Maximising competition: Bus service transformation in Wellington, New Zealand

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JEL classification: D47; L14; L91

Keywords:
Bus contracting; Competition; Bus emissions; Public Transport Operating Model; Bus procurement; Industry engagement; Barriers to entry; Transition

ABSTRACT

This paper explores the features of a multi-contract procurement process that formed the catalyst for a new way of delivering bus services in the Wellington region of New Zealand. The introduction of a new nation-wide Public Transport Operating Model (PTOM) legislated by the New Zealand government provided the opportunity for the Greater Wellington Regional Council to make a suite of changes to public transport at the same time as implementing a new contracting regime, which featured both tendered and negotiated contracts.

The tender process included many features to maximise competition and is regarded as a benchmark for industry engagement.

To meet Council aspirations for a low emission bus fleet, the tender process featured an industry-first quantitative assessment of bus fleet emissions using an economic cost to society approach to monetise bus emissions.

While the tender process met objectives for enhancing competition, delivering value for money and substantially improving bus fleet quality, the transition was particularly challenging with the new contracts requiring the scaling up of two smaller operators with new fleet and depots implemented at the same time as a number of other changes to public transport in the region.

1. Introduction

The Greater Wellington region, which includes the capital city of New Zealand, Wellington, has a strong culture of public transport use with 39 million passenger trips being taken on its Metlink public transport network in 2018, equating to about 78 trips per capita – the highest public transport use in the country. Bus trips make up around two thirds of these trips.

The Greater Wellington Regional Council (GWRC) is responsible for the planning, marketing, management, procurement and contracting of public transport services in the Greater Wellington region.

Legislative changes enacted in 2013 created a new framework for the procurement and governance of public transport services across New Zealand – the Public Transport Operating Model (PTOM). The model is a planning, procurement and business development framework. A key feature of the model is an emphasis on regional authorities and operators taking a partnering approach to the planning and delivery of public transport services in regions. This would be achieved through mechanisms such as collaborative business planning, joint investments and financial incentives. This approach recognises that both parties have a stake in, and are reliant on each other for, delivering affordable urban bus, rail and ferry services that people want to use.

PTOM includes a range of key components to give operators and regions confidence to grow investment in their businesses and allow joint business and service planning.

PTOM was developed in response to concerns about increases in public spending on public transport not being matched by patronage increases, very little tendering occurring, very low numbers of tender responses in the tenders that had occurred, and limited levers for contracting authorities to encourage and incentivise performance improvements.

The model was designed to contribute to the government's goal to grow public transport patronage with less reliance on subsidy. It was developed with two overarching objectives:

- To grow the commerciality of public transport services (in other words, to improve efficiency and reduce the level of subsidy over time), and
- To grow confidence that services are priced efficiently and there is access to public transport markets for competitors.

The PTOM framework provided the first opportunity for GWRC (and other regional councils across New Zealand) to undertake tendering of the majority of its bus services since the industry was first deregulated in the 1980s. Coupled with the need to replace an ageing bus fleet and a bus service that was at capacity in Wellington city, the implementation of PTOM provided an opportunity to take a fresh look at how bus services were delivered across the region.

While GWRC was able to undertake the tendering of a majority of the bus services across the region, a legislative requirement within PTOM required the direct appointment of some contracts to the major incumbent operators. This limited GWRC's ability to fully achieve a value for money outcome from the process. This is discussed later in this paper.

Five principles underpin the provision of public transport by GWRC on which the procurement process in Wellington was based:

- GWRC and public transport operators should work in partnership to deliver the public transport services and infrastructure necessary to meet the needs of passengers.
- The provision of services should be coordinated with the aim of achieving the levels of integration, reliability, frequency and coverage necessary to encourage passenger growth.
- Competitors should have access to regional public transport markets to increase confidence that services are priced efficiently.
- Incentives should exist to reduce reliance on public subsidies to cover the cost of providing services.
- The planning and procurement of services should be transparent.

Five overarching objectives guided the procurement process for bus services in Wellington. These were:

- Quality – to ensure quality of procurement in terms of value for money and customer satisfaction
- Smooth transition – a smooth transition to new contracts, new operators, new fleet and new service patterns in Wellington city
- Partnership and transparency – to embed a partnering relationship with operators
- Increasing patronage – to grow patronage, particularly at peak travel times, and improve integration between services and between modes
- Improving commerciality – to improve the commerciality of bus services over time.

