



# Firearms Buy-Back Pricing

Commercial in Confidence (7 June 2019)

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# Contents

<b>Executive Summary</b>	<b>3</b>
<b>1 Disclaimer</b>	<b>4</b>
<b>2 Scope and approach</b>	<b>5</b>
2.1 Scope	5
2.2 Principles underpinning the buy-back price lists	5
2.3 Approach taken to develop the buy-back price lists	6
2.4 Feedback from firearms industry experts	6
2.5 Challenges to the proposed structure of firearm price lists	7
<b>3 Development of a base price list</b>	<b>8</b>
3.1 Designing the base price list	8
3.2 Price list structure	8
<b>4 Pricing options</b>	<b>10</b>
4.1 Options development	10
4.2 Preferred short-list of options	10
4.3 Implications of condition checking	11
4.4 Price caps and the Exceptions Panel	12
<b>5 Estimating the cost of the buy-back</b>	<b>13</b>
5.1 Initial estimates of the cost of the buy-back scheme	13
5.2 Estimates developed using updated firearm valuations and volume data	13
5.3 Limitations of drawing financial conclusions	14
<b>6 Other considerations</b>	<b>15</b>
6.1 Excluding firearm parts from the buy-back	15
6.2 Funding modification of prohibited shotguns	15
6.3 Excluding .22 rimfires with detachable magazines from the buy-back	15
6.4 Including tactical/military style sights in the buy-back	15
6.5 Paying a premium price for E-CAT firearms	16
<b>APPENDICES</b>	
<b>Appendix A: proposed base price list</b>	<b>18</b>
<b>Appendix B: pricing option evaluation criteria</b>	<b>31</b>
<b>Appendix C: long list of pricing options</b>	<b>32</b>
<b>Appendix D: candidate five-tier grading system</b>	<b>36</b>
<b>Appendix E: candidate three-tier grading system</b>	<b>41</b>
<b>Appendix F: draft terms of reference for exceptions pricing panel</b>	<b>43</b>

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# Executive Summary

This report presents the base price list for the firearms buy-back scheme, the short list of options to determine the level of compensation, and KPMG's recommendations on the price cap and threshold for the Exceptions Panel. The tight timeframes and data gaps imposed a number of limitations on our ability to draw clear conclusions on how various pricing options would perform against the principles of the buy-back scheme.

## Short list of options

A long list of potential buy-back options was developed and evaluated based on a set of principles consistent with early advice from the NZ Police to the Ministers. This produced a set of three options that should perform better relative to other alternatives:

### Option B2: Detailed pricing catalogue with no discount factor

The level of compensation would be determined based on the brand, type and model, with no further adjustment.

### Option C1a: Detailed pricing catalogue, with a five-tier condition-based discount

As with option B2, the level of compensation will be set based on the brand, type and model of the surrendered firearm. To manage the overall cost, this option would see the base price adjusted based on the inspected condition of the firearm (New, Perfect and Excellent; Very Good; Good; Fair; Poor.) This five-tier scale would require condition assessments to be performed by NZ Police staff, with prior training and a list of criteria to ensure consistency.

### Option C1b: Detailed pricing catalogue, with a three-tier condition-based discount

Simplified version of option C1a, with the level of compensation once again set based on the brand, type and model of the surrendered firearm. To manage the overall cost, this option would see the base price adjusted based on the inspected condition of the firearm (Near-New, Used or Poor). By using a three-tier scale, it is anticipated that condition assessments could be performed more easily and rapidly by NZ Police staff than in the case of option C1a. However, the broader condition bands are likely to cause more contention with owners and could increase the level of referrals to the Exceptions Panel.

## Price limit and Exceptions pricing panel

Based on the existing base price list, we have believe the following price caps should be applied. Any firearms that owners believe are above these values must be valued by the Exceptions Panel:

— Centerfire semi-automatics	\$10,000
— Rifles with capacity beyond 10 rounds	\$2,000
— Shotguns with capacity beyond 10 rounds	\$5,000

These price caps should be reduced based on any discount factor or depreciation model applied to the base price list.

## Caveats and Limitations

**Subject matter expertise:** our approach is based on reliable techniques for data analysis and options development, and as much engagement with the expert pricing panel as the time allowed. Despite our best efforts, this report may not capture the full depth and breadth of the complex subject matter.

**Estimated cost of the buy-back scheme:** any estimates of the total cost of the buy-back should be used with caution. Without a national firearms register, it is not possible to understand the volume of firearms by make and model or even at any price point. It is not clear whether the majority of eligible firearms are at the midpoint of a price range or nearer the top or the bottom. For example, centrefire semi-automatics range in price from \$1,000 to \$10,000, with most models in the range from \$2,500 to \$4,500. It is not clear whether the majority of NZ MSSAs are in that mid-range or whether most are cheaper than \$2,500.

# 1 Disclaimer

## **Inherent Limitations**

This report has been prepared in accordance with our signed Consultancy Services Order with NZ Police dated 5 April 2019. Unless stated otherwise in the Consultancy Services Order, this report is not to be shared with third parties. However, we are aware that you may wish to disclose to relevant Ministers' offices elements of any report we provide to you under the terms of this engagement. In this event, we will not require relevant Ministers' offices to sign any separate waivers. The services provided under our Consultancy Services Order ('Services') have not been undertaken in accordance with any auditing, review or assurance standards. The term "Audit/Review" used in this report does not relate to an Audit/Review as defined under professional assurance standards. The information presented in this report is based on that made available to us in the course of our work/publicly available information/information provided by NZ Police. We have indicated within this report the sources of the information provided. Unless otherwise stated in this report, we have relied upon the truth, accuracy and completeness of any information provided or made available to us in connection with the Services without independently verifying it. No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by NZ Police and other stakeholders consulted as part of the process. In relation to any prospective financial information/forecasts/projections included in the report, we do not make any statement as to whether any forecasts or projections will be achieved, or whether the assumptions and data underlying any such prospective financial information/forecasts/projections are accurate, complete or reasonable. We do not warrant or guarantee the achievement of any such forecasts or projections. There will usually be differences between forecast or projected and actual results, because events and circumstances frequently do not occur as expected or predicted, and those differences may be material.

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## 2 Scope and approach

### 2.1 Scope

1. On 21 March 2019, the Prime Minister announced a ban on all military style semi-automatics (MSSAs) and assault rifles in New Zealand and noted that Cabinet had directed officials to develop an amnesty and buy-back scheme.
2. On 4 April 2019, Cabinet agreed to seek independent advice to develop the price list for the buy-back of firearms.
3. The purpose of this project is to prepare two price lists, following the Australian approach, in accordance with the options provided to Cabinet on 4 April 2019:
  - I. Compensation will follow the Australian approach of two price points, new and used for individual firearms make and models.
  - II. Compensation will follow the Australian approach with three price categories, the highest being nearly new second-hand price.
4. The project must also establish a maximum cap across the total price. It should also establish an Exceptions Panel to determine and recommend compensation for higher value items.

### 2.2 Principles underpinning the buy-back price lists

5. In the limited amount of time available to design the buy-back price lists, we have taken into account the following principles (based on the early advice provided by the NZ Police to the Ministers):

#### **Effectiveness in removing firearms from the public**

- The main objective of the buy-back is to keep New Zealand safe by removing as many prohibited firearms from the public as possible.
- Pricing should drive high levels of compliance.

#### **Fairness**

- To owners, compensation should be considered proportional to the value of the item.
- To the public, compensation should not be seen as excessive.

#### **Transparency**

- There should be consistency in the value paid for similar items.
- Owners, Ministers and the public can understand how the value of compensation has been derived.

#### **Administrative simplicity**

- The process should not impose high administrative time or costs on NZ Police.
- The price lists should be straightforward to follow and minimise specialist assessment required at collection points.
- The pricing approach should not create an excessive volume of firearms requiring evaluation by the Exceptions Panel.

#### **Overall cost of the buy-back scheme**

- The overall cost of the buy-back scheme needs to be estimated based on pricing and volume assumptions.

#### **Behavioural response and risks**

- Where possible, the buy-back price list needs to avoid unintended consequences.
- Such consequences may include, but not be limited to, 'asset stripping', where it is more financially beneficial for owners to strip down firearms into parts rather than handing in whole units.

## 2.3 Approach taken to develop the buy-back price lists

6. The team developing the buy-back price lists used the following approach.
  - 6.1. Review of approach taken to the buy-back in Australia in 1996, including lessons learned.
  - 6.2. Review of current and historic firearms pricing based on:
    - Detailed firearms, accessories and parts price databases provided by NZ retailers;
    - Data from TradeMe relating to sales of used firearms;
    - On-line new and used price lists from NZ, Australia and USA; and
    - Valuations lists of commonly sold military firearms provided by NZ dealers and auctioneers.
  - 6.3. Consultation with NZ-based specialists including:
    - Retailers;
    - Wholesalers;
    - Specialist dealers;
    - Auctioneers; and
    - Representatives of gun clubs.
  - 6.4. A working session with industry specialists, on Monday 29 April, to create a draft buy-back price lists:
    - 6.4.1. Reviewed potential pricing structures including proposed:
      - New/Used; and
      - Near New Condition/Used Condition/Poor Condition.
    - 6.4.2. Assessed alternative pricing structures based on existing market price models.
    - 6.4.3. Developed price list for major groups, brands and models of firearms based on retail data sources listed above.
    - 6.4.4. Outputs subsequently validated and updated by all delegates.
    - 6.4.5. Outputs also validated by independent data analytics team against other data sources listed above.
    - 6.4.6. Military firearms price list developed separately by specialists.
    - 6.4.7. Detailed price list for parts not created in this timeframe.
  - 6.5. Validation of draft price lists produced with industry specialists against the data described above.
  - 6.6. Collection of sales and import data to estimate volumes of different firearms likely to be handed in.

## 2.4 Feedback from firearms industry experts

7. In speaking to retailers, wholesalers, importers, collectors, auctioneers and specialists from across the industry, a number of other key messages came out:
  - 7.1. While the majority of people in the industry, even those who specialise in MSSAs, understand the government's need to act, there is a lot of pain and anger in the firearms community at the buy-back.
  - 7.2. They believe that pricing needs to reflect that this is a 'distress' sale. Many owners are angry about having to surrender these firearms, especially items that they believe should not have been drawn into the buy-back, for example, older shotguns that now exceed the current magazine capacity. They also believe that these will be high levels of non-compliance regarding the buy-back if prices are too low.
  - 7.3. Many believe that the new legislation encompasses far too many types of firearm, for example, older multi-shell shotguns.
  - 7.4. At the specialist end of the market, there is much disquiet about the potential destruction of rare and antique items, some of which have been handed down over multiple generations.
  - 7.5. Most retailers have been very cooperative especially in providing detailed new pricing data.

- 7.6. Retailers are concerned that any involvement they have in the development of the buy-back pricing, specifically the used prices, leaves them implicated with their customers. For example, they are concerned if they helped develop a price list, they are concerned that Ministers might amend it 'to fit a budget' without further consultation.

