

Summary of Reports into Analysis of Panel Costs and Valuation Unit Rates

Purpose

 This paper sets out a summary of both the report issued by AECOM regarding the Analysis of Panel Costs and Valuation Unit Rates (Report), and the corresponding peer-review of that Report by Rider Levett Bucknall (RLB) (Peer-Review).

SUMMARY OF REPORT

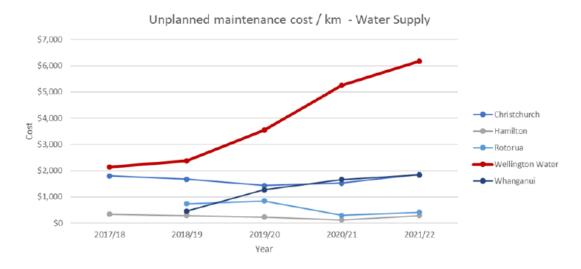
Background

- Wellington Water is in the process of reviewing the appropriateness and value for money provided by current delivery models.
- 2. The Report aimed to provide some indication of relative efficiencies within the current models by comparing costs of service provisions against a range of benchmarks for Wellington Water's collaborative operations and maintenance, capital works, and consultants panel contracts. Additionally, unit rates for replacement of pipes applied within valuations were reviewed and compared to a small selection of peer Councils.
- 3. AECOM noted that its analysis and confidence in its outputs were constrained due to limitations in data and timeframes.

Key findings

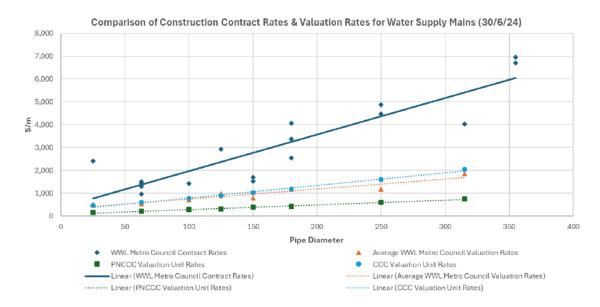
- 4. In relation to operations and maintenance, AECOM found that:
- 5. **Operations and maintenance expenditure**: Expenditure is overwhelmingly focused on water supply, particularly unplanned maintenance. Comparative analysis was not possible at the "asset-type" level, therefore, the main focus of the review was on the unplanned water supply maintenance costs.
 - a) Increase in maintenance costs: Unplanned water supply maintenance expenditure per km of pipe increased threefold between 2017 and 2022. Inflationary pressures between 2019 and 2022 were expected to have contributed to a third of the increase.

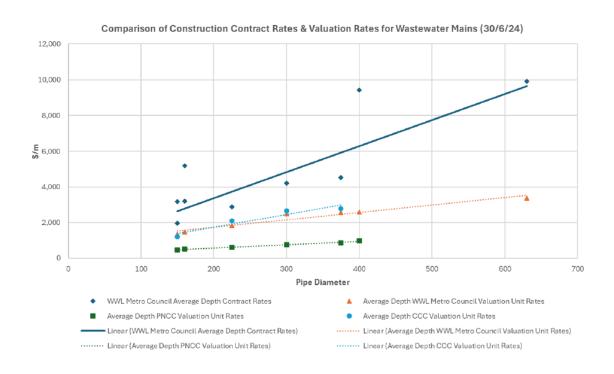
- b) **Comparative analysis**: The three-year average (2019-2022) expenditure on unplanned water supply maintenance expenditure per km of pipe was nearly three times higher than the peer council average. Higher maintenance expenditure might have reflected cost structures as well as network condition.
- c) Labour and plant rates: The operations and maintenance labour and plant rates were fair and reasonable compared to competitive industry charges, and AECOM noted that if anything, they appeared somewhat low.
- d) **Rework analysis**: A simplistic initial analysis of rework was undertaken, limited significantly by data adequacy. This indicated that water supply maintenance might have had the highest proportion of rework at around 10%, but further analysis would be required before this figure can be used.
- e) These findings are illustrated in the following chart collating the National Performance Review Data (Water New Zealand's national water sector benchmarking programme):



- 6. In relation to the capital works contractor panel, AECOM found:
 - a) Capital works contractor panel review The average contract rates for pipe installation, in general, well exceeded the average of the peer council valuation unit rates that were in use, particularly for water and wastewater, although AECOM noted the limited peer council dataset used. This inferred that cost of installation of pipes within the Wellington Water networks was significantly higher than in the comparator council areas. This might reflect cost structures as well as local site differences, and AECOM noted that a comparison against a larger dataset would be advisable.