2. Unit design

Central to the procurement of Wellington's bus services was the bundling of groups of routes into 'units' and inviting operators to bid for contracts to operate these units.

The following principles guided the design of the units:

- Units should be a 'marketable whole' – i.e. a unit can be delivered either as a stand-alone operation or as part of a wider grouping of units
- Units should have readily identifiable customer markets
- Each unit must comprise a service or group of services that operates on the entire length of one or more routes
- Units should be attractive to operate, and should attract competition from a range of operators
- There should be opportunities for operators to tender for units in groups to encourage efficiencies and thus value for money
- Units should reflect network effects and connections between routes.

Unit design was predominantly based on principles of linking routes for efficiency and service reliability, while also meeting the objective of increasing competition in the Wellington bus market. Units of different sizes were developed that would be attractive to a range of

interests, in particular new entrants, both large and small. Consideration was given to the opportunity to optimally aggregate or bundle units to increase scale for larger operators, offer opportunities for operators to increase market share in future tender rounds, and offer units that have a good chance of increasing tenure through the PTOM incentive mechanisms. Based on these principles, the region's bus services were divided into 16 units.

As a result of the legislative requirement to directly appoint a pre-determined number of revenue service kilometres to incumbents, nine of the sixteen units, representing around two thirds of the bus task, were set aside for tendering, and the remaining seven units were directly appointed to the two major incumbents.

The nine tendered units comprised approximately 270 peak vehicles.

Considerable consideration was given in relation to the effects on competition from the direct appointment of units to incumbents and how an even playing field, to the extent possible, could be achieved for the tendered units. Principal to this consideration was to ensure that the units with the lowest barriers to entry were preserved for tendering, whereas those units in which the incumbents would have the strongest competitive advantage, primarily based on location of depots in areas of scarce available land, would be directly appointed.

Figure 1 shows a subset of the region with a focus on Wellington city and the allocation of route based units between tender and direct appointment. The green routes within the north-south corridor were preserved for tendering due to the relative availability of land and buildings for depots in industrial suburbs to the north. Conversely the east-west corridor is more densely populated with few industrial land options. The major incumbent has three existing depots along this corridor.