## 2.5 Challenges to the proposed structure of firearm price lists

8. It was previously proposed to Ministers that the following forms of price lists be produced for complete firearms:
- I. A two-point price list, made up of a single 'new' and a single 'used' price for each item (similar to that used in Australia).
  - II. A three-point price list, including a 'nearly new condition', and two other price points, potentially 'used condition' and 'poor condition'.
9. Consultation with industry experts revealed a number of potential challenges with this approach:
- 9.1. **The proposed scales are too granular and likely to cause high levels of under- and over valuation.** Differences in condition can easily halve or double the value of a firearm. Just having broad brush price points is likely to result in under- and over-valuation. The former places firearm owner compliance at risk and the latter might not be well perceived by the public or government if owners receive more compensation than the value of the firearm.
  - 9.2. **A two or three point scale could result in a greater level of referrals to the Exceptions Panel.** The risk of under-valuation, described above, might lead to a high volume of firearms being referred for detailed inspection by the Exceptions Panel.
  - 9.3. **Condition is important when evaluating value, but could be complex to apply when dealing with high volumes of firearms.** NZ valuations, especially of more valuable firearms, are typically undertaken by firearms experts and take some time. Experts suggest that it would be difficult to quickly evaluation condition to define how 'used' a firearm is without detailed internal inspection with a borescope.
  - 9.4. **Firearms do not depreciate like most consume goods.** Because of the relatively slow evolution of firearms, the durability of their construction materials and the limitations of supply in NZ and low levels of innovation, most firearms that qualify for the buy-back do not depreciate significantly if well maintained and in good condition. Indeed, some second-hand firearms attract just as high a price as a brand new item where there is limited supply. This has been confirmed by independent research into NZ and overseas markets.
  - 9.5. **Age of the firearm is generally not important when assessing the used value.** It is hard to evaluate the age of a firearm by physical inspection as few are printed with a date of manufacture. And because some firearms get fired less frequently than others, the age of a firearm rarely impacts its value as much as its condition. Most dealers assess the value of a second-hand firearms via close physical inspection. Better makes and models are less likely to wear in critical areas than others because of the quality of components.



## 3 Development of a base price list

### 3.1 Designing the base price list

10. Based on consultation with firearms industry experts, we developed a base price list found in Appendix A. The aim has been to keep this list as short and as simple as possible while reflecting significant differences in value between different models of specific firearms.
11. The base price list reflects what NZ firearms experts believe might have been a fair market value for a firearm of a typical type, in the typical condition that might have been seen in the NZ market before the legislation change, i.e. in Q1 2019. Prices reflect what an owner might have typically spent to replace a specific firearm before the legislation change. The price list does not reflect the manufacturer's recommended retail price or the original price of a firearm.
12. A significant determinant of a firearm's market value is whether it is a 'Current Model', a 'Superseded Model' or a 'Discontinued Model'. According to the valuers and experts in the market, the nature of the model influences values in the following ways:
  - 12.1. **'Current Model'**. Some manufacturers have made the same model of firearm for many decades. 'Current model' firearms increase in value with inflation. Many firearms have at least the same value as the latest model regardless of their age. Some older versions of the 'current model' can be worth more than a new equivalent. For example, although a Ruger 10/22 was first sold in 1964 for USD\$64.50, sold in 1980 for USD\$99.00, and now has a retail of USD\$399, a second-hand Ruger 10/22 would retail at USD\$400.
  - 12.2. **'Superseded Model'**. If a new improved model is manufactured, any 'superseded model' becomes less desirable and therefore diminishes in value. Models are generally updated every 10 years. A 'superseded model' does not increase to the 'current model' values. For example a Browning BAR has had several variations over its lifetime. If you consider inflation, all of these models would have had a similar new retail price. But because the superseded models are not as desirable as the 'current model', they are worth less on today's market.
    - BAR Type 2 (1977-1993) \$1,000;
    - BAR Mk II (1993-2004) \$1,500;
    - BAR Shorttrac (2004-2016) \$2,500;
    - BAR Mk III (2016-now) \$2,500.
  - 12.3. **'Discontinued Model'**. These firearms are no longer made and there are no longer any parts available for them. 'Discontinued model' firearms are generally more than 20 years old but can be more than 50 years old. They are still valuable if they still function, but are sometimes not as effective as the current models. An example of how this impacts value is that a 12G Browning 2000 (1974-1981) is worth \$1,000, where Browning's equivalent current model would have a value of about \$2,500.

### 3.2 Price list structure

13. The base price list in Appendix A reflects the three definitions discussed above and categorises firearms into three groupings:
  - Centerfire semi-automatics;
  - Rifles with capacity beyond 10 rounds; and
  - Shotguns with capacity beyond 10 rounds.
14. The base price list does not detail variants of all models, and in some cases, only refers to a type of firearm, regardless of the brand. We understand it can be difficult to easily identify specific variants of models and have therefore not developed that level of detail. We have only differentiated between models where the industry advised us that there would be significant value differentials and model variants could be identified.

15. Note that the pricelist bundles together all makes and models of .22 rifles based on the type of firing mechanism. There is little differential of values between brands and different brands and models can be difficult to identify on this type of firearm.
16. There are approximately 237 specific types of firearms on the base price list and the pricing assumes all firearms that are handed in are complete (i.e., in working order). We believe, based on expert feedback, that this should capture the majority of the firearms that may be handed in during the amnesty period. But we do not have certainty whether this is an exhaustive list of newly prohibited firearms. We propose a process where further items and their value can be added to the base price list during the buy-back process.
17. In addition, we have produced a standardised brand-agnostic price list for accessories. This price list includes accessories such as magazines and suppressors. Firearms experts believe the buy-back of magazines is important to the overall success of the buy-back because these components make it relatively easy to convert a legal firearm into a prohibited firearm. Suppressors have also been included in the buy-back price list because they are generally machined to fit a specific barrel and cannot easily be transferred to other firearms.

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## 4 Pricing options

### 4.1 Options development

18. A long list of pricing options was developed based on two main categories:

- I. **Single value** – This approach is highly simplified. At an extreme, it would be to pay a single price for all firearms regardless of make, model, age or condition. At its most granular, such an approach might be to pay a single price for all firearms of a specific type, i.e., shotguns, rifles, MSSAs. An option within this category could also include paying no compensation at all (i.e., relying solely on the enforcement of the firearms ban to achieve the intended results). The main advantages of this category are simplicity of implementation, and intuitive transparency of the pricing level.
- II. **Make and model valuation** – This approach differentiates firearms based on their make and model and type. This approach produces a more precise measure of the value of the firearm, as the quality and price of the firearm can vary widely not just between manufacturers, but also between different models from the same manufacturer. This approach would be seen as more favourable by owners and the firearms community. The detailed price list in Appendix A reflects this approach.

19. In addition to these main categories, the long list also considered variations of these options, each of which would discount the base price list. A number of options were developed and based upon:

**The condition of the firearm.** Applying a discount factor based on the condition of the firearm. This would require inspection at hand-in by a trained individual, with clear standards to apply consistency across the country.

**A top-down discount.** Applying a broad-brush discount factor to the base price list, either across all firearms or in a more focussed manner based on firearm type, in order to fit to any budget constraint.

**An assumed depreciated value.** Some firearms will have been bought by businesses and depreciated as assets. One option is to discount valuations based on five-year straight-line depreciation, with any firearms over five years being considered as fully written-down and of no value.

20. Each of these variations assumes the application of a discount factor on the base price list included in Appendix A.
21. Six criteria were developed for evaluating the long-list of options, largely based on the principles for developing the price list detailed earlier in this document. The criteria for option evaluation are summarised in Appendix B.
22. The long list of options and their relative performance against the six criteria is summarised in Appendix C.

### 4.2 Preferred short-list of options

23. Long list assessment produced three short-listed options, each with relative strengths and limitations. These options are described below, with more detailed assessment in Appendix C.

#### i. Option B2: Detailed pricing catalogue with no discount factor

24. The level of compensation would be determined based on the brand, type and model, with no further adjustment. This is likely to be effective in incentivising owners to surrender their firearms, as it will provide compensation that closely matches the perceived current value of each surrendered firearm. This option also scores high on transparency, as the level of compensation can be clearly linked to the quality of the surrendered firearm.
25. The main drawback with this option could be it being perceived by the public as government paying 'top dollar' for firearms. It could also potentially be the most expensive option for the government as it could drive high levels of compliance, but at the highest price points.

#### ii. Option C1a: Detailed pricing catalogue, with a five-tier condition-based discount

26. As with option B2, the level of compensation will be set based on the brand, type and model of the surrendered firearm. To manage the overall cost, this option would see the base price adjusted based on the inspected condition of the firearm (New, Perfect and Excellent; Very Good; Good; Fair; Poor.) Condition assessments can be performed by NZ Police staff, with prior training and a list of criteria to ensure consistency.

27. The main advantages of this option are that it would explicitly incorporate condition into the pricing of firearms, and that using a five-tier approach would make this relatively straightforward to evaluate. Nevertheless, NZ Police will have to develop a clear condition assessment criteria and potentially train staff in their use to ensure consistency of assessments across the country.
28. While the condition based valuation is likely to be intuitively understood by the owners and the public, some members of the public may remain surprised by how well even 'used' firearms retain their value.
29. The main drawback with this option is the level of inspection required when firearms are handed in. Even with a straightforward model, training and relevant expertise, there is a risk that this may take too long to be operationally effective.
30. Candidate descriptions of the five tiers and their associated discount factors is included in Appendix D.

### iii. Option C1b: Detailed pricing catalogue, with a three-tier condition-based discount

31. As with options B2 and C1a, the level of compensation will be set based on the brand, type and model of the surrendered firearm. To manage the overall cost, this option would see the base price adjusted based on the inspected condition of the firearm (Near-New, Used or Poor), a simplified version of option C1a. Condition assessments can be performed rapidly by NZ Police staff, with short prior training and a list of criteria to ensure consistency.
32. The main advantages of this option are that it would explicitly incorporate condition into the pricing of firearms, and that using a three-tier approach would make this relatively straightforward to evaluate. Nevertheless, NZ Police will have to develop a clear condition assessment criteria and potentially train staff in their use to ensure consistency of assessments across the country.
33. While the condition based valuation is likely to be intuitively understood by the owners and the public, some members of the public may remain surprised by how well even 'used' firearms retain their value.
34. The main drawback with this option is that some owners may find the three-tier nature coarser than they might expect. A proportion of owners may believe that their firearm is worth more than the set value in the 'used' range. This may lead to a risk of higher levels of referral to the Exceptions Panel than is desirable.
35. Candidate descriptions of the three tiers and their associated discount factors is included in Appendix E.

## 4.3 Implications of condition checking

36. The following summarises the main implications of applying condition checks to whichever pricing option is selected.

### Impact on Transparency

37. While condition can have a significant impact on the value of a firearm, its evaluation is not straightforward. It requires experience and expertise, and some specialists may only have these capabilities across a limited set of firearms. While applying condition to the pricing of the buy-back may theoretically offer the benefit of increasing the accuracy of any valuation, there is a risk that there is inadequate expertise to complete this work at volume and that there will be inconsistencies of assessment between different evaluators.

