## AECOM

# Sentiment Infrastructure and Buildings Inthis ISSUE

### ASTRUCTURE AND BUILDINGS CONSTRUCTION SURVEY NEW ZEALAND 1ST HALF 2015

IN THIS ISSUE What are the country's biggest challenges? How does the Super City scorecard rate? Is the rebuild on track? How is sustainability prior tised? AECOM has compiled the information in this document from a number of sources. AECOM has not verified that such information is correct, accurate or complete. Whilst every care has been taken in the preparation of this document, AECOM makes no representation or warranty as to the accuracy or completeness of any statement in it including, without limitation, any forecasts. Historical trends are not necessarily a reliable indicator for actual future performance. AECOM accepts no liability or responsibility to any party in respect of this document. This document has been prepared for the purpose of providing general information, without taking account of any particular person's objectives, situation or needs. You should seek professional advice having regard to your own objectives, situation and needs before taking any action.

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# THE REVIEW

After a long period of stability, our May survey saw a tapering of industry confidence within the infrastructure market, while optimism lifted slightly in the buildings market.

The outlook within the infrastructure market has dipped in all geographies; 36 percent of respondents now expect increased workload, down from a peak of 46 percent six months ago. This shift in sentiment is most noticeable in Christchurch, which is down 27 percentage points in the past year and a half. The reduction in SCIRT's rebuild activity is likely to be a significant contributor to the change.

Those who took part in our latest six monthly Sentiment survey believed building activity would improve in Auckland, Hamilton and Wellington over the next year. The positive outlook in Auckland continues a growth trend; with 61 percent of respondents anticipating workload will increase, 11 percent shy of the expectation in Christchurch. This optimism is likely a result of ongoing investment in both buildings and infrastructure, triggered by high immigration rates and demand for housing. While the Garden City is still expected to have the biggest workload growth, at 72 percent, fewer respondents held the same level of optimism for Christchurch, compared to results from our survey six months ago. This downwards trend has industry optimism tapering off as the rebuild programme continues and anchor projects get underway or completed.

While providing an overview of industry optimism by region, sector and market type, Sentiment addresses the country's big issues. The report examines significant industry challenges and how issues like resilience, sustainability and procurement are perceived.

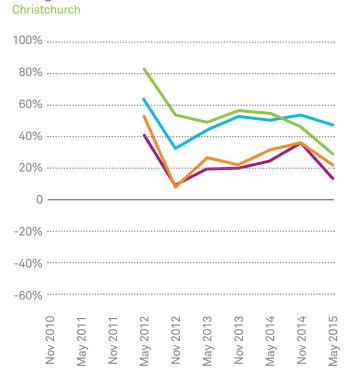
#### Workload expectations trend

**INFRASTRUCTURE MARKET** 7<sup>th</sup> industry survey

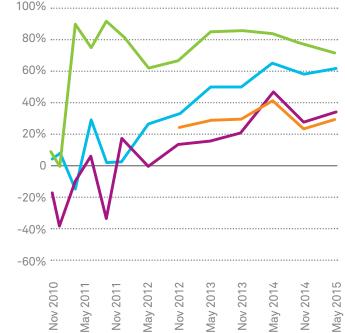
Auckland

Hamilton

Wellington



### BUILDINGS MARKET 13<sup>th</sup> industry survey Auckland Hamilton Wellington Christchurch



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.

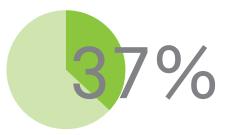
#### Key Indicators 2

# **KEY INDICATORS**

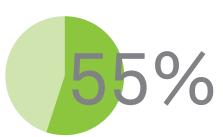
### WORKLOAD AND INVESTMENT EXPECTATIONS

Infrastructure optimism easing

Auckland infrastructure outlook stable



37 percent expect more infrastructure work across the North Island, compared to 47 percent previously



55 percent expect growth in Auckland infrastructure projects over the next 3 years, consistent with the 57 percent obtained in November 2014



Building investment on upward trend

59 percent expect increased investment in the buildings market over the next 12 months, up from 52 percent six months ago

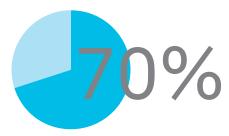
Residential sector positive



57 percent expect to see further uplift in residential development, similar to 58 percent previously

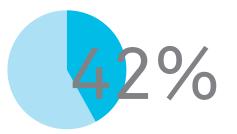
### **INDUSTRY SPOTLIGHT**

User pays funding choice popular



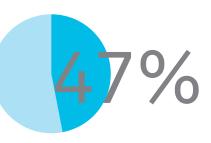
70 percent want to see a greater application of user pays as a mechanism for funding Auckland's infrastructure

Skills and materials shortage still biggest challenge



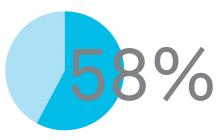
42 percent identified skills and materials shortages as the main challenge for the industry, up two points from the result obtained last year

#### Value seen in Public-Private Partnership



47 percent now see greater value in PPPs. This is a progressive trend upwards, from 33 percent 18 months ago

Significant rise in Natural Disaster planning



58 percent feel that there is significant consideration of natural disasters for infrastructure investment planning, compared to only 36 percent six months ago

# **INFRASTRUCTURE MARKET**

# EXPENDITURE AND WORKLOAD EXPECTATIONS

Expectations for investment remain relatively stable, while the views of contractors and consultants working in the delivery market have moderated.

The perception of a strengthening investment market continues to hold with 42 percent of respondents expecting growth. The Government's approach to infrastructure investment could be attributed to this outlook, as it sends positive signals of its support for continued investment as a mechanism for strong economic growth.

But while the number of optimistic respondents is up 2 percentage points from six months ago, there remains a significant proportion of respondents on the investment side who are expecting to see an overall reduction in spending. This pessimism remains, despite significant Private Sector investment in various projects around the country, including airports and ports. Optimism in the delivery market has eased, with 69 percent of respondents expecting an increase, compared to a peak of 81 percent six months ago. Outlook remains strong overall, with expectations of an increasing workload continuing to trend upward.