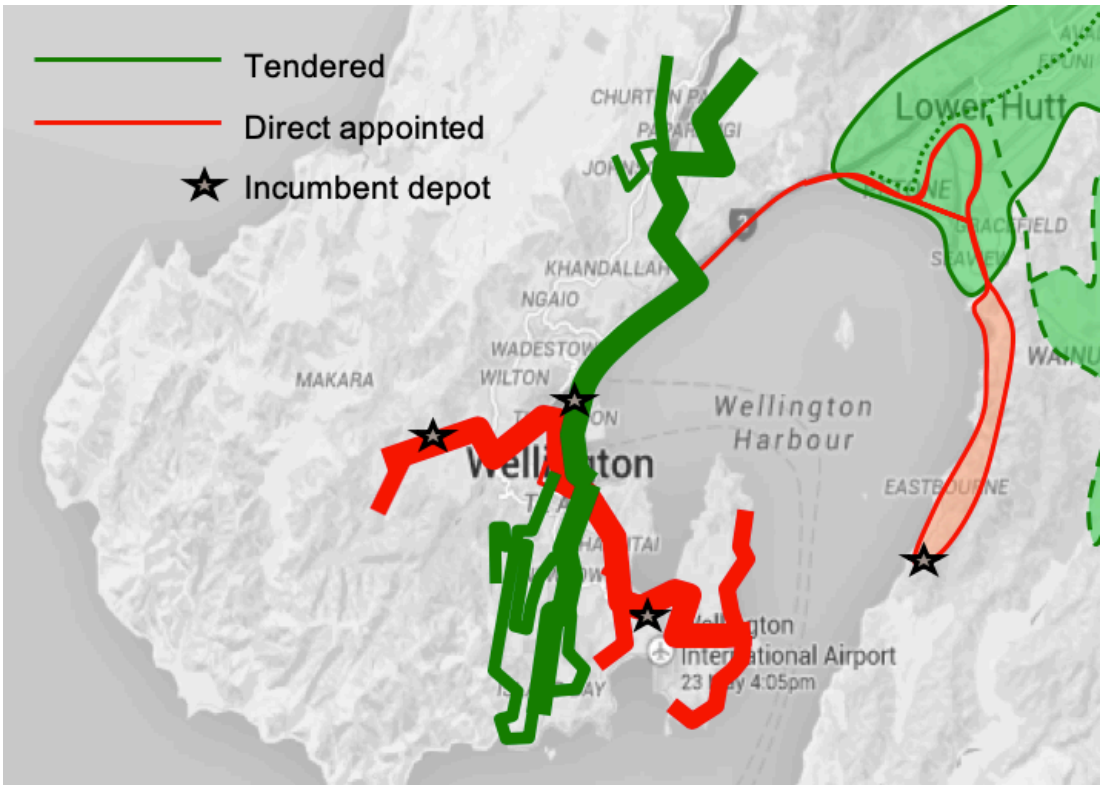

Figure 1. Unit allocation focused on Wellington city units

3. Engaging with the market

Bus procurement in the Wellington region was undertaken in the context of one dominant incumbent operator who provided 73% of bus services. Another operator had 24% market share, resulting in 97% of all services being delivered by two operators. These two operators were assured of a number of contracts in the future due to the legislative requirement to directly appoint contracts to them. The size of the total bus market was around 520 buses.

Objectives of the procurement process included:

- To generate enough interest in the market to attract multiple competitive bids
- Achieve a more balanced market concentration of operators in the region to enhance competition and value for money for future tender rounds
- Provide opportunities for smaller operators to compete for units on a standalone basis.

The project team recognised the importance of generating a high level of industry interest in the market and the value of industry input to process design. Central to the procurement therefore was comprehensive engagement with industry to discuss proposed approaches and gain feedback prior to the release of the Request for Tender (RFT).

To ensure that the final commercial framework and contract was attractive to industry, sustainable and achieved the right balance of risk and reward for both parties, the project sought to utilise the experience and perspectives of industry to inform the commercial and contract design. Consequently a comprehensive engagement process with industry was designed into the procurement process to discuss proposed approaches and gain valuable input to process and contract design prior to the release of the RFT.

Operator engagement commenced early in the development process, prior to the formation of firm positions and continued throughout the development of the commercial framework, using appropriate feedback gates as the process moved through the development cycle from high level terms to full draft contract.

The objectives of the industry engagement process were twofold – to both inform the process and contract design and to generate interest from the bus operator market. To maximise the outcome of these two objectives the industry engagement phase was an open invitation to any interested operator, locally and internationally, who considered that they had the scale and capability to deliver the contract areas to be tendered. Through this phase 12 bus operators from Australia and New Zealand, together with the New Zealand bus operator industry body participated.

The pre-tender engagement phase provided an element of self-selection for tender participation itself, as engagement participants had gained sufficient knowledge about the opportunity that they were able to make an informed decision as to whether they would then participate or not in the tender. Nine of the initial twelve engagement participants went on to participate in the tender process.

An open invitation was used for pre-tender engagement which delivered a number of advantages:

- Input was received from a potentially wide range of operators, ensuring different perspectives from different environments could be used to inform the design process.
- Selecting and shortlisting operators prior to agreeing the final business model may have resulted in engagement with operators who were unsuitable for the final business model and, conversely, operators who may have been ultimately suitable for the final business model may have been inadvertently eliminated from the process.

- All potential tender participants were provided with the same opportunity to engage in the process, ensuring fairness and equitable treatment – which helped to build confidence in the overall procurement process. Conversely, pre-tender engagement with a select number of operators would have provided those operators, as tenderers, with a knowledge advantage over tenderers who had not been previously involved. This would have been likely to discourage those who had not been involved from subsequently tendering, thereby limiting competition.

To ensure that the most appropriate operators participated, it was important to provide as much relevant information as possible about the nature and scale of the opportunity in the invitation to industry.

Feedback was gained using a mix of interactive meetings and written feedback over a series of interactions. The pre-tender engagement period spanned twelve months.

The market engagement approach is set out in Figure 2.

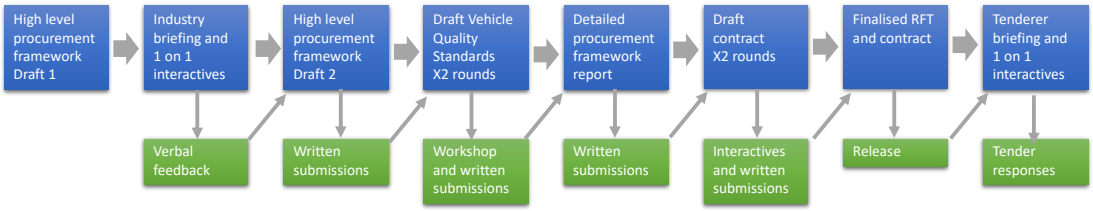

Figure 2. Market engagement approach

4. Probity

To enhance attractiveness of, and confidence in, the Wellington opportunity and to meet public sector expectations of transparency and contribute to value for money outcomes, high degrees of probity management were built into the process from the beginning.