### Impact on the Cost of the Buy-back

38. While the application of condition-based assessment of firearms might appeal from fairness and cost perspectives, it should be noted that US analysis of the second-hand market suggests that most recent production firearms are found in good or better condition. It seems that it takes decades of heavy use and/or abuse to reduce a quality modern firearm to fair or poor condition.
39. Given that the proposed base price-list already limits the value of firearms likely to be in poor condition, i.e. .22's, the impact of applying condition checks on higher value firearms seems like it is unlikely to have a significant impact on the overall cost of the buy-back.

### Impact on Administrative Simplicity

40. Most condition checks in NZ are typically detailed inspections that take some time and require a significant level of expertise. The typical NZ inspection approach would be likely to cause significant negative impacts on administrative simplicity. In the US, there are two standardised approaches to condition evaluation, both of which need some expertise. It seems that neither are commonly used in NZ other than for vintage firearms.

- I. The **National Rifle Association** has a long-standing approach to defining firearm condition. It classifies modern firearms as New, Excellent, Very Good, Good or Fair, and antique firearms as Excellent, Fine, Very Good, Good, Fair, and Poor. Each condition rating has a specific definition (largely based on visual inspection) and can generally be made fairly rapidly by an expert.
  - II. The **'Blue Book of Gun Values'** is a 2,500 page annual publication that many US dealers use to value firearms. It covers over 1,700 manufacturers of firearms, modern and antique. The Blue Book uses a valuation system based on the percentage of original factory finish(es) remaining on a firearm. The guide contains values for firearms at graduations such as 100%, 98%, 90%, 70% or less original finish remaining. Using the Blue Book requires a considerable level of expertise and knowledge to clearly identify the level of original factory finish. Note the importance of the word 'original'. If anyone other than the factory has refinished the firearm, its value is likely to have been diminished.
41. We understand that the Blue Book approach is considered more reliable and accurate by US experts but that it is considerably more complex to apply.

#### 4.4 Price caps and the Exceptions Panel

42. Based on the existing base price list, we believe the following price caps should be applied. Any firearms that owners believe are above these values must be valued by the Exceptions Panel
- |   |          |
|---|----------|
| — Centerfire semi-automatics              | \$10,000 |
| — Rifles with capacity beyond 10 rounds   | \$2,000  |
| — Shotguns with capacity beyond 10 rounds | \$5,000. |
43. These price caps should be reduced based on any discount factor or depreciation model applied to the base price list.
44. Draft terms of reference for the Exceptions Panel are included in Appendix F.

## 5 Estimating the cost of the buy-back

### 5.1 Initial estimates of the cost of the buy-back scheme

45. A briefing paper to Ministers on the buy-back scheme, dated 2 April 2019 suggested, that cost of the buy-back could cost up to \$150m.
46. This estimate was based on a set of estimated average firearm values and assumptions that:
  - All newly prohibited firearms are redeemed.
  - All of the approximately 15,000 MSSAs are be handed in.
  - Up to 20% of the approximately 760,000 rifles are handed in.
  - Up to 2% of the approximately 380,000 shotguns are handed in.

### 5.2 Estimates developed using updated firearm valuations and volume data

#### Estimates based on detailed price list and initial volume assumptions

47. One of the challenges in determining the overall cost of the buy-back is a lack of data relating to the actual firearms that are in public ownership. It is also not known what proportion of rifles and shotguns that are in public ownership are now prohibited.
48. Using the base price list included in Appendix A and the volume assumptions used in the 2 April 2019 Briefing to Ministers, the potential cost of the buy-back could as high as \$752m. This assumes the average value of firearms handed in is \$4,331 per firearm, reflecting the 75th percentile of all values in the base price list, and a volume of approx. 173,000 firearms.
49. Estimates of the overall cost of the buy-back using this 75th percentile valuation of firearms are included in Appendix C.
50. While these estimates could overstate the potential cost of the buy-back, there is no reliable volume data available to confirm whether this is the case.
51. It is not clear whether the majority of prohibited firearms are at the midpoint of a price range, nearer the top-end or nearer the bottom-end. For example, centrefire semi-automatics typically range in price from \$1,000 to \$10,000, with most models in the range from \$2,500 to \$4,500. It is not clear whether the majority of NZ-owned MSSAs are valued above \$5,000 or less than \$2,500.
52. Estimates could be improved by applying volume information for each make and model of firearm. But without a national firearms register this data is unavailable.

#### Estimates reflecting approximate firearm volumes by price point

53. A major retailer provided some limited comparative data relating to volumes. This data indicated whether there are likely to be tens, hundreds or thousands of any particular firearm in NZ public ownership. One limitation of this data was that it only covered a sample of firearms on the base price list. In addition, it is not clear whether the data points are skewed towards more recent firearms models.
54. Based on the relative volume information, it is estimated that the average price per firearm is circa. \$1,920, consistent with where the majority of firearms models are on the base price list. By applying the updated price per firearm to the volume information noted above, we estimate the potential cost to be around \$333m.
55. Estimates of the overall cost of the buy-back using this weighted average valuation of firearms are included in Appendix C. This valuation reduces the high end estimates of overall costs by up to circa. 56%. However, this reduction should not be applied to options A1, A2 and A3, as they do not differentiate by the firearm make and model.
56. These estimates should also be used with caution because the volume data provided was comparative rather than based on actual sales information.

### Potential impact of applying firearm condition to valuation

57. It is understood that the condition of a firearm can have a significant impact on the value of a firearm. This is especially true of more collectable and valuable pieces.
58. However, while applying discount factors based on condition may result in fairer pricing of firearms and a lower overall cost, the impact of such discounts should not be overestimated. For .22s and less collectable shotguns, a general 'average' condition has been factored into the price list. However, based on conversations with NZ owners and dealers, and looking at US data, we suspect that most MSSAs and high-value rifles will be in excellent, very good or good condition. We understand that these are typically not 'general usage' firearms, but are the more valued examples an owner might have in his or her collection. Higher quality firearms are also likely to be made from more durable materials.

### Exceptions Panel costs

59. The cost estimates of the buy-back provided in Appendix C are exclusive of the any valuations made by the Exceptions Panel.
60. The cost of the Exceptions Panel valuations is difficult to determine, based on unknown volumes and values of exceptional firearms.
61. We understand from firearms experts that there may be some very rare and highly collectable firearms that are now prohibited that may have values well over \$10,000, even as high as \$100,000.
62. Nevertheless, consideration of the pricing options must be considered carefully because of potential impacts on the Exceptions Panel. If the base prices are considered too low by owners, there is a likelihood that many owners will appeal to the exceptions panel.
63. Options that present an escalated risk of referrals to the Exceptions Panel are noted in Appendix C.

### Parts costs

64. Appendix A includes suggested price points for parts.
65. However, the overall cost estimates of the buy-back provided in Appendix C are exclusive of the any buy-back of parts.
66. The overall cost of the parts is difficult to determine because volumes are unknown and are difficult to estimate.

## 5.3 Limitations of drawing financial conclusions

67. The financial observations made in this report might be useful for option comparison purposes. However, KPMG does not believe they are robust enough to fully provide confidence in the financial implications of any of the buy-back pricing options presented.
68. In building estimate of the potential cost of the buy-back, the majority of data sources have lacked rigour and have been riddled with assumptions. For example, it is not clear what proportion of shotguns and rifles in public ownership are now prohibited and should be surrendered. In addition, it is not possible to understand the volume of firearms by make and model or at any price point. These estimates have been compounded with further uncertainty because it is not clear what level of owner compliance to expect.
69. Our estimations of the total cost of the buy-back are based on the base price list contained in Appendix A. While we believe the base price list should capture the majority of the firearms that may be handed in during the amnesty period, we do not have certainty that the base price list is exhaustive. The price points of any further firearms identified during the amnesty added could adversely impact on the overall cost of the buy-back scheme.
70. Appendix C provides a useful indication of the relative financial exposure of the different pricing mechanisms. While it provides illustrated indicative costs of the buy-back, these should only be relied upon for the purpose of comparing different options.
71. The options in Appendix C exclude the costs of running the Exceptions Panel and any valuations made by that group. It also excludes the cost of any parts that may be included in the buy-back.

## 6 Other considerations

72. There are a number of options to increase the effectiveness and simplicity of the buy-back and to reduce its overall cost. These are worthy of deeper examination as they could have potential risks that could generate unintended consequences.

### 6.1 Excluding firearm parts from the buy-back

73. Firearms experts believe that the buy-back of high capacity magazines needs to be maximised in order for the buy-back to be effective in making the community safer.
74. However, it is worth noting that the componentisation of modern firearms (particularly MSSAs) may lead to risk of 'asset stripping' i.e., owners working out that firearms are worth more as parts than as integrated items.
75. Paying for parts could significantly increase the cost of the buy-back and the complexity of the handling process at hand-in.
76. There is an option not to pay for parts under the assumption that firearms owners will want to remain within the law and will already be receiving significant compensation for their firearms (depending upon the pricing option selected).

### 6.2 Funding modification of prohibited shotguns

77. As part of the new list of legal and prohibited firearms, semi-automatic and pump action shotguns with detachable magazines, or tubular magazines containing more than 5 cartridges have been prohibited. Stakeholders raised the idea of funding the modification of prohibited shotguns in order to make them legal rather including them in the buy-back.
78. A large portion of shotguns in New Zealand have internal tubular magazines containing more than 5 cartridges, now making now prohibited. It is possible for gun smiths to modify the internal tubular magazines of such shotguns to reduce the number of cartridges that can be held in the magazine down to the new legal requirement of 5.
79. The cost of the modification is significantly cheaper than the cost of buying back a shotgun. Many of these now prohibited shotguns will only exceed the magazine limit by 1 or 2 cartridges and modification would probably be a preferable option for the owners.
80. Note that this option would not be available to shotguns with detachable magazines, all of which are prohibited.

### 6.3 Excluding .22 rimfires with detachable magazines from the buy-back

81. The new laws only prohibit rimfire firearms with a magazine capacity of more than 10 cartridges. However, many of these firearms are fitted with a detachable magazine.
82. Such firearms could be made legal by replacing the existing prohibited capacity magazine with a smaller legal version. This approach would be much more cost effective than buying back all firearms of this type. Indeed, it could be an option to exclude all .22 rimfire firearms with detachable magazines from the buy-back.
83. Note that .22 rimfires with internal non-detachable magazines with a capacity greater than the legal limit should remain in the buy-back as they cannot be easily converted to a legal format.

### 6.4 Including tactical/military style sights in the buy-back

84. Sights and scopes sit within a grey area of 'prohibited parts'. While they can be removed from firearms and do not affect the operation of the firearm, many are designed and intended to be an integral part of specific prohibited firearms. They may have no functional value other than being used with such firearms.
85. Stakeholders are concerned that the sight/scope of any firearm is generally one of the most expensive parts. It is not unusual for a sight/scope to be more expensive than the firearm that it is mounted on and can cost anywhere from \$100 to \$20,000.



