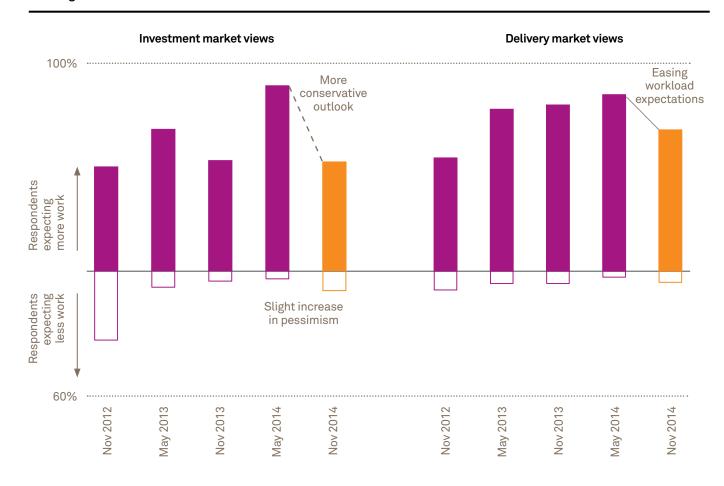
# EXPENDITURE AND WORKLOAD EXPECTATIONS

The buildings market outlook has moderated across the board.

There is a more conservative outlook in the buildings investment space, with 52 percent of developers and Government bodies in this sector expecting rising investment levels over the next 12 months. This follows the considerable jump in optimism that occurred in the May 2014 survey when this figure reached 89 percent of respondents.

Contractors, consultants and others involved in delivering projects in the buildings sector also shifted their expectations: 68 percent are optimistic about their workloads over the next 12 months, compared to 85 percent in our last survey.

#### **Buildings outlook**



Note: These measures of improving or declining expectations represent the proportion of respondent views on market direction – not the actual anticipated change in workloads.

# WORKLOAD BY REGION AND SECTOR

In general, sentiment in the buildings industry has eased. This follows a considerable rise in our previous survey in May 2014.

Education was the only sector where the outlook improved across the nation; 64 percent see increasing workloads in this area, up from 59 percent in our May survey.

There was a notable drop in those expecting to see more work done on existing buildings (54 percent, down from 74 percent), as considerable work in this space continues to move through the pipeline, sentiment has likely reached its peak. The spending outlook for new public sector buildings also dipped from 40 percent in May 2014 to 31 percent this survey.

A slight easing in residential sector optimism occurred across the board, but was most noticeable in the North Island – Lower and South Island regions. Statistics New Zealand building consents indicate that dwelling consents excluding apartments have plateued in recent months, but the number consented in the year to August 2014 was still 17 percent higher than in the previous year. However, it is still one of the top picks for activity in the buildings sector; 58 percent expect to see increased work in this space over the next year (compared to 66 percent previously).

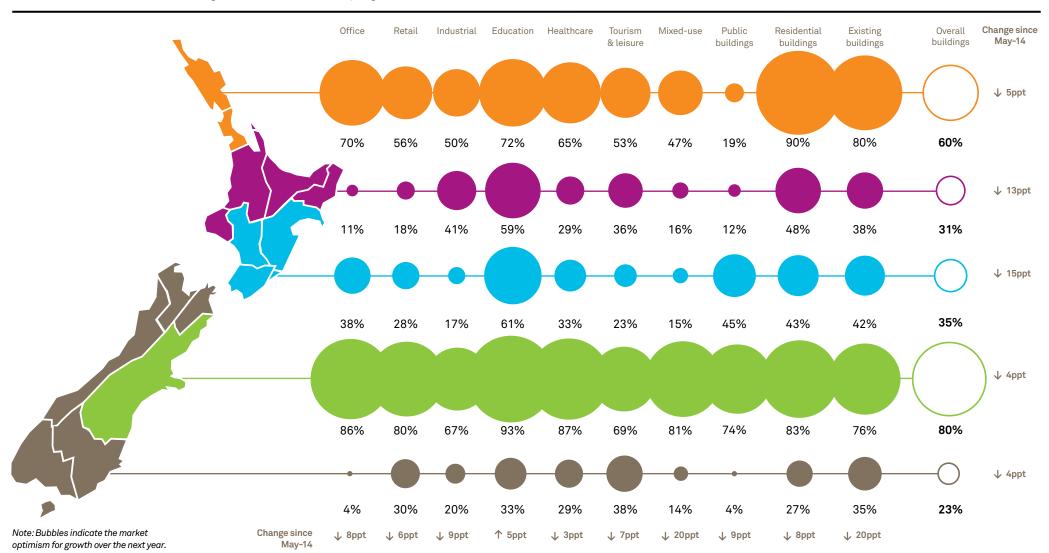
The housing market remains underpinned by strong fundamentals such as fewer Kiwis fleeing the country (departures to Australia were down by 34 percent in the year to September 2014), although housing market policy restrictions may be dampening the outlook for the sector. However, the Reserve Bank of New Zealand notes that the type of people flowing into New Zealand's cities can have a variety of effects on demand: "a large share of the increased arrivals comprises younger working-aged people and people on temporary work visas. These groups may demand less housing than permanent arrivals or families".