Probity was central to all aspects of industry engagement to demonstrate ethical behaviour and procedural integrity in the procurement. Appropriate probity protocols were enacted through the market engagement process to ensure fair treatment and consistency of information to all participants.

Tender participation and transition deeds were entered into with the incumbents and these documents were made available to other participants in the process. These deeds governed the agreed behaviours and undertakings of the incumbent operators during the tender and transition phases.

The procurement team was supported by both an external Probity Advisor and a separate external and independent Probity Auditor.

5. Addressing barriers to market entry

The Wellington bus operating market was characterised by features that could create, or be perceived to create, barriers to entry, potentially constraining competition. The primary barriers for new entrants included the need to recruit and train large numbers of staff, overcoming the incumbents' competitive advantages in relation to depreciated fleet and securing depots.

Each of these potential barriers was considered and addressed to encourage an open, competitive process that was attractive for all interested participants. Consideration of these issues was informed by industry feedback through the market engagement process.

5.1 Staffing

To mitigate the potential barrier of recruiting and training large numbers of staff, a transition period was planned of up to 15 months to enable new operators to recruit and train a pool of drivers and other key personnel. In the end, a transition period of 12 months was achieved. While the issue of staff recruitment did not manifest itself in a barrier to entry, for a variety of reasons the risk related to recruitment and training did manifest itself in an acute shortage of drivers for the larger new entrant at the time of contract commencement.

One of the reasons that contributed to the shortage of drivers at commencement was a result of union action through the transition process. Throughout the tender design, the process faced strong opposition from the dominant labour union representing bus drivers in the region. The union was advocating for terms and conditions of the primary incumbent to be preserved and for staff to be transferred on the same terms and conditions to a new entrant. The project refused the union's request on the grounds that the terms and conditions were regarded by the rest of the industry as out of date and inflexible, impacting the manner in which an incoming operator could organise their business, with potential value for money impacts for the Council. Additionally, as there were multiple incumbents and potentially multiple new entrants, each with their own sets of terms and conditions, there was disagreement throughout the sector as to which terms and conditions were the most favourable to employees. Given also that the incumbents were guaranteed ongoing business as a result of the legislated direct appointed units, agreement was not able to be reached between operators or the union as to which employees should transfer to a new entrant or be retained by the two incumbents.

5.2 Fleet

The incumbents' potential cost advantages from access to existing, depreciated fleet, was mitigated by specifying that a minimum 50% of fleet in every unit, whether tendered or directly appointed, had to be new.

At the time of tendering, over 50% of the Wellington bus fleet required replacement in the short term to comply with new national age and emission standards, and the required replacement of an aging trolley bus network. Hence, the requirement for 50% new fleet was consistent with the region's required fleet upgrade programme.

The result was that the incumbent operators' tendered fleets had to comprise at least 50% new buses, substantially reducing the potential cost advantage that would otherwise have been available to the incumbents of tendering an old fleet from day one. The incumbents' advantage was further mitigated by the requirement to tender a fleet profile of replacement buses during the term of the contract for vehicles that would reach 20 years of age during the term. As the price evaluation was undertaken on a Net Present Value (NPV) basis over the term of the contract, the incumbents' tendered prices were also balanced by the cost of replacement buses during the term of the contract.

To address the potential barrier to entry in future tender rounds of incumbency advantage of depreciated, high value specialty fleet, and to reduce the risk premium that tenderers may attribute to residual asset value at end of term, an end of term transfer obligation over specialised fleet was built into the contracts. At the time of tender this was limited to double decker buses, which represented just over 10% of the total fleet.

5.4 Depots

To address the potential barrier of lack of economic options for new operators to source depots in optimal locations, a transition period of up to 15 months from contract award was planned to provide operators with adequate time to source depots.

Other features provided the freedom for tenderers to bundle units together without limitation enabling operators to justify investment in setting up new depot facilities and extracting efficiencies across units through economies of scale.

The contract units within geographic areas with more accessible land for depots were tendered while those units in which incumbents had existing depots and land was less accessible were directly appointed to the incumbents.