- b) P&G costs analysis Preliminary & general as a proportion of total contract value for Wellington Water was generally well above typical proportions within other linear infrastructure sectors. Of this, temporary traffic management and site establishment and disestablishment costs were significant.
- c) Daywork and plant rates The daywork and plant rates were generally considered fair and reasonable when compared to average market prices, although this did not include an assessment of efficiency.
- d) These findings are illustrated in the following charts:







7. In relation to the consultants panel, AECOM found:

- a) Charge rates are broadly in line with the general infrastructure industry expectations. However, given the volume of work released through this mechanism, limited bid effort and reduced risks, AECOM had expected the rates to be towards the lower end of the range.
- b) Overall proportions of fee to capital project cost were broadly in line with industry expectations assuming that construction monitoring and contract management tasks were included, although would be considered towards the upper end considering the routine nature of many of the projects. However, capital costs for routine pipe construction works appeared to be significantly higher than comparator councils as noted in the capital works contractor review.
- 8. In relation to the review of the valuation unit rates, AECOM found:
 - a) The Wellington Water metro council valuation pipe unit rates were significantly higher than those used by other similar councils. However, from the analysis undertaken, these valuation pipe unit rates were, in general, significantly lower than the contract rates that have been extracted from the claims.
 - b) Overall, AECOM believed that the current valuation unit rates in use were a little low. While it would be normal practice to use current real rates for construction, it would not be unreasonable to moderate the rates if future changes are expected in delivery models which may impact these costs in the near-future.

Peer-Review

- 9. Wellington Water also commissioned the Peer-Review, which aimed to provide a comprehensive evaluation of AECOM's report on panel costs and valuation unit rates. In its critical assessment of the Report, RLB examined the methodologies employed, the reliability of data and the conclusions drawn by AECOM in the Report.
- 10. In summary, RLB made the following comments regarding the Report:
 - a) Methodology and data assessment AECOM utilised various methodologies to assess the data received, ensuring that comparisons were made on a like-for-like basis. However, the report frequently comments on the limitations of the data provided. A thorough examination would determine whether these limitations impacted the trustworthiness of the Report findings.
 - b) **Comparative analysis** The Report highlighted significant discrepancies in costs, particularly in water supply maintenance, where Wellington Water's costs are substantially higher than peer council averages.
 - c) Contractual and valuation rates review AECOM's examination of operations and maintenance, capital works contractors, and valuation rates, raised important questions regarding access to contracts and agreements, and the application of agreed rates, prices, and percentages in claims.
- 11. In summary, after raising a series of questions with AECOM, RLB found that:
 - a) The process taken was a high level comparative analysis, using incomplete information.
- 12. The approach was proposed by AECOM, driven to a certain extent by the information that was available i.e. it was not possible / too time consuming to split the cost allocations into job by job.
 - a) Macro level approach indicated that the Wellington Water programme was higher than other regions. There could be various reasons for this:
 - i. Differing design standards.
- 13. Differing methodology and management requirements e.g. traffic management, HSE, waste management, working hours etc.
 - i. Differing contracts / pricing mechanisms.
 - ii. Differing client expectations on call, accelerated delivery etc.

- iii. Geographical/Geological differences and challenges between locations.
- 14. AECOM noted that the base rates appeared reasonable, but there was a lack of clarity around how time was charged, the application of overheads, the composition of costs and overheads etc.
- 15. RLB did not recommend further review based on the current data, which they noted appeared to be incomplete, unclear or difficult to track. Instead, RLB made the following recommendations for consideration:
 - a) Review of contract and commercial mechanisms are these driving cost?
 - b) Review Wellington Water processes are these driving cost: e.g. inefficiencies
 - c) Review of supplier overheads how are these applied and if these are in line with the contract?
 - d) Discussion with suppliers as to what is driving cost.
- 16. Can Wellington Water isolate job costs for QS to review? Particularly the capex which appeared high.