In a reversal of the generally downward trend seen elsewhere, in the North Island – Upper, sentiment lifted in the health sector and some parts of commercial.

The easing building workload expectations for both investors and those on the delivery side highlights the market's volatility. The challenge is to create some stability for those on the delivery side to allow them to maintain a sustainable workforce in order to meet investment side demand.

Craig Davidson
Director Buildings + Places, AECOM

# Proportion of respondents expecting increased investment by region



# INDUSTRY SPOTLIGHT

### **FOCUS ON AUCKLAND**

# The Super City's scorecard

It has been four years since the Auckland Super City was formed. How is it performing so far and where does the industry see potential for improvement?

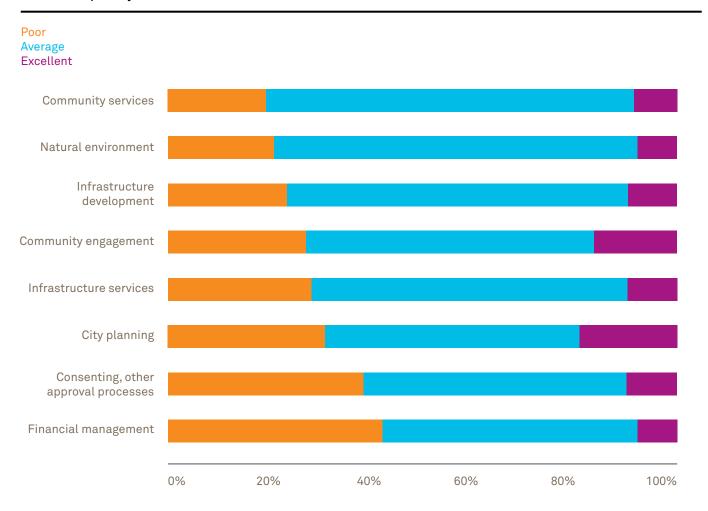
Community services, as well as the city's care for its natural assets rated highly, with close to 80 percent of respondents classifying them as 'Average' to 'Excellent'. Infrastructure development also fared well, a reflection of the range of improvements currently planned or underway in the city.

Financial management and the organisation's approval processes were identified as areas for improvement, with 58 and 62 percent of respondents rating these as 'Average' to 'Excellent' (respectively).

There was some difference of opinion on the topic of city planning. Of all the categories, it garnered the most support in the 'Excellent' rating (19 percent of respondents), however, 31 percent of respondents also rated this area as 'Poor', indicating that the new structure of the city and its approach to planning was working for some parts of the industry more than others.

Some respondents also felt that in some of these categories it was still too early to judge the city's progress properly.