This positive growth expectation in the delivery market continues to strengthen at a faster pace relative to growth expectations in the investment market. While the delivery of large infrastructure projects, like Transmission Gully and the Waterview Connection, requires a high level of staff resourcing, those organisations not involved in the delivery of big projects may be facing increased competition on smaller projects.

The continued disconnect between the delivery and the investment sides of the market may produce an unwelcome knock on effect; lower quality, less innovation and higher whole-of-life costs, could result if unsustainably low pricing is used to capture market share. "The local Energy sector is facing stagnation, with demand remaining flat over the last few years. Whilst some indicators suggest future growth, this has not been sufficient to stimulate new Generation developments. Despite this, the workforce continues to strengthen as demand remains high for New Zealand's expertise offshore. The Government's investment in global profiling to further leverage this capability will likely see a further boost to the industry."

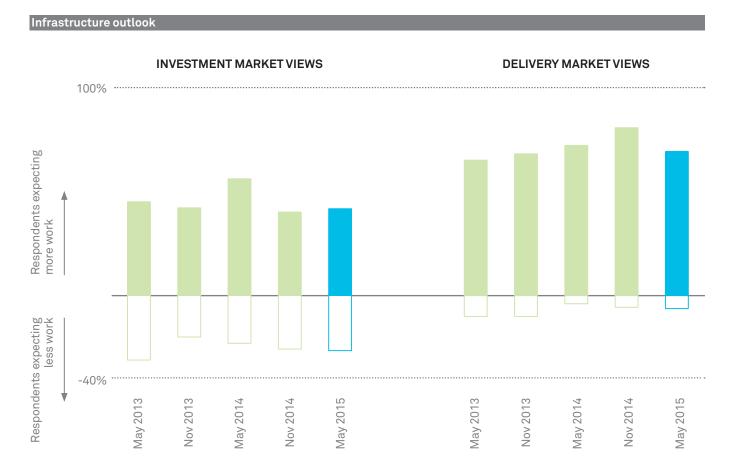


Anant Prakash Group Director – Energy AFCOM

"The challenge for industry is to continue providing high quality services in response to Government investment in the roading sector, that also meet expectations for value. This will ensure continued opportunities for investment in these services, as sector competition for state-funded projects increases. The significant urban growth expectations in the Auckland region will compound these factors."



Mike O'Halloran Group Director – Transportation AECOM



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

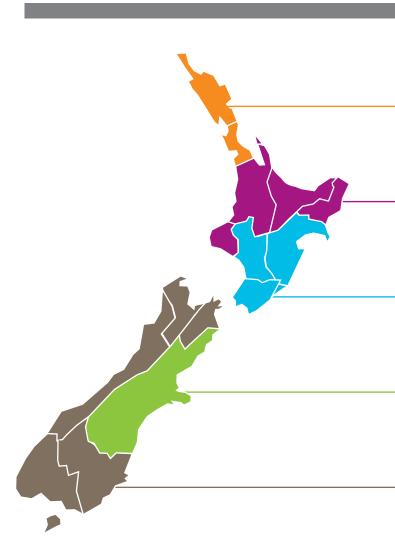
There has been a substantial easing of infrastructure work expectations, with optimism of those working in the North Island dropping by 10 percentage points, to 40 percent. The outlook has also softened for the South Island, particularly in the Canterbury region, which has seen a drop of 15 percentage points of respondents expecting an increase in workload. This reflects recognition of a longer, slower rebuild, rather than a peak.

At a national level, strong growth is expected in both Road and Land Development, with more than 50 percent of all respondents anticipating growth across the country. This positive outlook has trended consistently over the past year and reflects the emphasis by Central Government on the Roads of National Significance. Planning and design is well underway for many Auckland and Waikato projects, including the Waikato Expressway. While in the South, the Christchurch Motorways have commenced construction. The outlook for Land Development is particularly positive in the Upper North Island where 94 percent of all respondents anticipate an increase in workload. This positive sentiment reflects the increasing population, strong economic growth and both residential and commercial development in Auckland.

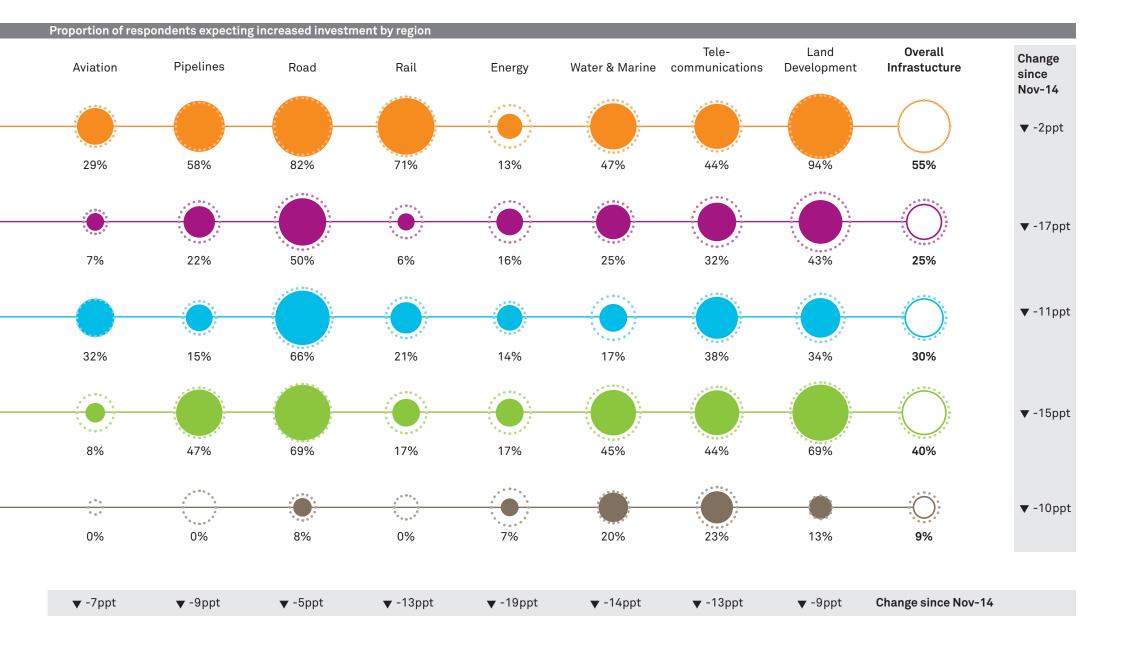
The Energy sector has seen a decline in optimism for the anticipated workflow over the next three years, dropping by nearly 20 percentage points. Just 13 percent of respondents are expecting growth compared to 33 percent six months ago.