86. If all sights/scopes are included in the buy-back programme then this could potentially dramatically increase the expected total cost of the buy-back. And those sights and scopes that could be transferred might be bought back erroneously.
87. However, a definition could be developed to target the buy-back of Tactical or Military Style Sights. Such a sight is designed to enable rapid alignment to a target less than 100m away from the firer's position. These sights are significantly different to traditional hunting scopes which are designed to be used at long range, and are typically only fitted to MSSAs.
88. Buying back this limited set of scopes would show a level of fairness to firearms owners, while not opening the door for a mass purchase of scopes. An advantage of this approach is that Military Style Sights tend to be cheaper than traditional hunting scopes.

## **6.5 Paying a premium price for E-CAT firearms**

89. Prior to the new legislation regarding firearms in New Zealand some semi-automatic rifles were classed as Military Style Semi-Automatics (MSSAs), requiring an E-CAT endorsement while others fell in the general A CAT. E-CAT endorsements required additional investments in the securing of E-CAT firearms. Stakeholders have indicated that a premium should be paid for E-CAT firearms to reflect that additional investment.
90. However, it is hard to justify a premium being paid. It is straightforward for semi-automatic firearms to be converted between E-CAT and A-CAT. A firearm being A-CAT or E-CAT does not realistically impact its value and should not impact the amount paid during the buy-back.

# APPENDICES

PROACTIVE RELEASE

# Appendix A: proposed base price list

## Centerfire semi-automatic (valued at under \$10,000)

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Aero Precision	AR-15	3000	3000		
Anderson Arms	AR-15	3000	3000		
Anderson Manufacturing	AR-10	3000	3000		
Armalite	AR-10	5000	5000		
Armalite	AR-15	3500	3500		
ATI	AR-15	1500	1500		
Auto Ordnance	M1 Carbine	3000			3000
Beretta	CX4	2000	2000		
Beretta	AR70	6000			6000
Browning	BAR MK1	1000		1000	
Browning	BAR MK2	1500		1500	
Browning	BAR ShortTrac	2000		2000	
Browning	BAR LongTrac	2000		2000	
Browning	BAR MK3	2500	2500		
Bushmaster	AR-10	4000	4000		
CJA	AR-15	1500	1500		
Colt	AR-10	7000	7000		
Colt	M4	3500	3500		
Colt	AR-15	3500	3500		
Daniel Defense	AR-15	3500	3500		
Diamondback	AR-10	2500	2500		
Diamondback	AR-15	1750	1750		
DPMS	AR-10	3500	3500		
DPMS	AR-15	2000	2000		
EAR	AR-15	2000	2000		
FN	FAL	3000	3000		
GBC	Sonic AR-15 High end	5000	5000		
GBC	Sonic AR-15	3500	3500		
GBC	AR-15	4500	4500		
GBC Blaster	AR-10	6000	6000		
GBC Fallout Carbine	AR-9	3000	3000		

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
GBC Fallout Carbine	(High Carbine) AR-9	4000	4000		
H&K	630	2500			2500
H&K	770	2500			2500
H&K	SL8	4000	4000		
H&K	USC	4500	4500		
H&K	G3	5000			5000
H&K	G91	5000			5000
H&K	MR-223	7500	7500		
H&K	MR-308	8500	8500		
H&K	94	10000	10000		
IBM	M1 Carbine	3000			3000
Inland	M1 Carbine	2500			2500
International	M1 Garand	5000			5000
International Harvester	USGI	6000	6000		
Iver Johnson	M1 Carbine	2000			2000
Jericho	AR-10	2500	2500		
JP	CTR 02 AR-15	6000	6000		
JP	SCR AR-15	7000	7000		
JP	AR-15	5000	5000		
JP	PSC AR-15	7000	7000		
LMT	AR-15	5000	5000		
Luvo	AR-10	3000	3000		
Marlin	Camp Carbine	2000			2000
Molot	AK	2000	2000		
National Postal	M1 Carbine	2500			2500
NEA	AR-15	2000	2000		
NFA	AR-15	1500	1500		
Norinco	M305	1250	1250		
Norinco	NHM90 AK	1000	1000		
Norinco	56s AK	1500	1500		
Norinco	M14	1250	1250		
Norinco	AR-15	2000	2000		
Others	M1 Carbine	2000			2000
PWS	MK1 AR-15	4000	4000		
PWS	MK2 AR-15	6000	6000		
PWS MK2	AR-10	6000	6000		
Quality H.M.C	M1 Carbine	2500			2500
Ranger	AK47	1250	1250		
Ranger	AR-15	1500	1500		

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Remington	742	1000		1000	
Remington	7400	1000		1000	
Remington	750	1500	1500		
Remington	Model 8	2500	2500		
Remington	R-15	2500	2500		
Remington	R-10	5000	5000		
Rock Ola	M1 Carbine	3000			3000
Rock River	AR-15	3000	3000		
Ruger	PC 9mm	1500	1500		
Ruger	40S&W	1500	1500		
Ruger	44MAG	1500	1500		
Ruger	Mini - 14/ Stainless	1750	1750		
Ruger	AR556	2000	2000		
Ruger	SR556	3500	3500		
Ruger	SR762	4500	4500		
Ryno-15	AR-15	3000	3000		
Saginaw	M1 Carbine	2500			2500
Saiga	AK	1000	1000		
Saiga	308 AK	1500	1500		
Sig Sauer	550	5000	5000		
Sig Sauer	AMT	5000	5000		
Sig Sauer	M400	3500	3500		
Sig Sauer	516	5000	5000		
Sig Sauer	716	7500	7500		
SLR	L1A1	3000	3000		
Smith & Wesson	M&P AR-10	4000	4000		
Smith & Wesson	M&P-15 AR-15	3000	3000		
Spikes Tactical	AR-15	3000	3000		
Springfield	M1 Garand	5000			5000
Springfield	M1A1	5000	5000		
Stag Arms	AR-15	3500	3500		
TRW	USGI	6000	6000		
Underwood	M1 Carbine	2500			2500
Winchester	1907	2000			2000
Winchester	M1 Garand	7000			7000
Winchester	M1 Carbine	3000			3000
Winchester	USGI	6000	6000		
Winchester	M100	1250			1250
Winchester	1905	2000			2000

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Winchester	1910 - 401	2500			2500
Windham	AR-15	2500	2500		
All	CHINESE SKS	750	750		
All	RUSSIAN SKS	1250			1250
All	CHINESE SKK	1000			1000
GBC	FALLOUT CARBINE (HIGH END)	4000	4000		
Ruger	MINI-14 TARGET	2500	2500		
AAA	ALL	3000	3000		
ALL	AK74 Russian	5000	5000		
ALL	AR18-180	3000	3000		
Beretta	BM 59	4500	4500		
CETME	Spain	5000	5000		
ALL	Chinese SKK (factory removable box)	1500	1500		
Colt	H-Bar	4000	4000		
Colt	LE2	4000	4000		
Colt	SP1 carbine	4000	4000		
Colt	SP1 rifle	3000	3000		
Colt	Sporter 2	4000	4000		
FN	49 (7x57)	3000	3000		
Franchi	SAS 12	4000	4000		
H&K	33	6000	6000		
Springfield	M1A	6000	6000		
ALL	M1A1 Para 30 carbine	6500	6500		
Yugoslavian	M76	4000	4000		
ALL	French MAS 49 (Standard mode	3500	3500		
ALL	French MAS 49/56	4500	4500		
ALL	PSL (ROM - SVD type)	4000	4000		
Valmet	AK	3500	3500		
ALL	AK47 Chinese	2000	2000		
ALL	AK47 Hungarian	3000	3000		
ALL	AK47 Bulgarian	3000	3000		
ALL	AK47 Roman ian	3000	3000		
ALL	AK47 Russian	3000	3000		
ALL	AK47 Polish	3000	3000		
ALL	AK47	3000	3000		
ALL	AK74 bakelite	5000	5000		
ALL	AK74 Rom	4500	4500		
FN	FAL Para	8000	8000		
FN	49	2000	2000		

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
FN	FNC	8000	8000		
ALL	German G1	3000	3000		
ALL	German G41	9500	9500		
ALL	M1 Garand	7000	7000		
International Harvester	IH	6000	6000		
Ljungman	ALL	2000	2000		
TRW	M14	6000	6000		
Sig Sauer	PE57	6500	6500		
STEYR	AUG	7000	7000		
Sturmgewehr	STG44	9000	9000		
C.Z.	VZ58	3500	3500		
C.Z.	VZ52	2000	2000		
C.Z.	VZ 52/57	1500	1500		
Winchester	ALL	6000	6000		
ALL	Russian Draginov SVD	4000			4000
ALL	German G43	6000			6000
ALL	Egyptian Hakim	1250			1250
Johnson	M1941	4000			4000
ALL	French MAS49	1250			1250
ALL	German MP43	7500			7500
ALL	German 44	7500			7500
Sturmgewehr	German StG45	7500			7500
ALL	Belgium SAFN49	3000			3000
ALL	Egyptian Rasheed	1250			1250
ALL	Russian SVT40	2500			2500
C.Z.	VZ52	2500			2500
Tokarev	STV 40	1500	1500		
ALL	AK74 (ISD Bulgaria)	3500	3500		

## Rifle 11+ rounds (valued at under \$2,000)

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
ALL	Rimfire 22 - bolt action	350			350
ALL	Rimfire 22 - semi-automatic	600			600
ALL	Rimfire 22 - lever action	1000		1000	
ALL	Rimfire 22 - pump action	800			800
ALL	Centerfire - lever action	800			800
ALL	Centerfire - pump action	800			800

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## Shotgun pump action, non-detachable magazine, 6+ cartridges (valued at under \$5,000)

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Akkar	KARATAY	500		500	
Benelli	NOVA	1250	1250		
Benelli	SUPER NOVA	1500	1500		
Benelli	NOVA TACTICAL	1500	1500		
Beretta	SILVER PIGEON	750			750
Browning	BPS	1000		1000	
Dickinson	XX3	750	750		
Escort	HUNTER	500		500	
Escort	MAGNUM	750		750	
Gun-City	870	500		500	
H&R	PARDNER	500	500		
Hawk	98	500		500	
Kel-Tec	KSG	2000	2000		
Mossberg/Maverick	88	500	500		
Mossberg/Maverick	590	1250	1250		
Mossberg/Maverick	535	750	750		
Mossberg/Maverick	500	1000	1000		
Mossberg/Maverick	590A1	1500	1500		
Norinco	1897	1500		1500	
Ranger	870	500	500		
Remington	870	750	750		
Remington	887	750	750		
Remington	870 WINGMASTER	1000	1000		
Utas	UTS-15	3000		3000	
Winchester	120	750		750	
Winchester	1200	750		750	
Winchester	SXP	750		750	
Winchester	1300	750		750	
Sarsilmaz	M212	1500	1500		