#### **Auckland Super City scorecard**



# Auckland's liveability

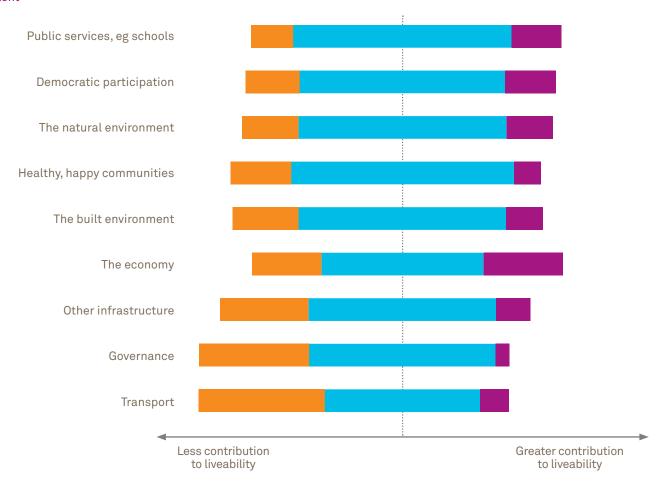
Auckland rates highly on international liveability measures, such as the Economist Intelligence Unit's Global Liveability Index, so we asked the industry for their views on the key components of this.

The city's services such as schools and hospitals scored on the higher end of the scale as liveability factors, with 86 percent classifying these as 'Average' to 'Excellent'. The economy was also seen as making a positive contribution to the city's liveability, with 26 percent of respondents placing it in the 'Excellent' category.

Other elements, such as governance and the city's infrastructure were areas where respondents saw some room for improvement. These results indicate that the major projects planned in Auckland's transport sector are a welcome step in addressing this crucial component of the city's liveability.

# Auckland liveability factor rankings

Poor Average Excellent



#### **Auckland housing**

In recent years, Auckland's housing market has seen considerable price growth and changes in levels of demand. One significant factor is the city's migration patterns; arrivals and departures from the city have changed considerably. For example in the third quarter of 2014, 1,900 Auckland residents left the country, which was 60 percent lower than the peak departure levels in 2012.

We asked government and industry representatives about addressing this changing market and their divergent views were representative of the current public debate on the issue. The key element in meeting Auckland's housing challenge, according to respondents, is to change the market's entire approach to housing. Increasing the quality of urban intensification and ensuring there is greater diversity of housing sizes were identified as the top factors by 81 and 68 percent, respectively.

This sort of shift in the market's mindset takes time to evolve, although there is some evidence of a shift towards greater housing diversity. Apartment consents have more than doubled in the year to August (reaching 3,157) compared to the annual average for the previous five years.

Secondary to this shift in thinking was fixing the processes surrounding the supply of housing stock, then finally intervene in the market if necessary. For example, some thought first homebuyers should be assisted (40 percent of respondents) and a smaller proportion thought there should be restrictions to foreign ownership (31 percent). Others believe buyer assistance will only further inflate house prices: "Capital gains tax and restrictions on foreign investment would work on supressing demand. Proposed assistance packages are a subsidy to demand that will in the long run increase prices".

Other ideas respondents offered to help deliver more affordable housing in Auckland included:

- proper government plans for intensification with targets
- revolutionising housing aspirations through better design
- curtailing construction costs and increasing market competition
- having sufficient resource and labour capacity to build enough housing to meet demand
- improving public transport and encouraging geographically diverse job creation.

Respondents also commented on how current policy measures were helping meet the housing challenge. Many felt that the loan-to-value ratio (LVR) restrictions had worked in some respects but were only a temporary market dampener: "LVRs just delaying the inevitable – first home buyers may wait a little longer, but will still be looking as soon as they get more equity, or can borrow".

Some respondents also cautioned against the consequences of LVR restrictions on some markets where house price escalation was not such a problem. "Out of Auckland areas, say Waikato/Bay of Plenty, have not had increases in house prices at the same rate and increasing interest rates and LRV restrictions have put unnecessary pressure on already stretched household budgets."

The Special Housing Areas (SHA) are seen to offer greater potential but require a more refined approach, and will only ever appeal to some parts of the market. "SHAs suffer from poor levels of amenity: e.g. schools, shops, public transport... therefore fail as a long term sustainable solution" and they "help to focus effort and resources but the areas being designated need further analysis with more emphasis on infrastructure".

# Key factors to help meet Auckland's housing challenge



#### Auckland's infrastructure prioritisation and funding

Another significant challenge for Auckland is funding and developing sufficient infrastructure for the city as it evolves. But how can industry, governments and the community work together to make the right decisions on how this happens?

