Imported Motor Vehicle Industry Association

VIA Submission: Mandating Safety Features (ADAS) for Vehicles Imported into New Zealand

1. Executive summary

VIA supports the intent to lift road safety through modern vehicle technologies. Our concerns relate to **timing, affordability, and operational feasibility** in the used-import channel: if mandates are set ahead of real-world availability in Japan's used fleet (and ahead of what New Zealand households can afford), New Zealanders will be priced out of upgrades and will hold on to older vehicles longer, undermining safety outcomes.

We accept NZTA's focus on **crash movement** (including head-on and lane-departure events) as relevant to ADAS, but ADAS is a mitigator, not a substitute for other safety levers. Any mandate should be underpinned by a clear problem statement, quantified DSI reductions by crash type, and a cost-benefit case that explicitly tests affordability and supply impacts.

A fixed-date mandate also creates **scarcity rents at source**: once a mandate is announced, Japanese auctions capitalise New Zealand's inelastic demand for compliant trims, lifting hammer prices. Where retail price ceilings are fixed by household budgets, the result is fewer viable imports and slower turnover.

Key market realities:

- New Zealand's used-import market is concentrated in the **8–12-year supply window** and anchored by a **$12,000–$15,000 retail band** where most turnover occurs.
- The mean import age is **11 years**, but using 11 years as a compliance threshold eliminates **around 50%** of used-import supply. The practical reference point is the **80th percentile at 12 years**, which still implies **about a 20%** supply reduction before ADAS fitment is considered.
- Japan reaches **near-universal AEB** fitment by 2021 (regulated), but New Zealand does not meaningfully access those vehicles until the **early 2030s** once the affordability lag is applied. **LDW and LKA are not mandated in Japan** and remain trim-dependent; they should not be assumed to become universal in New Zealand's sourcing window.

Fitment evidence and why NZTA/VIA numbers diverge:

- NZTA's discussion document presents **Rightcar-based fitment estimates** for 2024 entrants (e.g., LDW 37% and LKA 18% for used imports). VIA is **not confident** these are suitable as the evidential basis for mandate dates or supply-impact assessments without reconciliation, because a small assumption error cascades into large supply and price effects.

- VIA has matched **vehicle model code and year** against importer data and applied **functionally aligned definitions** (not broad yes/no "AEB present"). On that basis, observed fitment in the used-import stream is materially lower: **by 2025, LDW remains below ~10% and LKA below ~5%**, and higher headline percentages are likely to reflect counting early/limited variants that will not deliver the outcomes sought. VIA is available to sit down with NZTA for a short, transparent data-reconciliation exercise before fitment percentages are relied on in the RIS.
- A further practical constraint: **ADAS feature visibility at the sourcing stage is limited and inconsistent**, especially for older Japanese vehicles and lower-spec trims. Auction/document fields are not standardised feature-by-feature, so mandates that depend on pre-purchase confirmation risk compliance friction, supply loss and price distortion rather than improved safety.

Supply impacts if used mandates are brought forward:

- In 2027, New Zealand will primarily import **2015–2016** Japanese vehicles. AEB fitment in Japan in that model-year range was **about 70%** and concentrated in higher-spec trims; practical availability for New Zealand's trim-mix is **about 55–60%**.
- Combining the **~20%** supply loss from the 12-year threshold with incomplete AEB penetration yields an effective **~35–50% supply contraction**, with auction premiums and upward price pressure.
- Recent AMI claims data show collision claims trending down around **7% per annum** in recent years, indicating safety is already improving through turnover and technology diffusion; policy should be calibrated to avoid slowing that turnover.