## Shotgun semi-automatic, non-detachable magazine, 6+ cartridges (valued at under \$5,000)

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Akkar	All	750		750	
Armed	All	750		750	
Armsan	All	750		750	
ATA	All	750		750	
Baikal	All	750		750	
Benelli	Vinci	2500	2500		
Benelli	M2	2500	2500		
Benelli	M1	1750		1750	
Benelli	Super Black Eagle 1	2000		2000	
Benelli	Super Black Eagle 2	2500	2500		
Benelli	Super Vinci	3000	3000		
Benelli	M2 3 Gun	3000	3000		
Benelli	M2 Speed Feed	3000	3000		
Benelli	M2 Tactical	3000	3000		
Benelli	Super Black Eagle 3	3500	3500		
Benelli	M4	4000	4000		
Benelli	M3	4000	4000		
Beretta	300	2000		2000	
Beretta	1200	1500		1500	
Beretta	A400	3500	3500		
Beretta	303	1250		1250	
Beretta	1201	1500		1500	
Beretta	391 URIKA	2000		2000	
Beretta	390	2000		2000	
Beretta	391 Xtrema	2500		2500	
Beretta	1301	2500		2500	
Beretta	350	2500		2500	
Breda	Field	1000			1000
Breda	Inertia	2000		2000	
Breda	Grizzly	2500		2500	
Breda	B12	3000	3000		
Browning	2000	1000			1000
Browning	Maxus	2500	2500		
Browning	B80	1000			1000
Browning	A5	1500			1500
Browning	Silver Hunter	2000		2000	
Browning	Gold Hunter	2000		2000	

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Browning	Gold Fusion	2000		2000	
Dickinson	212	750	750		
EGE	Silah	750	750		
Escort	All	750		750	
Fabarm	H68	1500		1500	
Fabarm	H368	1250		1250	
Fabarm	H38	1250		1250	
Fabarm	H4	1250		1250	
Fabarm	Xlr5	2000	2000		
Fabarm	Sat8	2000	2000		
Franchi	Affinity	1500	1500		
Franchi	Predator	3000	3000		
Franchi	Intensity	2000	2000		
Fucile	All	750		750	
H&R	All	750		750	
Kral	All	750		750	
Maroochi	All	750		750	
Mossberg	SA-20	1000	1000		
Mossberg	930 Waterfowl	1250	1250		
Mossberg	935	1250	1250		
Mossberg	930 Pro	1500	1500		
Mossberg	930 Spx	1750	1750		
Other Brands	All	750		750	
Pardus	SI	750		750	
Ranger	M5	750	750		
Remington	105	2000		2000	
Remington	1100	1000		1000	
Remington	11-87	1250	1250		
Remington	11-87 Premier	1750	1750		
Remington	V3	1750	1750		
Remington	Versamax	2500	2500		
Remington	Versamax Comptack	3000	3000		
SKB	3000	1750		1750	
SKB	1300	1000		1000	
SKB	1900	1250		1250	
SKB	900	1000		1000	
SKB	90TSS	1000		1000	
SKB	3900	1000		1000	
Stoger	2000	750		750	

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Stoger	3000	1000	1000		
Stoger	3020	750		750	
Stoger	3 Gun	1000	1000		
Stoger	3500	1000	1000		
Weatherby	All	750		750	
Winchester	Super X2	2000		2000	
Winchester	Super X3	2500	2500		
Yildiz	All	750		750	
Sarsilmaz	Boeing	1250	1250		
Pietta	Ghibli	1250	1250		
Pietta	Zephyrus	1250	1250		
Pietta	Mistral	1250	1250		
Valtro	Action V-12	750	750		

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## Shotgun with detachable magazine (valued at under \$5,000)

Brand	Model / Type	Price (\$)	Current Model (\$)	Superseded (\$)	Discontinued (\$)
Gun-City	870	750		750	
Molot	VEPR	3000	3000		
Mossberg	590M	1500	1500		
Ranger	TAC-12	1250	1250		
Ranger	PRO TACTICAL	1750	1750		
Ranger	TAC-AR	2500	2500		
Remington	870 DM	1000	1000		
Saiga	HUNTING	1500	1500		
Saiga	MAGWELL	2500	2500		
Typhoon	F-12	2500	2500		
Valtro	PM-5	1500	1500		
Derya	MK10	2000	2000		
Sey Lan	TM1950	1250	1250		
Trex Defense	PAW12	2500	2500		

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## Accessories

Brand / type	Part	Price (\$)
AR-15	Magazine (Rifle & Shotguns)	75
AK 7-rounds	Magazine (Rifle & Shotguns)	75
AR Centrefire 7+ rounds (other than drum)	Magazine (Rifle & Shotguns)	150
Rimfire 10+ rounds	Magazine (Rifle & Shotguns)	150
Shotgun magazine extensions	Magazine (Rifle & Shotguns)	200
Shotgun box magazines	Magazine (Rifle & Shotguns)	200
All other centrefire detachable mags	Magazine (Rifle & Shotguns)	300
Drum Centrefire magazine	Magazine (Rifle & Shotguns)	500
ALL	Silencers	500
Detachable front sight	Open Sights	100
Detachable rear sight	Open Sights	200
ALL	Muzzle Brake	200
ALL	Scope Mount	200
ALL	Fore Grip	150
ALL	Bipod	200
ALL	Custom Trigger	500

## AR Parts List

Brand / type	Part	Price (\$)
ALL	Upper/Barrel Complete (no bolt)	1,000
ALL	Upper Stripped	450
ALL	Bolt carrier group	450
ALL	Factory Trigger complete	150
ALL	Carry Handle A3	300
ALL	Forend/Handguards (2 Piece)	100
ALL	Free float forend/ andguard (1 Piece)	350
ALL	Pistol Grip	100
ALL	Buffer Tube	100
ALL	Butt Stock	100
ALL	Butt stock sliding	200
ALL	Barrel	600
ALL	Gas block/Sight	100
ALL	Charging handle	100

## AK Parts List

Brand / type	Part	Price (\$)
ALL	Butt Stock	150
ALL	Forend	50
ALL	Barrel	500
ALL	Bolt group	250
ALL	Trigger	200

## SKS Parts List

Brand / type	Part	Price (\$)
ALL	Butt Stock	\$100
ALL	Forend	\$50
ALL	Barrel	\$200
ALL	Bolt group	\$200
ALL	Trigger	\$100

## All other Centrefire semi-automatic parts

Brand / type	Part	Price (\$)
ALL	Stock	200
ALL	Barrel	500
ALL	Bolt group	300
ALL	Trigger	250

## Appendix B: pricing option evaluation criteria

Pricing options were evaluated based on their relative performance against the six principles of the buy-back scheme:

Principle	Description
<b>Effectiveness in removing firearms from the public</b>	The main objective of the buy-back is to keep New Zealand safe by removing as many prohibited firearms from the public as possible. Pricing should drive high levels of compliance
<b>Fairness to the firearm owners</b>	Compensation should be considered proportional to the value of the surrendered firearm.
<b>Fairness to the public</b>	Compensation should not be seen as excessive to the public.
<b>Transparency</b>	There should be consistency in the value paid for similar items. Firearm owners, Ministers and the public can understand how the value of compensation has been derived.
<b>Administrative simplicity</b>	The process should not impose high administrative costs on NZ Police. The price lists should be straightforward to follow and minimise specialist assessment required at collection points.
<b>Overall cost</b>	The overall cost of the buy-back scheme needs to be estimated based on pricing and volume assumptions.



## Appendix C: long list of pricing options

The table in Appendix C provides a summarised description of pricing options that could be considered.

### Data Sources

The data in the pricing options table is based on the following sources:

- Firearms volume data provided by NZ Police
- Assumptions previously made by NZ Police relating to the proportion of rifles and shotguns that are now prohibited
- Indicative firearms volume data provided by an NZ firearms retailer – this provided a distribution ‘shape’ of the relative number of firearms at different price points
- The base price list of firearms contained in Appendix A

### ‘Overall Cost’ Assumptions

One of the challenges in determining the overall cost of the buy-back is a lack of data relating to the actual firearms that are in public ownership. Even major firearms retailers have only been able to provide highly indicative data about the volume of firearms in public ownership at different price points. In addition, it is not known what proportion of rifles and shotguns that are in public ownership are now prohibited.

We have therefore provided two comparative sets of estimates that indicate the ‘Overall Cost’ of the buy-back:

- i. **Based on 75<sup>th</sup> Percentile Valuation:** The first column is the more conservative estimate of ‘Overall Cost’. Because there is no detailed firearms volume data, we developed ‘Overall Cost’ estimates using the 75<sup>th</sup> percentile value of all firearms listed in the base price list. This assumes an average firearm value of approx. \$4,331.
- ii. **Based on Weighted Average Valuation:** The second column provides a view on ‘Overall Cost’ that reflects an approximated distribution of firearms volumes across different price points. Data provided by an NZ retailer offered a high-level indication that there are more firearms of lower value in public ownership than at higher values. Based on this data, and applying it to the base price list, we estimated that the average value of firearms could be approx. \$1,920.

The Best Case, Mid Case and Worst Case ‘Overall Cost’ estimates are based on the following firearms volumes and levels of prohibition:

	Best Case	Mid Case	Worst Case
<b>MSSAs</b>	100%	100%	100%
Approx stock 14,286	of overall stock classed as prohibited	of overall stock classed as prohibited	of overall stock classed as prohibited
<b>Rifles</b>	5%	10%	20%
Approx stock 758,811	of overall stock classed as prohibited	of overall stock classed as prohibited	of overall stock classed as prohibited
<b>Shotguns</b>	1%	2%	2%
Approx stock 379,405	of overall stock classed as prohibited	of overall stock classed as prohibited	of overall stock classed as prohibited

Note that ‘Overall Cost’ estimates are based on mean values of firearms and do not take into account the actual mix of firearms in public ownership. These estimates also assume that all prohibited firearms are redeemed. Note that the ‘Overall Cost’ figures do not include any firearms that are referred to the Exceptions Panel and do not include the cost of parts.