Overall, 61 percent of respondents considered the decision-making process for infrastructure priorities to be moderately to extremely effective. Some respondents felt that the current process was too dominated by government agendas and that more work should be done to resolve sometimes conflicting viewpoints: "influence should be evidence based, not ideological" and that "good leadership would bring the community along for the ride to a better city".

Almost half of respondents (44 percent) believe the community only has a low level of input on infrastructure priorities. Several called for a greater balance between industry and business inputs, levels of government and community views.

Some respondents suggested that infrastructure decisions could be improved by "more involvement of industry at an early stage to address supply chain

issues". Another cautioned against current practices where "economic evaluation is cast aside when it gives the 'wrong' answer...don't elevate a strategic overlay above empirical factors to support your own project and discredit others".

Shifts in funding approaches would also help the city meet its infrastructure needs. User pays as a means of funding Auckland's infrastructure requirements was the top choice among respondents with an overwhelming majority wanting to see a broader application of this (70 percent). Another popular approach was private sector involvement, with 80 percent of respondents wanting to see more of this.

Several respondents believe that the council should sell underperforming assets rather than continue to raise rates. However, another 22 percent of respondents wanted to see less asset sales to fund the city's infrastructure needs.

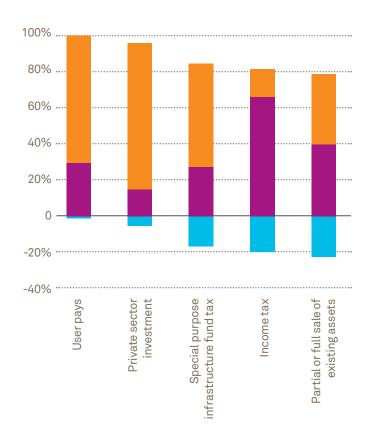
This discussion around funding Auckland's transport infrastructure is expected to continue following the release of the Independent Advisory Board's report, Funding Auckland's Transport Future, (commissioned by Auckland Council) which considers the introduction of network charges on the city's motorways in order to mitigate an estimated \$12 billion transport funding shortfall.

In Auckland's quest to become the most liveable city, emphasis must be placed on the ability of our community's infrastructure to meet growing demand. We must maintain the momentum Auckland Council has created and invest in the dependability and resilience of critical services.

John Bridgman
Managing Director, AECOM New Zealand

#### Funding Auckland's infrastructure

Respondents wanting more of this funding Respondents wanting similar levels of funding Respondents wanting less of this funding



# **CANTERBURY UPDATE**

#### Rebuild momentum grows

Those working in the Canterbury market are now more optimistic that the majority of rebuild works will occur in 2016-2017 – 78 percent nominated this period in our November survey, compared to 62 percent in May 2014. This reflects a recognition that the industry has started to get busier and that, by necessity, the rebuild needs to be a slow burn rather than a peak.

Recent monthly consented works figures from Statistics New Zealand support this view. Across the three months to July 2014, the value of earthquake-related consents reached a record high, exceeding \$320 million worth of work in this period. Over 780 residential consents and 63 non-residential project consents were processed in this time.

This momentum has been helped by the industry and government bodies working together to combat several of the key impediments identified early on in the rebuild process. A comparison of the results from our current survey with those from a year ago highlights a few of these areas.

Over the year, significant progress has been made on key factors, such as improving the flow of information about projects to assist with investment planning and resource provision and easing of delays caused by regulatory impediments. Concerns about increasing costs, however, have grown in prominence as the industry continues to struggle with resource and capacity limitations; 56 percent of respondents now rate this as a key barrier to rebuild progress.