Fewer respondents expect to see new work in either Water & Marine or Telecommunications, with both sectors moderating since our last survey in November. The industry does not expect recent high levels of investment in these areas to continue.

Growth expectations for the Rail sector have dropped significantly with the exception of Auckland where 71 percent of respondents expect an increased level of investment. While there are few Rail projects in the pipeline nationally, a \$400 million dollar boost announced for KiwiRail's turnaround plan could see optimism boosted in the future.



Note: Bubbles on page 6 indicate the market optimism for growth over the next year. Dotted lines indicate the November 2014 results.



# **BUILDINGS MARKET**

# EXPENDITURE AND WORKLOAD EXPECTATIONS

Overall, optimism in both the investment and delivery space of the buildings market remains positive.

59 percent of respondents have a positive outlook for investment expectations, up 7 percentage points on our last survey. They remain moderate compared to May 2014, when there was a spike in optimism, with 89 percent of respondents expecting rising levels of investment in the buildings market. However, the number of respondents who expect less investment has increased.

Workload expectations for the delivery market are up just 1 percentage point from our November survey, to 69 percent. This too, is much lower than the peak a year ago, where 85 percent of contractors and consultants reported a positive outlook. The anticipation of growth for the South Island is smaller overall than what is expected in the North Island. The pressure on Auckland's housing market and the region's foreseeable growth can be attributed to the increase in optimism. It is expected that about 34,000 of New Zealand's 56,275 (net gain) migrants, according to immigration figures released in April, will settle in Auckland putting further pressure on the issues that surround undersupply in housing market. Measures to address this include \$52 million in State contingency funding to enable work with private developers to build affordable housing on under-utilised Crown land. Building and Housing Minister Dr Nick Smith has begun meeting with developers to discuss potential partnerships.

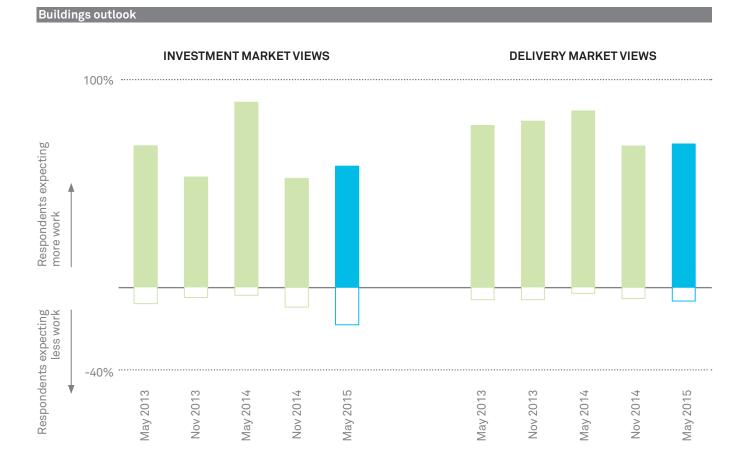
Meanwhile, significant development underway in Christchurch may be a contributing factor to the easing optimism. It remains a positive outlook for the region, as large Private Sector projects take shape and the Government confirms its ongoing commitment to the rebuild. "The more moderate trend in expectations reflects a deeper understanding of what can be achieved within current financial constraints and delivery capability. The challenge is to lift productivity within this environment. Delivering a unique combination of resources will ensure organisations create and maintain a sustainable competitive advantage."



Mark Drury Executive General Manager – Strategy & Growth AFCOM The growing convergence of workload and investment expectations, across an industry sensitive to small shifts in market opportunities, is positive. This alignment of expectation will enable further efficiency in workload planning and resource allocation. However, given the segmented nature of the market, those on the delivery side need to maintain some agility in adapting to shifts in demand.



Craig Davidson Group Director – Buildings + Places AECOM



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

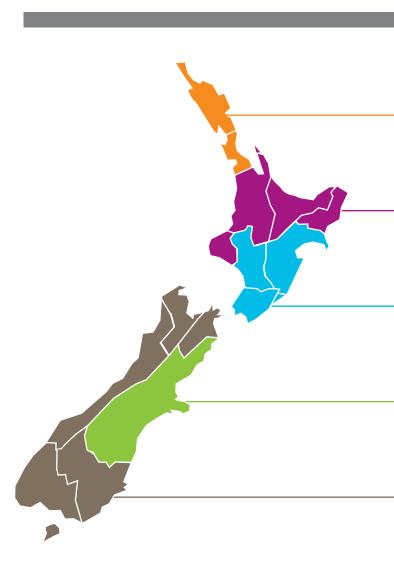
### WORKLOAD BY REGION AND SECTOR

Sentiment has remained relatively stable in the buildings market across all regions. Residential development is the sector where most respondents see workload increasing.