Valuation Type	Option	Description	Effectiveness in removing firearms from the public	Fairness to owners	Fairness to public	Transparency	Administrative simplicity	Overall cost	
								Based on 75 <sup>th</sup> Percentile Valuation	Based on Weighted Average Valuation
Single value	A1. Zero compensation per firearm	No compensation paid for any firearm or part. Assumes owners will hand in firearms to avoid criminal activity.	Unclear how many owners would comply using this regime. Perceived as high risk approach to remove firearms from the community, especially the higher value items.	Highly likely to be seen as unfair by the firearm owning community.	Even members who do not own firearms may consider this approach unfair.	Easy to understand and communicate.	Easy to administer, with no additional resources required from the NZ Police.	No cost	
	A2. Fixed compensation per firearm	Single price-point paid for all firearms with some 'winners' and some 'losers'. Could be highly effective for low value .22 rifles. Less effective for MSSAs and other centrefire semi-automatics because of the very wide range of values.  If compensation is set too low there is a risk the Exceptions Panel may have a very high volume of firearms to process.	Depending on the price-point, this approach could be effective at removing large quantities of firearms from the community.  However, might also create bias towards handing in lower quality firearms.	Compensation may be higher than the value of some firearms, while being considerably lower than the price of higher-value items.	Members of the public might see certain levels of compensation as a bit high for lower value items.	Easy to understand and easy to communicate. However, this approach is unlikely to be seen as transparent, as some firearm owners will receive compensation that is disproportionately higher than the value of their firearm, while others will lose value on their higher quality firearms.	Easy to administer, with no additional resources required from the NZ Police.  However, there would be a high likelihood that a high volume of firearms valued above the fixed compensation level would be referred to the Exceptions Panel.	Likely cost - approx. \$87M at \$500 per firearm - approx. \$173M at \$1,000 per firearm - approx. \$261M at \$1,500 per firearm - approx. \$346M at \$2,000 per firearm  Additional option to limit costs would be to define a fixed budget and to pay out on all firearms until the budget is consumed.  Exceptions Panel volumes could also impact the overall cost, especially at the lower fixed price points.	
	A3. Fixed compensation based on the type of firearm	A flat rate based on the general type of firearm. The rate would be set at the 75 <sup>th</sup> percentile price, based on the following types: - MSSA; - A-CAT Centrefire; - Rimfire; - Shotgun – Semi-Automatic - Shotgun – Pump Action.	If the price is set above the likely median, this approach should provide effective incentives for most firearm owners. However, there is a risk that those with the highest value firearms will appeal to the Exceptions Panel.	While the compensation may not fully match the price of some firearms, this approach will be closer to the perceived value for most firearms. This overpays for lower price firearms and underpays for higher price firearms.	Does not account for the condition, or the make/model, which the public could perceive as too high.  Cost likely to be far higher than public expectations. This overpays for lower price firearms and underpays for higher price firearms.	Easy to understand and communicate. However, unlikely to be seen as transparent, as some firearm owners may receive compensation disproportionately higher than the value of their firearm, while others will lose value on their higher quality firearms.	Straightforward to identify the type of the firearm.  There is a risk that those owners with higher value firearms will appeal to the Exceptions Panel.	Likely cost approx. \$752M  This scenario, at the 75 <sup>th</sup> percentile price, is based on a weighted average prices of: - MSSAs at \$4,440 - A-CAT Centrefires at \$4,440 - Rimfires at \$4,400 - Shotgun – Semi-Automatic at \$2,000 - Shotgun – Pump Action at \$2,000  Difficult to estimate to cost based on unknown mix of firearms in public ownership.  Exceptions Panel claims also likely to impact the overall cost.	

Valuation Type	Option	Description	Effectiveness in removing firearms from the public	Fairness to owners	Fairness to public	Transparency	Administrative simplicity	Overall cost	
								Based on 75 <sup>th</sup> Percentile Valuation	Based on Weighted Average Valuation
Make and model valuation	B1. Single NZ price point per firearm (simplified catalogue)	Simplified catalogue grouping many types and brands together, with a single price point regardless of condition. Challenge is to identify a price point that drives the right behaviour without over-paying for a range of firearms. For example, a single make and type may have a number of 'models' which can differ in price by as much as \$2000.	Likely to be more effective than the fixed compensation approach.  Effectiveness increases at the higher end of each price range.	While the compensation may not fully match the price of some firearms, this approach will be closer to the perceived value of the firearms.	Level of compensation may be perceived as too high for poor quality/condition items	A short price list could be easy to comprehend for the public. However, this approach does not fully account for the variation in quality that may exist between different models of the same brand	Very straightforward to quickly identify the make and type of any firearm.  Exceptions Panel volumes could be increased where high-end models seem under-valued.	<b>Worst Case \$639M</b> <b>Mid Case \$360M</b> <b>Best Case \$205M</b>	<b>Worst Case \$283M</b> <b>Mid Case \$159M</b> <b>Best Case \$91M</b>
	B2. Single NZ price point per firearm (more detailed catalogue)	More detailed catalogue listing types, brands and models, with a single price point regardless of condition.  Discount can be applied by differentiating between current, superseded and discontinued models.	Likely to be highly effective, as the level of compensation should closely match perceived value of most firearms.	Likely to receive support from the firearm-owning community, based on previous interactions with a stakeholder reference group.	This approach does not account for the condition of the firearm which can create perception that the government is paying more than the face value for some of the firearms.	Level of granularity will be seen positively by firearm owners as it shows understanding of differences by government.	Requires some additional time for NZ Police to assess the firearm to determine the model. Should be straightforward with right training and guidance documentation.	<b>Worst Case \$752M</b> <b>Mid Case \$423M</b> <b>Best Case \$242M</b>	<b>Worst Case \$333M</b> <b>Mid Case \$188M</b> <b>Best Case \$107M</b>
	B3. Discount single NZ price point by discount factor to fit buy-back within a budget	Take pricing from long catalogue and apply discount factor that means total cost of buy-back fits in a budget.  Alternative option is just to discount high volume of low-value firearms or low volume of high-value firearms.	Highly unlikely to achieve the intended effect other than through fear of penalties.	Level of compensation is unlikely to be seen as fair by the firearm owners. Only owners of poor quality firearms will be fairly compensated.	The overall cost is likely to match public expectation for the overall level of compensation the firearm-owners should receive. However, part of the community may see compensation as too low to be fair.	Same level of transparency as the long-catalogue option.	Same level of administrative complexity as the long-catalogue Option B2.	<b>Worst Case \$376M</b> <b>Mid Case \$212M</b> <b>Best Case \$121M</b>	<b>Worst Case \$167M</b> <b>Mid Case \$94M</b> <b>Best Case \$54M</b>
	B4. Depreciation-based pricing	Initial value of the firearm is based on the detailed catalogue (brand, type and model), but the price depreciates at 20% per year from the year of purchase. After 5 years, the firearm is deemed to have fully depreciated.	Likely to be effective at removing firearms purchased in the past two years. However, it is unlikely to act as an incentive for owners of older firearms, and the success will heavily depend on effective enforcement.	Lack of compensation for firearms older than 5 years (many of which may still be in working order), and a more aggressive depreciation curve is likely to be seen as unfair by a large group of current owners.	Fiscally conservative approach is likely to be acceptable to the wider public.  However, some groups of non-firearm owners will see this approach as unfair on the firearms community.	Similar level of transparency as the long-catalogue option, although firearms community likely to claim this pricing scheme shows a lack of understanding of firearm valuation.	Same as the long list catalogue. Plus imposes additional requirements on the firearm owners to prove age of the firearm.	<b>Worst Case \$150M</b> <b>Mid Case \$84M</b> <b>Best Case \$18M</b>	<b>Worst Case \$68M</b> <b>Mid Case \$43M</b> <b>Best Case \$18M</b>
								Estimates depend upon mix of firearms in public ownership and are based on the base price list.  Exceptions Panel volumes could also impact the overall cost.	
								Estimates depend upon mix of firearms in public ownership and are based on the base price list.  There may also be additional administrative costs on NZ Police to conduct assessments.	
								Estimates depend upon mix of firearms in public ownership and assume 50% discount factor applied to the base price list.  There may also be additional administrative costs on NZ Police to conduct assessments.	
								Important caveat: this option assumes only 20% of prohibited firearms will be eligible for buy-back payment, i.e., only 20% of firearms are less than 5 years old and have receipts.	

Valuation Type	Option	Description	Effectiveness in removing firearms from the public	Fairness to owners	Fairness to public	Transparency	Administrative simplicity	Overall cost	
								Based on 75 <sup>th</sup> Percentile Valuation	Based on Weighted Average Valuation
Condition-based valuation	C1a. Compensation based on the detailed catalogue (Option B2), with a discount based on the assessed condition of the firearm (five price tiers)	Compensation based on the more detailed catalogue listing types, brands and models, with the final level of compensation based on external condition. Inspection can be rapid in the hands of a trained individual and easy to make consistent across multiple cases. Use NRA-based guidelines for five tiers of condition estimates: - New, Perfect and Excellent - Very Good - Good - Fair - Poor.	Likely to be effective at removing firearms from the community. However, the degree of uncertainty about the level of compensation may create a bias towards surrendering high quality models, while retaining older/damaged models.	Owners will receive a price that similar to what they could have sold the firearm for prior to the law changes.	Public is likely to intuitively understand a quality based approach. Some may be surprised by high retained value of used firearms.	NZ firearm owners and the public will understand the concept of reduced quality resulting in reduced price. If a common template is used the process will be less subjective.	To ensure expedient assessment, NZ Police will need to develop clear criteria that are easy to apply consistently.  Additional training may be required for NZ Police staff to ensure they are applied consistently across the country.	<b>Worst Case \$601M</b> <b>Mid Case \$338M</b> <b>Best Case \$194M</b>	<b>Worst Case \$267M</b> <b>Mid Case \$150M</b> <b>Best Case \$86M</b>
	C1b. Compensation based on the detailed catalogue (Option B2), with a discount based on the assessed condition of the firearm (three price tiers)	Compensation based on the more detailed catalogue listing types, brands and models, with the final level of compensation based on external condition. Inspection can be rapid in the hands of a trained individual and easy to make consistent across multiple cases. Use guidelines for three tiers of condition estimates: - Near-New - Used - Poor.	Likely to be effective at removing firearms from the community. However, the degree of compensation may create a bias towards surrendering high quality models, while retaining older/damaged models.	Broad "used" tier might result in many owners seeking valuation from the Evaluation Panel.	Public is likely to intuitively understand a quality based approach. Some may be surprised by high retained value of used firearms.	NZ firearm owners and the public will understand the concept of reduced quality resulting in reduced price. If a common template is used the process will be less subjective.	Simpler approach than C1a, but still requires clear criteria that are easy to apply consistently. However, there would be a high likelihood that a high volume of firearms would be referred to the Exceptions Panel.	<b>Worst Case \$526M</b> <b>Mid Case \$296M</b> <b>Best Case \$170M</b>	<b>Worst Case \$233M</b> <b>Mid Case \$131M</b> <b>Best Case \$75M</b>
	C2. Multiple US price points per firearm based on external condition (apply to short or long catalogue)	Use US 'Blue Book' to determine prices. Condition evaluation as per Option C1a.	Hard to predict how this would be received by the NZ firearms community, but likely push-back in that US market has higher levels of supply meaning that prices are lower.	US values are generally lower than NZ equivalents. Condition variables may cause some contention and inconsistency.	Likely to be seen as fair by the public, as it matches international standards.	Blue Book is transparent, but requirement to evaluate condition leaves process open to inconsistency.	Requires additional time to assess the firearm and check it against the Blue Book. The Blue Book also include historical value of some firearms, which may need to be backed out of the compensation price.	Cost likely to be 10% to 20% lower than Option C1a based on US pricing being lower than NZ. Very difficult to estimate because of the complex nature of the Blue Book.  Estimates depend upon mix of firearms in public ownership and are based on the base price list.  There may also be additional administrative costs on NZ Police to conduct assessments.	



## Appendix D: candidate five-tier grading system

Determining the condition of any firearm will always be subjective to some degree due to differing views on what determines the overall condition of a firearm. A five-tier grading system, such as the one suggested below, is designed to balance accuracy of condition with efficiency of inspection. It is unreasonable to expect the NZ Police expend significant time and expertise on each firearm that is handed in. Therefore the grading system below is designed to enable the NZ Police to determine the condition of a firearm as quickly, fairly and consistently as possible.