#### Top factors slowing the pace of the rebuild



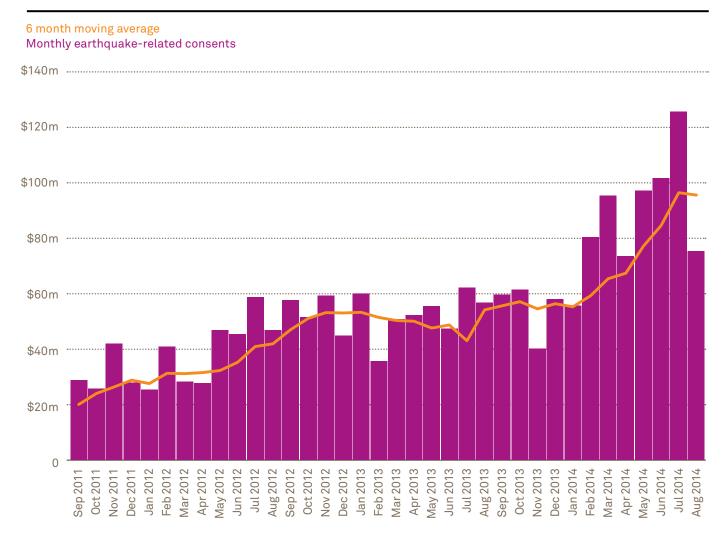
Skills shortages are evident across construction, consultants and client-side, while increasing pressure on material supply is creating longer lead times. Investors involved in significant portfolios of work need to ensure they programme these carefully to minimise the impact of these challenges on cost escalation. New entrants to the market will only be successful if they can solve these labour and material shortages and not rely on existing resources.

Trevor Hipkins

New Zealand Lead – Programme, Cost, Consultancy,

Davis Langdon, an AECOM company

#### Earthquake-related consents



Source: Statistics New Zealand

### Rebuild competition and cost

As mentioned previously, cost is currently a key issue for the rebuild. In Canterbury, many have already seen costs rising, but over the next three years even more expect to see price hikes. A majority of respondents (58 percent) expect annual increases in labour costs of more than 5 percent over the next three years.

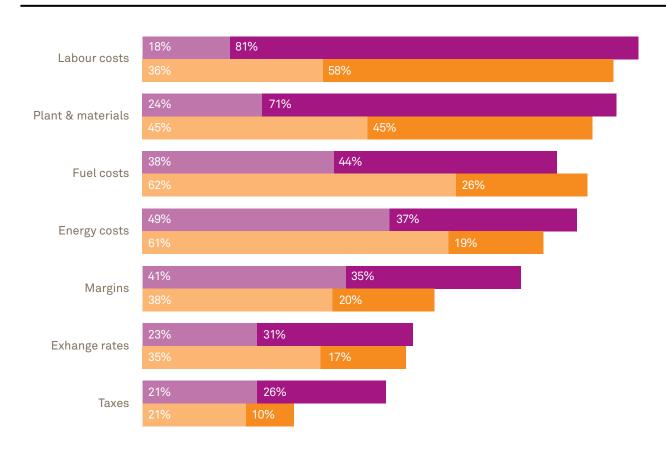
In all instances, the severity of cost hikes anticipated by respondents has eased compared to the industry view in November 2013 – that is, the proportion expecting price hikes greater than 5 percent has reduced. However, a slightly larger proportion of respondents are worried about rising fuel costs than there were one year ago.

In Christchurch, we must remain focused on quality, as this will be the lasting legacy of the city. As our new city takes shape, it must be built with resilience and longevity in mind.

#### Shaun Hubbard

Regional Manager, South Island, AECOM

### Canterbury rebuild cost pressures outlook



November 13: Increase by up to 5%

November 14: Increase by up to 5%
November 14: Increase > 5%

November 13: Increase > 5% November

Note: Figures indicate the proportion of respondents expecting cost increases over the next three years.

#### Rebuild challenges and lessons

Respondents shared several ideas about how to enable a more successful rebuild process, and also reported on how their businesses have been affected by some of the challenges so far.

It is worth noting that in our previous two surveys, the need for a single, coordinated vision was very prominent in respondent discussions of the rebuild, however, in this case the focus has shifted towards getting the delivery right as industry momentum has improved.

One of the key challenges for the industry was "deciding on acceptable risk" and many emphasised the need to get the right advice early on and programme carefully. This was also an important step in efforts to mitigate increasing cost escalation.

Others felt that "a critical mass of completed public projects" was holding back private developers: "the business case does not stack up... it requires Government projects to get underway". There were also ongoing concerns about delays related to "insurance companies dragging the chain".