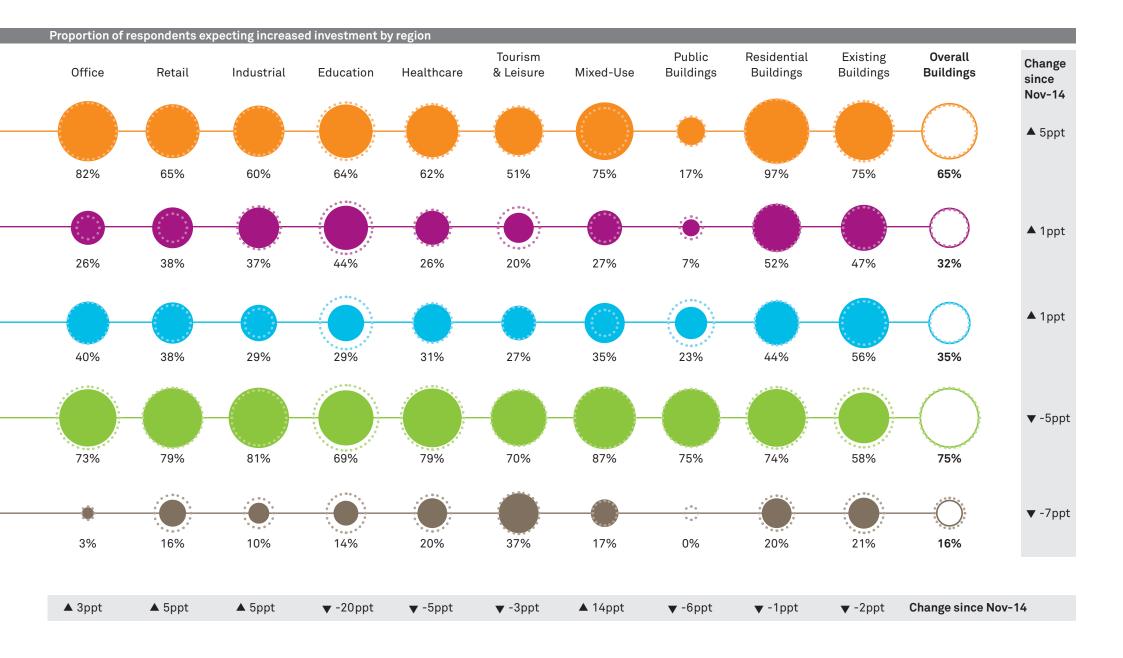
Optimism for the Upper North Island is particularly strong, with 97 percent of respondents anticipating growth to continue. This is a reflection of the current challenges in the Auckland housing market in both supply and price. The Unitary Plan is expected to result in further opportunities for residential development by releasing land and altering building height restrictions in some parts of the city. Development of Existing Buildings is also high, at 75 percent, which may be linked to developers seeking to maximise their use. The outlook in Canterbury remains very positive, with three-quarters of all respondents expecting the buildings sector to continue to have high growth. In this market, Mixed-Use and Industrial buildings are where respondents are most optimistic. There has been an increase of 14 percentage points in the proportion of respondents expecting an increase in Mixed-Use buildings, that is buildings that incorporate both office or commercial space, as well as residential space. This is likely to be driven by the need to intensify urban density.

The emphasis for the rest of the South Island is on the Tourism & Leisure sector, which has the most positive outlook for the region, at 37 percent.

The outlook for further growth in the Education sector has eased with optimism dropping by 20 percentage points to 44 percent. Overall levels of investment continue to be high, with priority on re-development projects.



Note: Bubbles on page 10 indicate the market optimism for growth over the next year. Dotted lines indicate the November 2014 results.



# **INDUSTRY SPOTLIGHT**

### FOCUS ON AUCKLAND

#### The Super City's scorecard

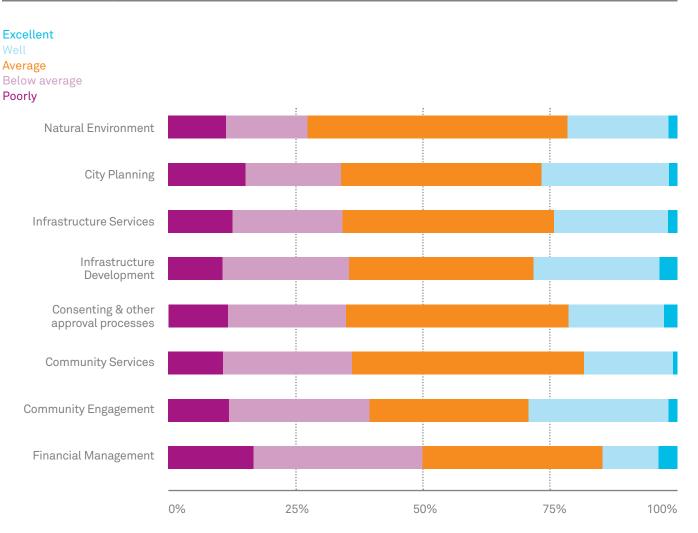
Nearly five years after the amalgamation of Auckland's seven councils into one, close to 40 percent of survey respondents rated the city's performance 'below average' to 'poor' in all but one area. Half of all respondents see the city's Financial Management as 'below average' to 'poor', after a period of public debate and scrutiny. A series of factors, including revaluations, mean many households are facing rates rises of more than 20 percent. The rating of Auckland Council's performance in this area has seen little improvement from our November survey.

More than a quarter of respondents viewed City Planning, Community Engagement, and Infrastructure Development as above 'average', a reflection of the city's commitment to address transport and congestion.

65 percent of respondents feel that the organisation's approval processes have improved. Despite this, comments reflected a perceived lack of consistency, which may be delaying further progress.

A number of respondents felt the Council would benefit from reduced bureaucracy and a more streamlined approach to its workflow. One respondent noted, "Auckland Council requires a much leaner structure, no duplication of roles, clear governance and a strategic direction."

#### Auckland Super City scorecard



#### Industry Spotlight 12

#### Auckland liveability

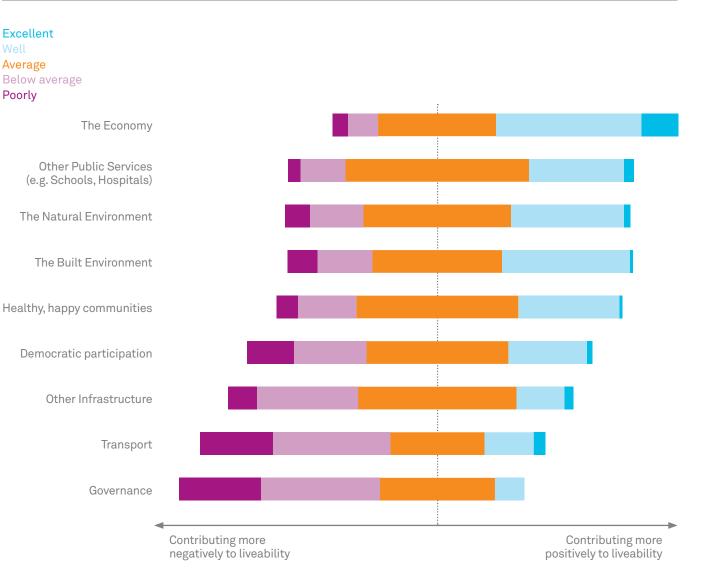
With a goal of being the most liveable city in the world, Auckland has maintained its place within the top ten ranking for the last five years. The result, from *The Economist* Intelligence Unit Report, is from a comparison of 140 cities in areas that fit into five main categories; stability, healthcare, culture and environment, education and infrastructure. We asked the industry how they rank our biggest city.