Each of the different grades based on similar standards used by a number of firearms bodies, including the US National Rifle Association (NRA). For each grade, we have developed a recommended condition-based discount factor that should be applied to the Base Price Point listed in the price list in Appendix A.

### Grading principles

The candidate five-tier system works on a 'lowest grade counts' system. Officers are to inspect the Operation, Barrel, Working Surfaces, Internal Components and Main Body of the firearm and determine the grade they satisfy based on the criteria provided. From there, the lowest grade out of the inspected areas will determine the overall condition.

For example, if a firearm was handed in that satisfied the A Condition criteria for Operation, Working Surfaces, Internal Components and Main Body, but satisfied the E Condition criteria for Barrel due to a significant crack being present, then that firearm would be graded as being in E Condition.

The justification for this is the fact that degradation of one component of a firearm will reduce the overall operation of the firearm by an equivalent amount. Using the aforementioned example, a serious crack in the barrel of a firearm risks a dangerous catastrophic failure upon firing regardless of the quality of rest of the firearm. It should also be noted that firearms components rarely degrade in isolation, therefore it would be unexpected for one component to be dramatically different from the overall quality of the firearm. In instances where it is NZ Police may want to consider applying their discretion.

### Ease of inspection

Inspection of the firearm is to be a visual inspection only and should take no more than a few minutes. The inspection should begin by first ensuring the firearm is unloaded and cleared. The inspector should ensure the firearm is cleared by inspecting (where possible) the magazine/magazine weld, chamber and bolt-face to ensure they are free of ammunition and ammunition produce.

### Functions testing

Once the firearm is cleared the inspector should conduct the provided Functions Test to confirm the operation of the firearm (see below for sample checklist). The inspector should then perform a visual inspection of the barrel from the muzzle end. A small torch may be used for this inspection. From there the working surfaces should be inspected visually and with touch. An inspection of the internal components is limited to a visual inspection that can be conducted with minimal stripping of the firearm. Moving the bolt to the rear should provide enough visual opportunity to inspect the internal components. In the case of AR-15(like) models the rear locking pin can be removed to quickly separate the upper and lower receiver to support a brief internal inspection.

The NZ Police should consider producing a short video of how to conduct the functions test and inspection in order to ensure consistency of process across all locations.

## Firearm Inspection Glossary

**Base Buy-back Pricelist:** Base price list of firearms and parts, listed in Appendix A.

**Base Price Point:** Base price of a firearm as listed in the Base Buy-back Pricelist.

**Bore:** The interior of the barrel, for the purpose of inspection it is only what can be seen with the naked eye from the muzzle end of the barrel.

**Components:** The internal parts of a firearm that are essential to the operation of the firearm (without which the firearm will not function). E.g. Bolt Carrier, Bolt, Firing Pin, Cam Pin, Trigger Mechanism, Hammer, Gas Piston,

**Main Body:** The external cover of the firearm, including but not limited to, the Receiver, Stock, Trigger Guard, Ejection Port.

**NIB:** New In Box.

**Operation:** The ability of the firearm to function as intended, i.e., chamber a cartridge, fire the round and automatically chamber the next round without operator input.

**Pitting:** A form of extremely localised corrosion that leads to the creation of small 'pits' in a metallic surface.

**RBP:** Recommended Buy-back Price. Price that takes into account the condition of the firearm by applying a discount factor to the Base Price Point.

**Safety Features:** A Safety Catch or other mechanism use to prevent the unintentional discharge of the firearm.

**Superficial:** damage or degradation of the firearm that is easily visible but does not impede the operation of the firearm

**Unsafe:** Firearm may discharge even when safety features are engaged, or firearm may fire without intention of the operator (e.g., a semi-automatic that fires multiple rounds during a single trigger pull due to an internal malfunction)

**Working Surfaces:** Areas of the firearm that the operator must utilise or be in contact with in the common operation of the firearm. Including, but not limited to, Trigger, Butt, Grip, Check Weld, and Bolt/Charging Handle.

## Sample Functions Test Checklist

Below is a sample checklist that officers could use to rapidly check the function of a firearm.

Action	Pass Criteria	
Action the firearm	Action should be smooth and not require undue force	x
Apply Safety Catch to 'Safe'*	Safety catch should remain in position once applied	
Depress Trigger*	Action should not fire (not click heard)	
Release Trigger*	Nil	
Move Safety Catch to 'Fire'*	Safety catch should remain in position once applied	
Depress Trigger and retain trigger to rear	Action should fire (an audible click will be heard)	
Maintaining trigger pressure action the firearm again	Action should be smooth and not require undue force	
Release Trigger	A small click may be heard (not a firing pin click)	
Depress Trigger	Firearm should fire (an audible click will be heard)	
Release Trigger	Nil	
<b>Grade</b>	Pass	Fail

\* If a safety catch is present on the firearm

Firearm must pass all relevant actions in order to receive a pass grade on the functions test.

*The Functions Test should be sufficient for the vast majority of Semi-Automatics. In the event that NZ Police encounter a firearm that cannot utilise the functions test then they should exercise their professional discretion to determine if the firearm is operational and safe and then should grade accordingly.*

## Five-Tier Firearms Grade Criteria

<b>A Condition</b> <i>(NIB, Perfect, Excellent): In new condition with little to no use. Would be difficult to determine if firearm has been used before.</i>	
Operation	Pass functions test, action is completely smooth with no resistance or impairment. All safety features function.
Barrel	No muzzle wear. Bore is shiny.
Working Surfaces	No damage or wear. No pitting. No corrosion.
Internal Components	No damage or wear. No pitting. No corrosion.
Main Body	Perfect condition, no scratches or visible wearing
<b>RBP</b>	<b>95% of base price point</b>

<b>B Condition</b> <i>Very Good: Perfect working condition, has seen some/little use. Firearm has been well maintained</i>	
Operation	Pass functions test, action is completely smooth with no resistance or impairment. All safety features function.
Barrel	Minimal muzzle wear. Very slight wear on bore (slightly dark).
Working Surfaces	Minimal wear. No pitting. No corrosion.
Internal Components	No damage. Minimal wear. No pitting. No corrosion.
Main Body	Minimal wearing/scratches on all surfaces. No corrosion
<b>RBP</b>	<b>85% of base price point</b>

<b>C Condition</b> <i>Good: In safe working condition. Minor wear on some surfaces. Only minor superficial surface scratches, otherwise is in good condition</i>	
Operation	Pass functions test. All safety features function.
Barrel	Some wear on muzzle, Bore is not shiny.
Working Surfaces	Some wear, Superficial scratches, No corrosion.
Internal Components	Slight pitting or scratches that do not interfere with operation, No corrosion.
Main Body	Minor wearing. Superficial scratches.
<b>RBP</b>	<b>75% of base price point</b>



<b>D Condition</b>	
<i>Fair: In safe working condition but well worn. Minor superficial damage. No rust but may have minor pitting which does not render the firearm unsafe</i>	
Operation	Pass functions test. All safety features function. Action may 'stick' or not be smooth in its operation.
Barrel	Worn and/or minor damage that does not render the firearm unusable. Muzzle may have some pitting or damage.
Working Surfaces	Worn and/or minor damage that does not render the firearm unusable.
Internal Components	Pitting or minor corrosion that does not render the firearm unusable.
Main Body	Metal showing signs of corrosion or pitting. Wood contains cracks that do not render the firearm unusable.
<b>RBP</b>	<b>55% of base price point</b>

<b>E Condition</b>	
<i>Poor: Inoperable or in unsafe working condition. Rust present on firearm. Components damaged or missing. Significant work would be needed to restore firearm. Would normally be sold to a dealer for parts.</i>	
Operation	Fails functions test. Safety features do not function.
Barrel	Bore visibly damaged. Barrel has damage or cracks.
Working Surfaces	Damaged to a degree that impairs safe and comfortable operation.
Internal Components	Components missing or damaged to such an extent that they significantly impact the safe operation of the firearm.
Main Body	Metal deeply pitted. Significant corrosion present. Wood cracked, dented or broken to an extent it will impact the safe and comfortable operation for the firearm.
<b>RBP</b>	<b>25% of base price point</b>

## Appendix E: candidate three-tier grading system

A three-tier grading system could be implemented with much broader condition bands than used in the five-tier system described in Appendix D.

A three-tier grading system offers straightforward implementation to NZ Police than the five-tier model. It is likely that its broader condition bands would allow NZ Police to make more rapid evaluations.

In its application, a three-tier grading system would also use NRA-style categories (like the five-tier model) but would group them in broader ranges, as follows:

1. **Near-New Condition:** These are firearms that have seen little to no use and have been maintained to a high standard by their owners. It would be hard to determine if the firearms was brand new or had been fired a few times before. Most of the firearms in this category would either be collector items or purchased in the last 5 years and not been used.

**RBP:** 95% of base price point. Most firearms of this quality would sell for their original sales price, regardless of the fact they are technically 'second hand'.

**Expected number of total firearms:** 5%-10%

2. **Used Condition:** These firearms are ones that have seen some-to-regular use but still operate as effectively as a new firearm due to the fact it has been well maintained by its owner. These firearms will display some superficial wear and tear but not to the extent that it interferes with the safe and comfortable operation of the firearm.

**RBP:** 70% of base price point. Most firearms of this quality still sell at a high price due to the fact their operation effectiveness is no noticeably lower than that of one in near new condition.

**Expected number of total firearms:** 70%-80%

3. **Poor Condition:** These firearms are inoperable or in a condition where their operation is not safe or comfortable. Firearms will display significant wear on key areas that will impact performance. Corrosion and pitting will be seen throughout the firearm. Work from a gunsmith or replacement parts would normally be required to restore firearm to a safe level of operation. The most common cause of a firearm being in this condition would be either an impactful event or low levels of maintenance.

**RBP:** 25% of base price point. Firearms in this condition are normally brought by dealers to strip for parts.

**Expected number of total firearms:** 15%-20%

However, having a broader range of firearm conditions valued at single price may cause greater dissatisfaction from owners. It is likely that a greater proportion of owners will believe that their firearm is under-valued using this model and that this could increase the levels of referral to the Exceptions Panel.

It is not uncommon for a firearm to be purchased and then not used for a year or two after purchase. Many firearms will fire few as 8 to 20 rounds per year, unless used for sporting activities. There is very little reduction in performance based on a rifle's age. On average it takes about 10,000 rounds fired to start seeing a drop in performance. However a lack of regular maintenance (cleaning and oiling) will cause the relatively rapid onset of degradation. The degradation of a firearm is also greatly impacted by brand and model. For example, a high quality brand firearm that is well maintained will be in better condition after 15 years and 10,000 rounds fired than a far newer lower quality brand that has been poorly maintained.