Taking the time to get a project right in the initial stages was important to many industry participants. Several recommended that "effort should be spent in achieving good design and urban planning before ripping into sub-standard or ill-conceived developments". Another cautioned: "do not panic into design and construct contracts – tender to market and do not believe that sole source 'mates' are the answer".

Quality and longevity should be the key aims in design, and a repeat of past mistakes needs to be avoided. One respondent linked the poor quality of some housing stock with the extent of damage it incurred: "why should earthquake insurance cover house damage that is the result of shoddy foundation construction?"

While acknowledging the considerable efforts so far to improve programme transparency, several respondents hoped more could be done in this area: "some improvements that could be made... we find tendering resources a considerable barrier and having visibility would mean we could plan more effectively".

As in our May 2014 survey, respondents continued to point to the benefits of early and comprehensive stakeholder involvement: "Coordinated cohesive collaborative procurement approaches along the likes of Early Contractor Involvement will out-strip silo procurement in terms of efficiency and value for money every time".

In contrast to those stressing a slow and steady approach, were those who called for more expedient progress. The realities of life on the ground mean that some need solutions faster than others, particularly in the residential sector where "people are suffering with high rents, high build costs... need high level agreement for kit set homes to be built outside Christchurch and shipped in".

Others believed that the industry should be looking beyond the idea of a rebuild, and should instead be considering the complexities of building a whole new town: "Christchurch is not rebuilding — it is building a new city. Some companies that were in the city will never go back and have established themselves in the suburbs."

#### Towards a successful rebuild

Early planning (2)
Government facilitation (4)
Insurance resolution (4)
Be open to new procurement approaches (N/A)
Manage and communicate timelines (5)
A decisive, expedient approach (N/A)

Note: Previous rankings for ongoing issues are listed in brackets.

# NATIONWIDE INDUSTRY CHALLENGES

Beyond the issues faced in Auckland and Canterbury, there are also a broader set of challenges facing the industry in the medium term.

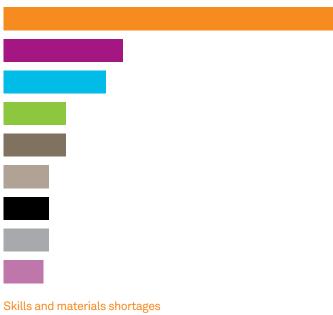
A shortage of skilled labour to cater for the expected increase in work remained the top concern; this was identified by 39 percent of respondents. Labour supply to deliver the work was not just about the volume of work coming online, there were also concerns about an ageing workforce and finding the right replacements. One respondent pointed out the challenge of simultaneous need for "earthworks skills given the challenges ahead with Transmission Gully, Huntly and Warkworth to Puhoi".

Subsequent cost escalation – caused by rising demand for labour and materials – was also mentioned by several respondents (14 percent). This would make it difficult to "keep construction cost increases in line with rental increases... to encourage investment by property

investors". Several respondents were also worried about competition levels in the market, such as "unrealistic terms" being agreed to on projects by contractors and consultants desperate to win work. In other cases a lack of competition was the problem, including unsustainable margins and "parochial thinking" that sought to exclude new market entrants. There were also concerns about the parallel demands for resources to work on projects in Auckland as well as Christchurch, a significant challenge for major project planning in both cities.

Local companies lacking the "confidence to grow their business" would also have flow-on effects across several sectors. Another respondent was concerned about inflated markets in Auckland and Christchurch affecting other regions that may still be struggling, making it harder to get jobs off the ground in those areas. Participants stressed the need for New Zealand to diversify its economy "beyond the primary sector" and the reliance on a few major projects for jobs.

# Top industry challenges



Skills and materials shortages
Cost escalation
Governance and regulations
Not enough, or too much, competition
Funding
Global market conditions

Quality

Poor procurement
Business conditions

### **PROCUREMENT**

The industry continues to aspire to better project delivery and a key element of that is a tailored approach to procurement. Comparing our results from this survey to the same period last year indicates a few slight shifts in industry views.

Partnerships are the top choice for respondents (55 percent of respondents believe these offer greater value for money), while Management Contracting is not viewed as favourably by industry participants.