To address the potential barrier to entry of access to depots in future tender rounds, an end of term transfer obligation over any new depot owned by the operator was built into the contracts. Where a depot developed for the contracts was owned by a third party, for which a transfer obligation was not possible, a two year extension of lease for an incoming operator was required to provide a future incoming operator with more time to source and develop a new depot.

6. Tender approach

6.1 Key stages and timeframes

The tender approach was designed to allow tenderers adequate time to submit well thought out and competitive bids, while maintaining high levels of fairness and probity throughout. The pre-tender industry engagement period provided tenderers with an additional twelve months prior to tender release to prepare and undertake due diligence on the opportunity, including detailed familiarisation with the commercial approach and contractual terms.

A single-stage RFT was deemed the most straightforward approach to enable the provision of RFT information for all tendered units to operators at one time, thereby reducing administration requirements and procurement timeframes. This approach was also considered the most likely to maintain the greatest level of competitive tension, as there was no short-listing step to reduce the number of bidders and all contract units were made available at the same time.

All units available for tender were tendered at the same time, in a single tranche, and tenderers were provided with12 weeks from RFT issue date to submit their responses, which was considered sufficient time to collate and review tender material and to respond.

The RFT response and transition periods recognised the need for new entrant tenderers to investigate, plan and source assets and staff. Including approvals, the timeframes were designed around six months for tendering and selection, followed by 12-15 months for transition.

6.2 Bundling of unit bids

To receive the best price and service outcomes from leveraging network synergies and ability to share underlying resources across multiple units, tenderers were encouraged to

maximise scale and efficiencies by the bundling of units together. The single tranche approach enabled operators to bundle units more freely.

Recognising that operators are best placed to understand where synergies and economies of scale may exist, the procurement team did not wish to stifle innovation by prescribing which units should be bundled together nor limit the number of units or combination of units that could be bundled. Therefore, operators were given the freedom to tender any combination of units that they wished. This approach to bundling received positive feedback from operators during the pre-tender engagement phase.

Consequently, no limitations were set on the number of units that could be included in a bundled bid nor the number of bundles that a tenderer could bid. Additionally, as a result of industry feedback, tenderers were also not required to submit individual (standalone) bids as a pre-condition to submitting bundled bids.

The objective of not restricting bundling opportunities in any way was to maximise the opportunities for tenderers to submit potentially winning bids, thereby increasing the competitiveness of the process and increasing the potential for an improved value for money outcome for GWRC. This approach proved successful with 86 tenders received from 9 tenderers.

However this approach presented an evaluation challenge – how to evaluate the multiple permutations of bid groupings, comprising both individual unit tenders and bundled tenders from multiple tenderers.

Due to the single tranche approach, the project was interested in the best value for money outcome across all of the tendered units. Value for money was measured by the aggregated Evaluation Adjusted Price for each tendered unit, as determined by the Price Quality Method (PQM) of evaluation.

A spreadsheet model was used to bring together the evaluation score and price for each tendered unit of each of the tender combinations submitted and to calculate the Evaluation Adjusted Price for each unit.

To evaluate the potentially large number of bundle and individual unit bid permutations, the aggregate quality adjusted price at a region wide level was used to determine the preferred combination of operators by units and bundled units across the whole of the market.

6.3 Emissions evaluation

To meet GWRC's aspirations for a low emission bus fleet, the tender process featured an industry-first quantitative assessment of bus fleet emissions using an economic cost to society approach to monetise bus emissions. Low emission fleets were 'rewarded' in the evaluation using criteria based on economic cost to society. Both localised pollutants and greenhouse gases were assessed.

This feature contributed to a tender outcome that delivered 99% new buses to the tendered contracts, 95% of which were Euro VI (the latest in diesel emission reduction technology at the time of the tender). The outcome also resulted in an initial ten battery electric buses

entering service in 2018, followed by the phased introduction of a further 22 electric buses over the first three years of the contracts.[1]

Provisions were built into the contract to safeguard GWRC's interests and ensure operators continued to deliver on their promise of low emission buses. Provisions included requirements that:

- Operators must provide the same or better vehicles that are tendered, through the life of the contract
- Operators must operate and maintain vehicles to the certified emission standards
- Any tampering or modification of emission control equipment on vehicles is an "event of default" and will trigger a cure plan
- GWRC has audit rights to check maintenance records, specifically to ensure compliance with emission control requirements
- Operators are to work with GWRC to establish emissions data and "test, develop and implement vehicle emission reduction strategies"
- GWRC can request that vehicles undergo exhaust emissions tests

6.4 Alternative tenders

The procurement team was interested in receiving innovative ideas that offered alternative outcomes to the tender specification, and therefore encouraged Alternative Tenders. To ensure effort wasn't wasted by tenderers preparing, and evaluators evaluating, alternative tenders that did not meet the needs of GWRC, tenderers were invited to interactive sessions shortly after the RFT release date to present alternative ideas for the procurement team's consideration. If the presented alternatives were attractive to GWRC, tenderers were then invited to submit alternative tenders, subject to the submission of a compliant tender.