The Economy is seen to make the biggest contribution to Auckland's liveability with more than half of all respondents placing it above average, in the 'well' or 'excellent' categories. The city's services, its communities, and both its built and natural environment also scored well, with the majority of respondents rating the city from 'average' to 'excellent' in these areas.

Significant transport infrastructure projects identified or underway across the country will be welcome given the nearly 70 percent of all respondents who see Transport as an area for improvement. Economic development could be hindered without the delivery of projects such as the City Rail Link (CRL) and the proposed Second Harbour Crossing, given the high population growth forecast for Auckland over the next 30 years. The effect of completing the Motorway Ring Route and CRL may improve Auckland's liveability ranking.

Targeted rates increases will also impact Auckland's congestion, with additional infrastructure for public transport, cycling and walking receiving \$10 million in the city's 10-year plan. Governance is seen as another area for improvement with 60 percent of respondents rating the performance as 'below average' or 'poorly'.

#### Auckland liveability factor rankings



#### Auckland housing

Low interest rates and high demand are fuelling Auckland's 'housing bubble', with the city's average asking price nearly \$800,000.

Recently released data highlights the intensity of pressure on the market:

- Real Estate figures for March 2015 show the median sales price across Auckland was 18.1 percent above July 2014 Council valuations
- The average Council valuation has increased by 34 percent from 2011 to 2014
- Auckland properties are reported to be gaining an average daily value of \$900

We asked what key factors respondents thought might address Auckland's housing crisis. Across the board results were up from those six months ago, a reflection of the scale of the issue. Respondents indicated three principal factors should be looked at; urban intensification, diversity in housing size and availability of land.

The two factors that had the biggest increase compared to our November survey were increasing assistance for first home buyers and restricting foreign ownership. The ranking for both of these policy options increased by more than 3 percentage points. Respondents commented on the effect of policy measures on the market; the Loan-to-Value Ratio (LVR) and Special Housing Areas (SHA). Concern was raised at the perceived effect of the LVR restrictions in addressing housing issues in Auckland. Most respondents in our survey six months ago cautioned that this policy measure would serve only to temporarily dampen the market, *"delaying the inevitable"*. However, in this latest survey, respondents criticised the financial restriction for adding further complications to the housing issue rather than contributing to a solution. The main observation was how it's restricting first home buyers from accessing the market, rather than slowing the pace of inflation.

While SHAs are recognised as a good initiative, the time taken to develop is of concern. In line with our survey six months ago, these SHAs are seen to have great potential but only appealing to some parts of the market. This is primarily because of their lack of supporting infrastructure, as illustrated by one respondent: *"There is a need for far greater quality high-density dwellings in close proximity or well linked by public transport to places of employment to reduce pressure on roading and infrastructure". Given the early stage in project development, respondents were unwilling to be definitive on the success of this measure in easing the pressure on Auckland's housing market.* 

Auckland Council's planned investment to improve the region's transport network will be welcome to the many who feel that improved connections both in the city and outlying areas would enable access to cheaper housing areas.



#### Auckland infrastructure funds

With Auckland's expected growth over the next decade, ensuring the city continues to develop sufficient infrastructure to meet increasing demand remains a challenge. Respondents were asked to consider how industry, Government and the community can collaborate to find ways to fund infrastructure development.

Auckland is committed to addressing its transport and congestion issues, one of the biggest challenges the city faces. But it is also facing a future-defining choice between funding that would achieve an aspirational outcome versus what the city can afford. Many initiatives are being discussed, with the focus on bridging the gap. One is the recently announced Transport Levy on city ratepayers.

32 percent of respondents considered the decisionmaking process for infrastructure priorities to be only moderately effective, similar to the 35 percent who expressed the same concern in our November survey. Respondents commented on what they perceived as a slow and consultation-heavy process. Alternatively, they saw infrastructure prioritisation as based on a political rather than a strategic basis. One respondent commented, "generally decisions on these projects stem from political motivation". Another respondent said "there still seems to be a lot of small projects that are prioritised based on a political rather than strategic basis". Survey respondents identified User Pays and Private Sector/Investment as preferred funding options, a result in line with our survey six months ago. At least 70 percent of all respondents prefer more funding to come from one or both of these sources. Special Purpose Infrastructure Fund Tax also follows this upwards trend.

Respondents saw Government as holding the balance of power when making key funding decisions. For a quarter of all respondents, this power structure needs to shift giving industry and communities more influence, but opinions on finding the 'right' balance varied. Some felt there is "too much community consultation". In contrast, others felt "more input from the community should be sought".

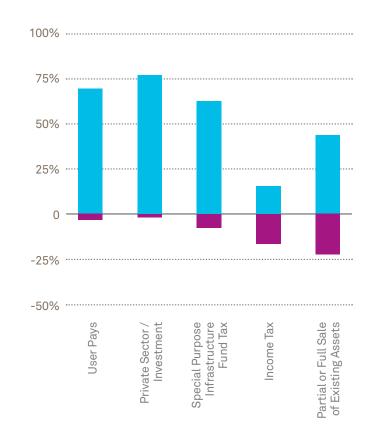
"Strategic decisions are necessary to enable Auckland's infrastructure growth and its goal to become the world's most liveable city. The council must be supported in making bold investments which define the city's future."