The view on Public-Private Partnerships (PPP) has improved compared to this time last year – 42 percent now see greater value for money, compared to 33 percent of industry participants 12 months ago. This approach to projects is gaining momentum as it becomes relevant across multiple sectors such as roads and social infrastructure facilities. These agreements offer several benefits, such as by implementing measurable performance standards across the life of an asset.

While the delivery market saw better value in Negotiated Contracts (71 percent), the investment market rated Closed Tendering highly in terms of value for money and on issues of quality control and other risks. This method of tendering was classified by 68 percent in the investment market as above average value. This may be due to the fact that providers who compete on these tenders have detailed knowledge of the developer or owner's organisation and a high level of expertise related to the project requirements.

In recent contract negotiations, many respondents have observed a shift in risk from clients to contractors, particularly due to the increase in design-build projects. In the current high volumes of residential construction (including the rebuild), "the traditional lump sum contract where the risk is transferred to the contractor remains prevalent", however, in complex projects there is "a move towards the Alliance modelling with Negotiated Contracts that share risk". Some respondents also called for "a more co-ordinated approach to risk similar to NEC3".

Others observed that, in general, there is an increased awareness of risk allocation, particularly due to a more litigious environment, and following cases involving significant consequences: "recognising the cost of risk so that it can be quantified for all parties".

Respondents also noted other pitfalls associated with current procurement processes, including:

- "not enough quality contractors"
- "old problem of investors wanting certainty of costs without committing to time and cost of detailed proposals"
- "little innovation shown by D&C contractors as there aren't enough incentives"
- "limited appetite to adopt overseas procurement methods for fear of probity issues"
- "too many projects are put out for pricing and don't proceed".

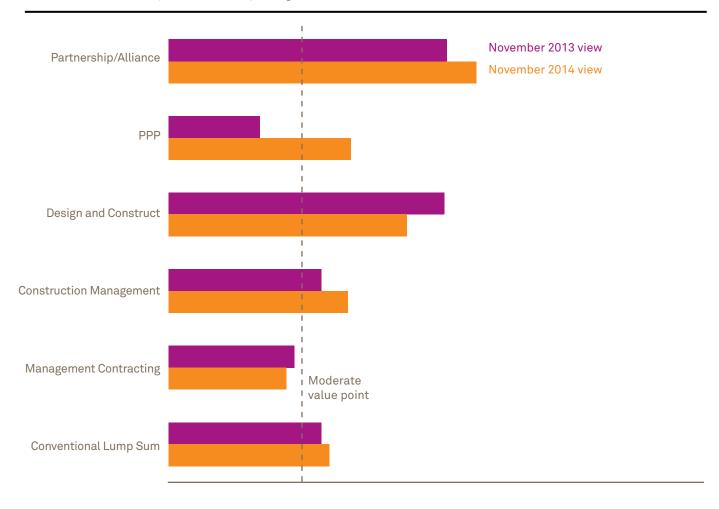


42 percent now believe PPPs offer greater value for money

As an industry we could learn more from procurement methods adopted overseas; while not necessarily better, they do offer valuable insights. Traditional tendering in a relatively small market can be inefficient. New Zealand's industry could benefit from a shift in mind-set from winning the next commission to delivering more efficiently. Competitive tendering on lowest price is a zero-sum game at best.

Geoff Milsom
Director Water & Infrastructure Services, AECOM

# Procurement methods by value for money rating



### RESILIENCE AND SUSTAINABILITY

Examining the industry's views on how resilience and sustainability are considered in project investments demonstrates little change in respondent perceptions. Often it takes a significant shift to sway thinking in this area, or alternatively, these considerations can become so ingrained in practice and 'business as usual' that they become 'invisible' – as one respondent pointed out "credentials in terms of environmental protection are the norm and not an exception".

Since our survey in November 2013, there has been a slight gain in the level of consideration of technical failure, driven by heightened risk sensitivity and following recent infrastructure failures. In contrast, consideration of climate impacts during asset investment planning was rated lower by respondents compared to this time last year (26 percent of respondents believe it is not considered at all).

Views on natural disasters indicated marginally more disagreement. Both ends of the rating scale increased – those who see this as a prominent concern in asset planning and those who see little evidence of this.