6.5 Evaluation methodology

For tenders to be considered for evaluation, tenderers had to meet a minimum level of mandatory requirements.

The tender sought a balance of price and quality and used the 'Price Quality Method' (PQM) as specified in the NZ Transport Agency's Procurement Manual for evaluating tenders.

Calibration testing determined that the optimal balance to ensure value for money, affordability and quality for these contracts was a Price to Quality weighting of 60%/40%.

To account for the impact of bundled tenders and the potential for a range of bundle and individual unit tender permutations, the aggregate evaluation adjusted price at a region wide level was used to determine the preferred combination of operators by units and bundled units across the whole of the market.

[1] For more information about the approach to evaluating and quantifying emissions, please read 'Evaluating Bus Emissions: What colour, how big and how much is that elephant in the window?' by Kuschel and Cooper, 2017

The calculation of the Evaluation Adjusted Price is represented by:

Evaluation Adjusted Price = Tendered Price – Quality Credits – Emissions Credits [– Added Value Credits (alternative tenders)]

The selection methodology is illustrated in Figure 3. While selection was based on the evaluation adjusted price, the authority pays the full price tendered by the winning tenderer. The price adjustment represents the premium that the authority is prepared to pay for the higher quality offered by the winning tender against the lowest ranked tender.

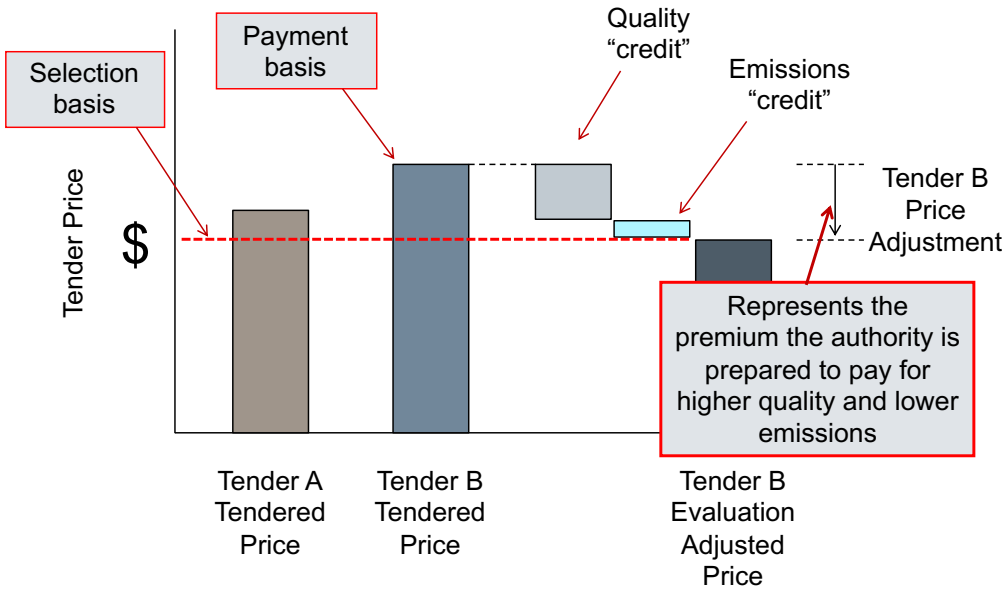

Figure 3. Selection using Price Quality Method

The ranking of the evaluation adjusted price for each tender combination for all units in the region is illustrated in Figure 4.

Tender combi-nation	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit …	Total
1	198			39	80	57	71	$445
2	33	58	206			57	71	$425
3	33	138	206			138	71	$448
…	97		206			131		

Preferred

- Shading denotes bundles

Figure 4. Determining the lowest aggregate quality adjusted price at a region wide level

6.7 Tenderer capacity

A further incentive to maximise tendered bids allowed tenderers to limit their financial exposure by specifying their bid capacity, using a combined Peak Vehicle Requirement (PVR) as a proxy for a tenderer's bid limitation. In this way, tenderers could tender for as many units and unit combinations as they liked, but if a region-wide tender outcome resulted in a tenderer exceeding their bid capacity, that result was deemed unsustainable and rejected. The preferred tender outcome would then be the next ranked region-wide outcome in which all successful tenderers that made up that outcome were within their bid capacity.