## Three-Tier Firearms Grade Criteria

<b>Near-New Condition</b>	
<i>New or near-new condition with little to no use. Would be difficult to determine if firearm has been used before.</i>	
Operation	Pass functions test, action is completely smooth with no resistance or impairment. All safety features function.
Barrel	No muzzle wear. Bore is shiny.
Working Surfaces	No damage or wear. No pitting. No corrosion.
Internal Components	No damage or wear. No pitting. No corrosion.
Main Body	Perfect condition, no scratches or visible wearing
<b>RBP</b>	<b>95% of base price point</b>

<b>Used Condition</b>	
<i>Safe working condition, has seen superficial wear and tear that does not impact the firearm's safe and comfortable operation. Firearm has been regularly maintained.</i>	
Operation	Pass functions test, action is somewhat smooth with little resistance or impairment. All safety features function.
Barrel	Some muzzle wear. Some wearing on bore.
Working Surfaces	Some superficial wear. Minimal pitting. Minimal corrosion.
Internal Components	No damage that would impair function of firearm. Minimal wear. Minimal pitting. Minimal corrosion.
Main Body	Minimal wearing/scratches on all surfaces. Some minor corrosion
<b>RBP</b>	<b>70% of base price point</b>

<b>Poor Condition</b>	
<i>Inoperable or in unsafe working condition. Rust present on firearm. Components damaged or missing. Work would be needed to restore firearm to a safe level of operation. Would normally be sold to a dealer for parts.</i>	
Operation	Fails functions test. Safety features do not function.
Barrel	Bore visibly damaged. Barrel has damage or cracks.
Working Surfaces	Damaged to a degree that impairs safe and comfortable operation.
Internal Components	Components missing or damaged to such an extent that they significantly impact the safe operation of the firearm.
Main Body	Metal deeply pitted. Significant corrosion present. Wood cracked, dented or broken to an extent it will impact the safe and comfortable operation for the firearm.
<b>RBP</b>	<b>25% of base price point</b>

# Appendix F: draft terms of reference for exceptions pricing panel

## Purpose

1. The purpose of the Exceptions Pricing Panel (the Panel) is to efficiently provide recommendations on the monetary compensation for firearms, components and accessories that were newly prohibited by legislation on 21 March 2019, but that are not already included on the National Price List.

## Submission criteria

2. To submit the firearm, component, or accessories to the Panel, the item needs to meet the following conditions:
  - They have to have been lawfully acquired;
  - They are not already included in the National Price List *This criteria will allow the Panel to consider not only higher value items, but any items that were not included in the National Pricing List. This should increase the number of firearms, parts and accessories that will be removed from the public. Alternative criteria here could be: Items that are substantively different from those already on the National Pricing List (i.e., exceed the maximum value for the type of firearm, or is of superior quality; or any items where the owner disagrees with the price listed on the National Pricing list. However, these options are unlikely to match the effectiveness of the proposed criteria.*
  - They have been newly prohibited by legislation (i.e., they were not already prohibited prior to 21 March 2019).
  - Once the firearm, component or accessory is submitted for evaluation by the Exceptions Pricing Panel, it becomes property of the New Zealand Police and will not be re-issued back to their previous owner. *This will stop individuals from stashing away or selling their items on the black market if they don't like the outcome of the pricing panel.*

## Supporting information

3. Individuals submitting items to the Panel are encouraged to include any information that can be useful in determining the value of the items. This includes, but is not limited to:
  - Make, model and year of manufacture;
  - Evidence of the original purchase price and the cost of any additional customisations; and
  - Unique features.

## Exclusions

4. The Panel will not consider firearms, components or accessories that:
  - Are not covered by the new legislation, or that were already prohibited before 21 March 2019; or
  - Were illegally acquired.

## Role and responsibilities

5. The role of the Exceptions Pricing Panel is to provide advice to Ministers on the monetary compensation for firearms, components and accessories that are not already include in the National Price List.
6. To perform its role, the Panel is responsible for:
  - Ensuring that all firearms, components and accessories meet the submission criteria before they are evaluated for compensation; *This is to avoid instances where individuals want the Panel something that is already included in the National Pricing List.*
  - Reviewing, all relevant features of the firearm, component and accessory, including (but not limited to) the make, model, materials and condition;

- Assessing any supporting information that was provided by (i) the person surrendering the firearm, component or accessory, or (ii) external experts requested by the Exceptions Pricing Panel;
- Providing and documenting the recommendations on the monetary compensation, including:
  - I. Likely full price of the firearm, component, or accessory as if it was purchased new today;
  - II. Discount that was applied to the full price based on whether the item is still in production, has been superseded, or has been discontinued;
  - III. Any additional adjustments to the price at the discretion of the Panel, including sufficient commentary to justify these adjustments; and
  - IV. Recommended amount of monetary compensation for the firearm, component or accessory, based on items (I to IV).
- 7. In the instances where no supporting information is provided as part of the submission, the panel has the responsibility to:
  - Seek additional analytical or external expert advice on the price of the firearm, component, or accessory to determine the starting point for compensation; and/or
  - Identify a suitable alternative from the National Pricing List as the starting point for the price of the firearm, component or accessory.
- 8. The Panel will not take into account any historical or sentimental value of the firearm, component or accessory, as surrendered items will ultimately be destroyed. Owners of items with significant historical or sentimental value can apply for a separate exemption, endorsement and permit to hold these items under Section 4A of the Arms (Prohibited Firearms, Magazines and Parts) Amendment Act 2019. *Note – the owner will need to apply for the exemption prior to surrendering the firearm, component, or accessory to the Panel.*
- 9. The Panel is required to meet these responsibilities in a transparent, fair, consistent and efficient manner.
- 10. Panel members will receive an agreed fee for their time

## Authority and decision-making

- 11. The Exceptions Pricing Panel is authorised by the New Zealand Police to make recommendations to Ministers on the monetary compensation for firearms, components and accessories not included in the National Pricing List.
- 12. The Panel is authorised to make recommendations on compensation for firearms that were surrendered between 21 March 2019 and the 30 September 2019. *Surrender to the Panel aligns to the amnesty period. However, the Panel will have until March 2020 for final recommendations. This will give the panel sufficient time to review all submissions, seek additional expert advice etc.* This will also create an incentive on people to surrender their firearm earlier to beat the rush at the end of the amnesty period and receive compensation earlier. The Panel has to submit the final set of recommendations to Ministers no later than 21 March 2020.
- 13. There is no maximum amount of compensation the Panel can recommend. However, the final decision on compensation amount is at the discretion of the Ministers. *This follows the Australian approach. Note that at that time, the top compensation for a very small number of firearms exceeded \$35,000AUD per firearm. Anecdotally, some firearms in NZ could be valued up to \$100,000 NZD.*
- 14. Decision-making will be done by full consensus of the Panel. In the instances where Panel members disagree, the final recommendation will be determined by the Chair.
- 15. Once the compensation amount is endorsed by the Ministers, the make, model and the corresponding compensation amount will be added to the National Pricing List. *Adding Panel's decisions to the National Pricing List could speed up evaluation of similar models across the country. This will also ensure consistency in valuing the same items across the country.*

## Dispute resolution

- 16. Should the owner of the items wish to dispute the recommendation of the Panel, they can do so under the existing provision in section 63 of the Arms Act, which provides for appeal to a District Court Judge in respect of compensation. Section 64 provides for the standard second appeal on points of law only to the High Court.

## Membership of the Exceptions Pricing Panel

17. Membership of the Exceptions Pricing Panel will be determined by the New Zealand Police.
18. The Exception Pricing Panel will consist of:
  - Firearms expert from the New Zealand Police or NZDF (Chair); *In the case of Australia, evaluation of exceptions was done by an approved firearms evaluator*
  - Two representatives from firearms, components and accessories importers and distributors;
  - An independent firearms expert, auctioneer, or independent valuer (either from New Zealand or Australia).
19. In addition to proven knowledge in firearm, components and accessories, the Exceptions Pricing Panel members have to collectively have sufficient expertise in:
  - Military-style firearms; and
  - Historic firearms. *These categories are likely to generate the greatest number of exceptions.*

## Suppliers and expert advisors

20. Where the Exceptions Pricing Panel deems it useful, a representative from a firearms supplier or manufacturer may be invited to provide input or advice.
21. The Panel may seek advice from external experts to support their decision making. For example, the Panel may request additional advice from overseas experts on firearms, parts and accessories that have been produced by a boutique manufacturer.
22. The cost of any external advice will be met by the New Zealand Police. *Cost of this is yet unknown, but could be non-trivial and should be noted in the advice to the Ministers*

## Administrative and Analytical Support

23. The Exceptions Pricing Panel will be supported by an assigned administrator, provided by the New Zealand Police. The Chair of the Panel can request additional analytical and administrative support from the New Zealand Police when required.

## Operating rhythm

24. The Exceptions Pricing Panel will be chaired by the either a representative from NZDF or NZ Police. *Ideally, the Chair should be independent. However, I can't think of anyone who will have the necessary skills and experience, while being independent. This is why I suggest using someone from NZDF or Police.*
25. Meetings will be held monthly, for a total of 8 hours (includes 30 minute lunchtime break and two 15 minute morning and afternoon tea breaks). In special circumstances the Chair may require the Exceptions Pricing Panel to convene at short notice or to increase the frequency of meetings. *The anticipated volume of firearms is yet unknown, as is the complexity of the cases that will be submitted to the Panel. The Chair has discretion to increase the frequency if the volume requires it. Having a separate panel for each of the 4 regions should also help manage the volume.*
26. There will be a separate Exceptions Pricing Panel for each region of New Zealand. *Alternatively, there could be one Panel that travels across the country. This may slow the evaluations down and may be too difficult on the Panel members.* In this case, the regions are defined as:
  - Auckland and the Upper North Island;
  - Central North Island, down to Manawatu;
  - Lower North Island, Nelson and Marlborough; and
  - Rest of the South Island.
27. The quorum for the Panel meetings is three members (including the Chair). If a quorum is not met, any supporting information about the submitted items can be discussed and a request for additional information, or expert advice can be arranged. However, no recommendation on compensation can be made.

28. Members are expected to attend all pricing meetings in person. In exceptional circumstances, a video conference is an acceptable format for member participation. Non-attendance at two consecutive meetings may invoke a review that could culminate in the member being replaced.
29. Members may not delegate to substitutes, unless the substitute has performed the current members substantive role for an effectively equivalent period of time.
30. A full list of items for Panel consideration and all relevant supporting information (if any) has to be circulated at least five working days ahead of each Panel meeting. The acceptance of late items is at the sole discretion of the Chairs.
31. The Exceptions Pricing Panel will reference and appropriately record meeting artefacts including:
  - Agenda – including a list of firearms, components and accessories for evaluation;
  - A full record of supporting information that was considered by the Panel (if any); and
  - A summary of the Panel's decisions and recommended monetary compensation.
32. It is expected all Panel members will have easy access to all information that is provided as part of the submission to the Panel.
33. Any firearms handed into the Panel for evaluation will not be returned to owners.

### Performance review

34. These Terms of Reference will be formally reviewed by the Exception Pricing Panel and the New Zealand Police after the first three months.

## Contact us

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