John Bridgman Managing Director AECOM New Zealand

#### Funding Auckland's infrastructure

#### Respondents wanting more of this funding Respondents wanting less of this funding



### **CANTERBURY UPDATE**

#### A focus on delivery

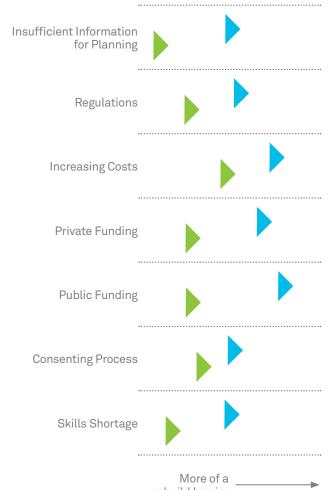
Christchurch remains a city in transition. SCIRT's programme of works is nearing completion with activity expected to continue at current levels for another 12 months. The perception of many of those working in the Canterbury market is that the rebuild will peak between 2016-17, although it is expected to be is longer and flatter than was initially anticipated. The Blueprint, released in 2012, has redefined the city with many rebuild projects now coming to life. A timeline to build for the series of interwoven commercial precincts has also been made clear. Despite this, optimism has dropped over the past six months, from 78 to 70 percent.

Respondents were asked to identify factors that could be considered a barrier to rebuild progress. Overall, respondents felt that all of the factors slowing the pace of the rebuild have increased since our survey six months ago. The three largest perceived barriers were related to cost, indicating that an emphasis on funding could be integral to achieving a successful and timely rebuild. In an attempt to address this rising concern about sources of funding and cost escalation, Christchurch City Council established 'Development Christchurch Limited' in April 2015. The priority of this new organisation is to appeal to the Private Sector as a source of funding for major projects. If successful, the organisation will help the city avoid a significant rates increase and enable the postquake rebuild to maintain its momentum.

Earthquake related consent approvals paint a more positive picture. Figures from Statistics New Zealand show a jump from an average of \$53 million per month during 2013, to an average of \$86 million per month in 2014; this is a 61 percent increase year-on-year. Interestingly, results from January and February this year returned to levels obtained in 2013. This may affect the perception of an increase in barriers to the rebuild captured in this survey. However, just released figures for the month of March 2015 see approvals achieve a record high, exceeding \$133 million. This spike could be a turning point, signalling an upward trend and a lower perceived barrier.

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

#### May 2015 November 2014



rebuild barrier

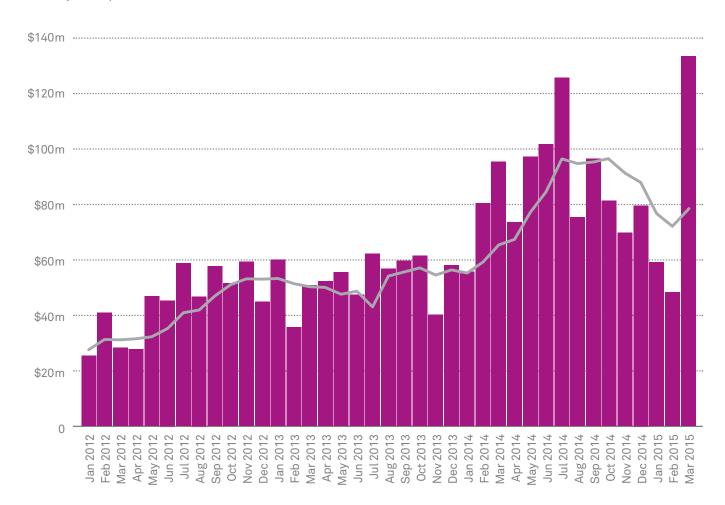
"The rebuild effort requires real agility to balance competing priorities; a desire for progress, concern over increasing costs, and the need to ensure an outcome that takes into account the long term needs of the community. As an industry we must provide advice that addresses the complexity and continue to implement rigorous controls for effectively delivering complex projects."



Matthew Heal Practice Area Lead – Programme Management AECOM

#### Earthquake-related consents

#### 6 month moving average Monthly earthquake-related consents



Source: Statistics New Zealand

#### Rebuild competition and cost

As previously mentioned, cost continues to be one of the main concerns for the rebuild. In line with previous surveys, more than 85 percent of respondents indicated they expect price hikes in Labour and Plant & Material costs. Significantly, more than half of those who expect price hikes, also expect them to be greater than 5 percent.

However, there was a significant easing for all other cost pressures, with the proportion of respondents expecting price hikes (at any level) decreasing since our last survey. The recent drop in fuel prices and the strengthening of the New Zealand dollar may contribute to this more positive outlook.

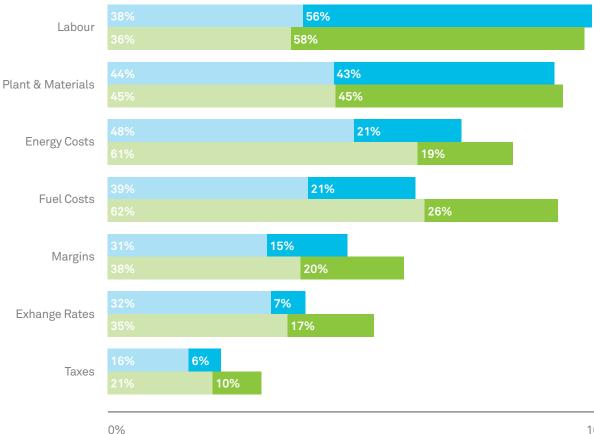
"As CERA transitions from a Public Service department to a Departmental Agency, it is critical that the transfer of power is done in a timely and phased way. Capacity and capability must be maintained to deliver the end state portfolio of anchor projects and ensure business confidence is maintained."



#### Shaun Hubbard Area Manager, South Island AECOM

#### Canterbury rebuild cost pressures outlook

May 2015: Increase by up to 5% May 2015: Increase > 5% November 2014: Increase by up to 5% November 2014: Increase > 5%



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

#### Rebuild challenges and lessons

While previous surveys highlighted the need for a single, coordinated vision, the discussion moved to a deliveryfocus as rebuild momentum began. Since our survey six months ago, many projects are underway and SCIRT has made significant infrastructure progress with 72 percent of all work complete.

Overall, survey respondents suggest a more integrated approach between the various stakeholders. Knowledge sharing is advocated with "on-going communication about the work pipeline and more trusted relationships with those delivering the outcomes" seen as key.

The theme of communication continues at different junctions. Respondents advocate for more clarity from and between EQC and insurance companies "to address the gap between reality and expectations". Further down the supply chain more education is recommended for private home owners "to better understand the process and their role in achieving a favourable and speedy outcome".