The benefits of this approach included:

- Reduced risk of over-commitment by tenderers and therefore sustainability of the successful tender outcome
- Encouraged higher levels of tender activity
- Final result was determined by the pre-agreed evaluation methodology rather than a subsequent determination to withdraw contracts by the successful tenderer/s

The treatment of tenderer capacity is illustrated in Figure 5.

Tender Combi-nation Ranking	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit …	Total Adjusted Price
~~1~~	~~58~~	~~33~~	~~71~~	~~46~~	~~89~~	~~57~~	~~70~~	~~424~~
2	58	33	71	46	89	58	73	428
3	68	42	88	39	80	58	71	446
…	57	33	71	46	89	81		

If a single tenderer exceeds its specified capacity (combined PVR), tender combination is excluded from consideration

Figure 5. Treatment of tenderer capacity

6.8 Market concentration

Experience from other public transport markets (and indeed all markets) shows that greater competition (both real and perceived) provides downward pressure on prices in competitive tender situations.

If one operator was to gain significant market share from the tender process, this may create, or be perceived to create, significant barriers to entry for any new entrant in future, thereby reducing the likelihood of robust competition in future tender rounds. A single dominant operator may also stifle rivalry and innovation of operators delivering service within the market.

The risk of a single supplier dominating the tender outcome in Wellington (perceived or real) was exacerbated by the incumbency advantage held by the two major incumbent operators, further exacerbated by the advantage to those operators of the award of directly appointed units.

To address future competition risk, a set market cap restriction was not applied, but rather a market concentration guideline was included in the evaluation process to assess the value for money implications of any preferred tender outcomes that exceeded the guideline.

A value for money assessment of market concentration followed the completion of the initial price/quality assessment. This additional assessment was to be triggered if market concentration (expressed as a % of region-wide market share, incorporating all units – both tendered and directly appointed) of any one operator exceeded a threshold of 60%.

The value money assessment used empirical evidence of premiums paid in tenders elsewhere that comprised small numbers of bids or direct appointments and considered such premiums against the value difference between the preferred tender outcome and the next ranked tender outcome that fell below the market concentration guideline.

6.9 No departures

To enable a consistent, like for like comparison of each tender bid, a key objective of the tender design process was to prevent tenderers specifying departures from, or tags to, the partnering contract that was issued with the tender. This objective required tenderers to have sufficient comfort with the contract terms and risk allocation. The extensive engagement between the procurement team and potential tenderers prior to the tender release included numerous rounds of review and feedback, initially of high level terms, concluding with potential tenderers reviewing and providing feedback on a full draft contract.

Feedback from tenderers indicated that the engagement process ensured that they were sufficiently familiar and comfortable with the contract that they were prepared to accept all contract terms, without departure, in the submission of their tenders.

6.10 Negotiation of direct appointed units

As part of the legislative changes to put the Public Transport Operating Model into effect, it was a requirement for GWRC to directly award a specified number of contracts, without contest, to the two primary incumbent operators.

The intention of the direct appointment process was to negotiate prices using the successful tendered prices, normalised for the different characteristics of each unit, as benchmark prices.

The legislative framework precluded GWRC from a recourse to tendering of the contracts should it not be possible to agree acceptable prices with the incumbents. Rather, recourse for final determination of prices was arbitration.

Without recourse to tendering the directly appointed contracts, and under time pressure to commence the tendered and direct appointed contracts at the same time, the procurement team entered the negotiations with very limited commercial leverage. The outcome of the price negotiations was reflective of these circumstances.

7. Outcomes

The tender process was considered a benchmark for industry engagement which resulted in an attractive and competitive tender opportunity for market participants.

Twelve local and international bus companies participated in the pre-tender engagement process providing valuable input to the tender and contract design. Industry input to the process resulted in a strong performance-based contract, with appropriate allocation of risks between the authority and operators.

The high level of market engagement, together with the various mechanisms that were used to reduce barriers to entry and incumbency advantage, contributed to strong competition in the tender process.