Several respondents felt that the strongest current driver was financial return rather than a sense of sustainability, except these issues were still very real for "clients who take a long term view" and those that realise resources are becoming scarcer.

Beyond the efforts that have been incorporated into business as usual practices, industry participants expressed further concerns. There is a need to consider "alternative supply for critical services" that includes "planning for population growth over the long term", also accelerate action by improving the business case for seismic resilience for example, through "lower council rates or insurance costs".

As we continue to examine ways to achieve 'more for less', the challenge we face is to determine how much we need to invest in safeguarding infrastructure against something which may not happen in our lifetime.

Ian Martin Regional Manager Wellington, AECOM



26 percent of respondents believe changing climate impacts are not considered at all in investment planning

# Consideration of resilience in buildings and infrastructure investment planning

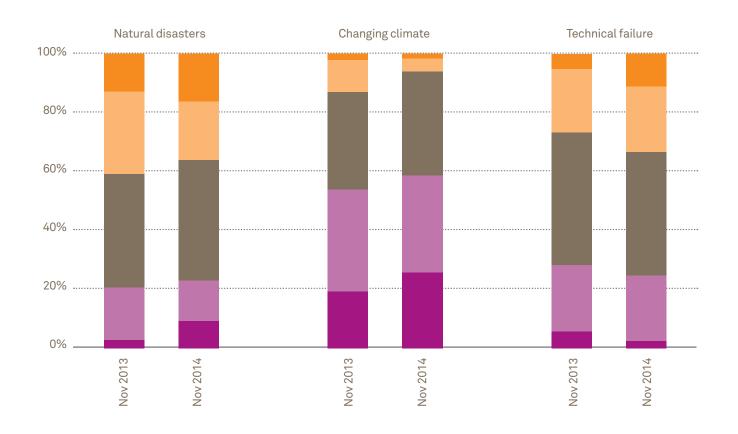
Considered to a great extent

>>>

Considered to a moderate extent

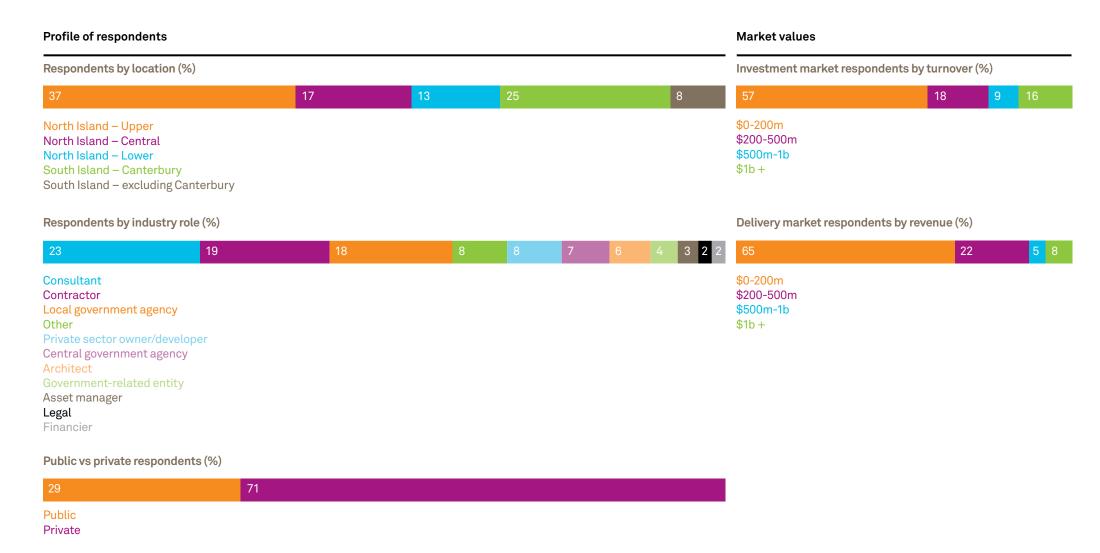
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Not considered at all



# SURVEY SAMPLE – A BROAD VIEW

Survey participants are selected based on their role in the industry. Leading thinkers and decision makers are selected from the buildings and infrastructure markets.



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