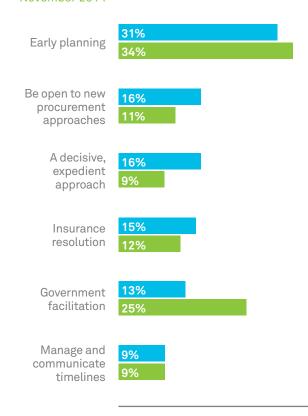
The quality of delivery and longevity of projects continues to be a key aim in the design and delivery phases. For one respondent, "quality must prevail to not produce a new set of issues further down the track", while another felt that "whole-of-life costings and end-user (or asset owner) input should be factored into the design process". The need for early planning and Government facilitation eased from our last survey. However, several respondents still commented on the value of time spent at the beginning of the process. It was suggested to "take more time to evaluate designs along with budgets prior to tendering" and to plan for the long haul. The notion of "growth stimulating growth" was offered as an incentive to build upon the momentum.

A number of respondents reflected on a perceived delay in the rebuild and a lack of clarity of what the 'end-game' actually is. One respondent referred to the *"lack of visible action"* and the *"delays in public spend"* as continuing to *"undermine confidence"*. Several respondents thought the initial estimates for the time it would take to rebuild were overly optimistic. For one respondent, *"it is more complicated than first envisaged and portrayed"*. Another noted, *"the market in Christchurch is small and very few people are willing to take risk until there is more certainty. The main message is that we all have to be patient. Politically no one wants to admit that it will take two or three generations to rebuild"*.

This survey also revealed a jump in respondents who feel that new procurement options along side a decisive and expedient approach would assist towards a successful rebuild. A suggestion that "procurement needs to empower innovation to enable the delivery of value" was made, and it was noted that "bureaucracy is not the best driver of commercial development".

#### Towards a successful rebuild

#### May 2015 November 2014



0%

### PROCUREMENT

Seeking the right method of procurement continues to be a key focus for those in the construction and infrastructure sector aspiring to improved approaches to project delivery.

Superseding the Partnership/Alliance model as the clear favourite, a Design and Construct approach was identified as the preferred method of procurement. Respondents see this model as providing the best value for money. The Partnership/Alliance model was a close second, easing slightly over the last half year.

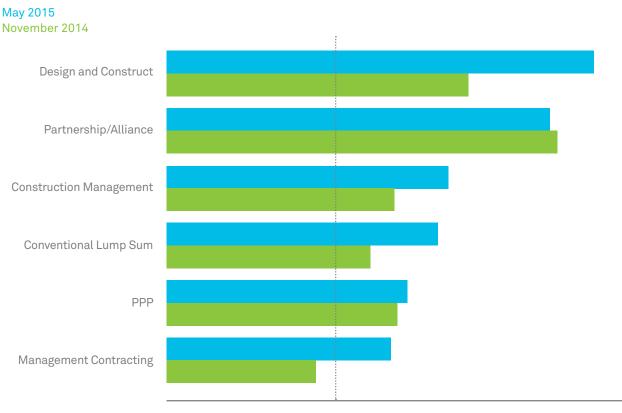
There was consistency from respondents indicating that there is no 'one-size-fits-all' approach to procurement. For one respondent, a "fit-for-purpose approach is required, depending on the nature of the project, risks and availability in the market". Another respondent noted there are examples of 'good' and 'bad' use of all models: "The main message is to have a balanced approach where all options may be used and chosen where applicable. In saying that, a more collaborative approach between the Client and Contactor/Designer ultimately provides the best overall value for money". There is a perception of an 'unbalanced' approach to risk allocation, with a project's risk increasingly being passed from the client to the contractor. For one respondent the "shifting of risk away from the client inevitably results in higher prices or under delivery". Another noted that procurers don't understand risk, and as a result they are "dumping all risk onto the contractor via short notice tendering and therefore, paying for the transfer of that risk". However, in contrast another commented that new approaches are placing greater emphasis on shared risk and shared profit: "Development Agreements and master planning form a foundation for strong and collaborative Partnership Alliancing. They appear to be delivering outcomes with public and private benefits".

There was agreement that procurement processes are too price driven, diminishing the value-added aspects of an offering. Respondents noted that tenders were frequently awarded to the lowest bidder, when placing "more focus on the delivery team and resources" would have a wider benefit. A common sentiment was the limited scope to trade off non-price attributes. "Organisational charts and experience", "delivery team and experience" and "quality and time" were all identified as worthy of more recognition. Respondents noted a variety of other pitfalls and challenges embedded in current procurement practice:

- "Poor quality of documentation provided"
- "Government procurement is very prescriptive, which is good in some situations but not in others"
- "If the emphasis on speed can be reduced, then better value can come from the more traditional procurement processes such as open and selected tender"

The interest in Public-Private-Partnerships remained steady in line with the views of respondents six months ago. This approach continues to gain momentum with major projects like Transmission Gully and Wiri Prison being delivered via this model. The sustained optimism could reflect a core group of contractors and consultants having a clear understanding of the benefits of this approach.

"As an industry we need to maintain momentum in the debate around procurement. Considering issues such as the high cost of tendering, unclear risk allocation, delays and cost overruns, we should see bestpractice shared and the game raised. Risk allocation poses particular challenges, especially around ill-informed or unbalanced risk transfer. The challenge is to ensure educated and informed decisions are made, so that those best placed to manage or accept the risk take ownership. It needs to be recognised that the transfer of risk normally comes with a price premium."



Moderate value point

Geoff Milsom Group Director -Water & Urban Development AECOM

Procurement methods by value for money rating

### **RESILENCE AND SUSTAINABILITY**

In comparison to six months ago, consideration of resilience and sustainability in project investments has increased significantly. This is a notable positive change from results of our recent surveys.

Several comments were made about striking a balance between desirable resilience and financial pragmatism. Gaining an understanding of "what the state is now, where we want to go, and what is affordable" is considered a realistic platform to base decisions from. Expanding on this idea, one respondent suggested that "agreement of appropriate policies and standards and then uniform progressive application" would serve as a good approach to move forward.