Nine of the original twelve bus companies participated in the final tender process. The nine tenderers submitted a total of 86 tenders covering a variety of individual and bundled tendered bids in various combinations.

The final tender outcome awarded the nine tendered contracts to two operators with existing, but very small, footprints in the region's bus market, with the tender result yielding strong savings against expectations which were set by a 'shadow bid'.

The successful pricing of harmful emissions contributed to a tender outcome that has delivered 99% new buses to the tendered contracts, 95% of which are Euro VI (the latest in diesel emission reduction technology). The outcome also saw an initial ten battery electric buses enter service in 2018, which will be followed by the phased introduction of a further twenty-two electric buses over the following three years of the contracts.

8. Transition

To address major capacity constraints, poor service reliability and inconsistent network coverage, a major overhaul of the bus network in Wellington city was designed to coincide with implementation of the new bus operating contracts. The significance of the changes to existing routes and services prevented the new network being implemented under the previous incumbency contracts, resulting in the implementation of the new network being explicitly tied to commencement of the new bus operating agreements.

To manage the implementation risks of such major change, commencement of the bus operating contracts affecting Wellington city was timed to occur at a relatively low demand period on the network, being school holidays in the middle of 2018, twelve months from the award of the tendered contracts.

Other areas that did not impact Wellington city commenced earlier to separate the mobilisation activities of these areas from the Wellington city task and thereby reducing some risks associated with this major change.

While the tender process met objectives for enhancing competition, delivering value for money and substantially improving bus fleet quality, the transition was particularly challenging. The new contracts, new fleet and new depots were implemented at the same time as a radically new bus network, expanded and upgraded ticketing system, upgraded real time information system and a substantial change programme for GWRC, involving new roles, systems and processes. As a consequence, the transition has taken longer than expected to reach acceptable customer service levels, with many lessons learned for managing transitions of this nature.

The significance of the change, particularly as a large part of the change was being implemented by two operators who had to scale up, meant that the planned for transition period of 12 months was underestimated and a longer transition period would have assisted some aspects of the transition process.

9. Lessons learned

Some of the principal lessons learned from the Wellington bus procurement process include:

1. **Importance of market engagement** – feedback from market participants highlighted the benefits of active engagement with the market at an early stage. Input from the market provided valuable advice into the design of the commercial framework and procurement process – not only did the project benefit from 'free' advice from experienced industry participants but ensured that GWRC was able to offer an attractive proposition, with appropriate risk allocation, which was clearly understood by the market. This was reflected by a high level of interest in the opportunity and strong levels of competition in the tender process.
2. **Importance of having recourse to go back to market in negotiations** – the inability for GWRC to tender the directly appointed units in the circumstance that acceptable negotiated pricing could not be agreed with the incumbents was reflected in the final prices agreed comparative to the tendered prices received.
3. **Importance of time in transition processes involving significant change** – initially a transition period of up to fifteen months was targeted for the new Wellington bus contracts, however this was shortened to twelve months for a number of reasons. These included a perceived urgency to address existing service performance issues by bringing in the new bus network as quickly as possible; a desire by operators to commence services, and therefore revenue, as quickly as possible; and a general underestimation of the transition task involved. The latter included implementing the new bus network and associated customer communications and education, new contracts and associated tools and processes to measure and monitor performance, new bus fleet, new greenfield and brownfield depots, staff recruitment and training, expanded and upgraded ticketing system, upgraded real time information system and a substantial organisational change programme for GWRC. On review, the original target of a fifteen month transition is likely to have improved the outcomes of the transition process.
4. **Change affects incumbents, not just new entrants** – a lot of focus and support was provided by GWRC to the two operators who had to scale up during the transition. However the major incumbent operator experienced substantial challenges in adapting to the change, in particular optimising both driver and management resources for a downsized business. This impact and subsequent performance of the major incumbent during the transition was unexpected and consequently there was a delayed response by GWRC to performance managing and supporting the incumbent.
5. **Change affects the transport authority, not just the operators** – the transformational nature of the changes in Wellington required GWRC to undertake an

organisation change process and acquisition of new capabilities to prepare for and adapt to the new environment. Through the procurement and transition process GWRC relied on a large number of external contractors and is yet to adapt its public transport organisational structure and capabilities to match the new operating and commercial environment, though this change is now underway. It is likely that, had GWRC undertaken the required organisational change in preparation for, rather than in response to, the bus system changes, the challenges and service performance issues experienced through the Wellington transition process will have been substantially mitigated with a greater level of readiness.