Cost is still considered one of the largest barriers to strengthening commitments to resilience and sustainability. For one respondent, clients "don't see value in sustainability in terms of its carbon impact – value is only perceived in reduced operating costs". However, a number of comments suggest that it makes good business sense to fully consider these factors. The "economics (of sustainability and resilience) and showing good innovation puts you ahead of the competition" and the "rising costs of construction and operation make it a logical decision and direction" for projects. The earthquakes in Christchurch and extensive flooding in Wellington have cast a spotlight on the importance of having resilient infrastructure. Disruptions to lifeline utilities, such as transport networks, can have serious consequences for business and communities. Equally, the recent failure of critical power infrastructure in Auckland has identified costly gaps. For one respondent, *"insurers have a role to play in shifting the conversation around investment planning"*.

A broader approach to resilience planning would consider more than just the effects of natural disasters. Planners and designers must also focus on adapting to changing conditions such as Climate Change, and managing risk of system failure due to unspecified causes. For one respondent, the "effect on our urban population of sea level rises" needs attention, especially in Auckland with its significant coastline.

Despite legal precedents being set recently in Australia, penalising consultants for neglecting the impact of Climate Change, it was still considered the least important factor among issues of resilience and sustainability. "When cities and organisations actively develop and enhance their understanding of resilience and its implications, they remain ahead of the competition. Resilience must be seen as more than simply robust infrastructure; it is a critical design input for cities of the future."



Ian Martin Area Manager, Wellington AFCOM

"The challenge for industry is to place as much emphasis on sustainability as it does resilience. When it's not treated as a cost, but a source of innovation, project outcomes benefit considerably."



Peter Hartley Group Director – Environment AECOM

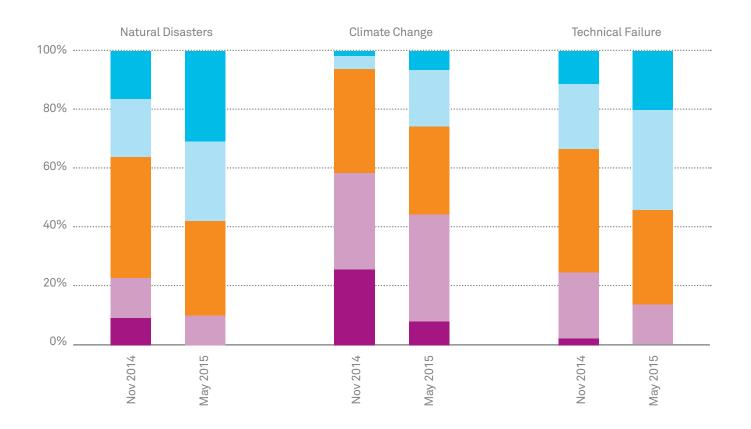
"In order to better manage risk and complexity, and build our cities and towns of the future, we need to think both systemically, and across generations. Resilient and sustainable design is simply good design, and needn't cost more. What is missing are integrated approaches to our current challenges, which call for new, collaborative approaches to solving them."



James Hughes Principal Consultant AECOM

#### Consideration of resilience in buildings and infrastructure investment planning





### NATIONWIDE INDUSTRY CHALLENGES

Beyond the housing and congestion challenges facing Auckland, and the pace, quality and cost of the rebuild in Christchurch, respondents cited several issues affecting the pace and cost of development across the country.

Respondents were asked to identify the one nationwide concern they felt needed attention. Close to half of all respondents identified the shortage of skills and materials as the biggest challenge facing the industry. This perception is in line with results from our survey six months ago. A lack of *"skilled design and construction staff"* was mentioned repeatedly, with many pointing to the issues of technical skill and workforce location as adding to the overall picture.

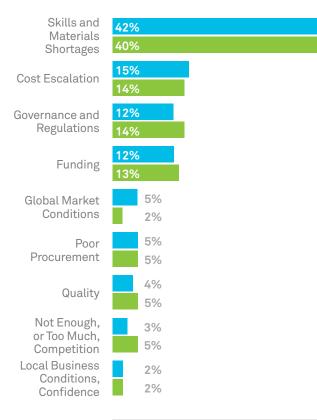
The perception of a skills shortage in Canterbury is supported by recently released data showing the unemployment rate has fallen to 3.1 percent (not seasonally adjusted) in the March quarter. The national (seasonally-adjusted) unemployment rate is sitting at 5.8 percent for the same quarter. It could be reasoned that the volume of available talent in Christchurch is problematic. The global demand for quality engineers was also seen to have an effect. Cost escalation is the second biggest concern. Many respondents commented on "excessive price escalations" and "inflated construction costs" as barriers to efficient development. A "lack of available funding" and "uncertainty within the private sector about both domestic and international prospects for the next three to five years" is also seen to prevent major projects from getting off the ground.

Governance and regulation remains a challenge, with more than 12 percent of respondents considering "overbureaucratic processes" as the industry's biggest issue. It must be noted that regulatory control may become an even more significant concern as the industry faces further compliance requirements triggered by new Health and Safety legislation coming into effect later this year. One respondent said the "changes in the Health and Safety legislation will likely increase costs and extend the timeframes of available Government funding".

#### Top industry challenges

### May 2015

#### November 2014



# SURVEY SAMPLE – A BROAD VIEW

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

Profile of respondents			Market values	
Respondents by location %	Respondents by industry role %	Public vs private respondents %	Investment market respondents by turnover %	Delivery market respondents by revenue %
40 North Island – Upper	<ul> <li>9 Other</li> <li>3 Mixed Government/Private Entity</li> <li>3 Private Sector Owner/Developer</li> <li>7 Government-related Entity</li> </ul>	2 Mixed 49 Private	<b>20</b> \$1 billion +	<b>20</b> \$1 billion +
	<ul><li>7 Central Government Agency</li><li>7 Asset Manager</li></ul>		<b>19</b> \$500 million – \$1billion	<ul> <li>7 \$500 million - \$1billion</li> <li>20 \$200 - \$500 million</li> </ul>
16 North Island – Central	13 Consultant		<b>19</b> \$200 – \$500 million	
16 North Island – Lower	15 Contractor	49 Public	<b>42</b> \$0 – \$200 million	<b>53</b> \$0 – \$200 million
	36 Local Government Agency			
20 South Island – Canterbury				
8 South Island – excluding Canterbury				

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# RESEARCH

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