VIA's core recommendation is an **evidence-gated, staged programme** that aligns mandates to real supply and affordability, not theoretical production timelines:

- **Dual compliance pathway** to reduce supply choke points:
  (1) feature/standards compliance where documentation exists; or
  (2) performance-based compliance using recognised safety ratings (Rightcar inputs such as ANCAP/Euro NCAP and UCSR thresholds), with ADAS treated as an uplift rather than the sole gateway.
- **Supply-and-price gates** before each used-import phase-in: verify (i) minimum availability in Japan's 8–12-year target segments, and (ii) limited price uplift at the $15k band, otherwise auto-defer the step.
- **Stage lane-keep systems**: LDW first; LKA later only once supply, calibration consistency and verification practicality are demonstrated.
- **AVAS as a special case**: enable early benefit via an approved retrofit pathway rather than constraining supply.
- **Explicit exemptions/deferrals**: mobility/disability vehicles; time-limited relief for demonstrably constrained segments (people-movers and light commercials); and an exemption (or substantially longer lead time) for class TC trailers up to 10 tonnes for any ABS mandate.
- **In-service integrity**: move beyond dash tell-tales to ECU/OBD-based health checks for mandated systems, so the "mandate" remains real for the in-service life.

- **Used-vehicle timing** should follow the actual arrival curve in the affordability band; the submission's conservative position is to treat LDW/LKA as scarce in the 8–12-year band until demonstrated otherwise.

Proposed key principle:

- ADAS policy should maximise the **rate of safety improvement per dollar of household transport spend**, by accelerating affordable fleet turnover, not by maximising nominal compliance at the border.

Appendix A cross-references each NZTA online survey question to the section(s) of this submission where VIA has addressed it.

2. Context: the safety objective must be matched to the dominant sources of harm

Mandating specific technologies only makes sense if it targets material contributors to death and serious injury (DSI) outcomes, and if the benefits justify the costs. VIA Members have asked (reasonably) whether the proposal is aligned to a clear problem statement and to wider transport policy settings.

VIA requests that NZTA publishes (or references) the specific crash problem statement for the ADAS mandate: which crash types it is designed to prevent, the estimated DSI reductions, and the cost-benefit case.

- VIA agrees with the crash-movement focus in NZTA's discussion document (loss of control, head-on and lane-departure related events). However, these crash types are often driven by upstream factors such as impairment, fatigue, distraction and inappropriate speed. ADAS can reduce the severity or likelihood of some outcomes, but it is not a substitute for (and should not crowd out) enforcement and behaviour interventions targeting those contributors.
- New Zealand should avoid fragmented policy sequencing. The Government has recently acknowledged (in the Clean Car Standard settings) that affordability constraints materially limit access to newer vehicles and can slow fleet turnover. ADAS mandates that further narrow supply risk working in the opposite direction.

Sidebar: New-Vehicle Policy vs Used-Import Policy — Different Functions, Different Effects

New-vehicle policy and used-import policy operate on **different mechanisms within the vehicle system** and must not be treated as interchangeable.

New-vehicle mandates shape future supply.
Requirements applied to new vehicles influence what manufacturers build going forward. Over time, these mandates raise the baseline specification of vehicles entering the global fleet. Consumers choosing new vehicles can decide whether to pay for higher specifications, and supply adjusts through production changes. This is a forward-looking supply mechanism.

Used imports do not create supply; they recondition the existing fleet.
Used-import policy does not add new vehicles to the global fleet and does not influence what is manufactured. Instead, it determines **which portion of the existing overseas fleet is allowed to replace older vehicles already on New Zealand roads**. In this sense, used imports function as a **fleet-quality upgrading mechanism**, not a supply-expansion mechanism.

Any vehicle that is **better than the vehicle it replaces**—even if not the newest or highest-spec globally—produces a **material improvement in the safety, emissions, and reliability of the New Zealand fleet as a whole**. This is how New Zealand achieves most of its safety progress in practice.

Used-import mandates directly affect affordability and turnover, not production.
Because New Zealand relies on used vehicles typically 8–12 years old and purchased within a fixed household price band, used-import mandates immediately narrow which existing vehicles are eligible for import. They do not cause more compliant vehicles to exist; they only change which vehicles can be used to refresh the fleet.

Why applying new-vehicle logic to used imports is risky
Applying new-vehicle mandate logic to used imports assumes that excluding non-compliant vehicles will somehow raise standards automatically. In reality, it can reduce fleet renewal by preventing otherwise safer-than-current vehicles from entering the market. When replacement slows, older and less safe vehicles remain in service longer, delaying overall fleet improvement[1].

Policy implication
New-vehicle mandates raise the future standard of vehicles globally. Used-import policy should focus on **maximising the rate at which New Zealand's existing fleet is upgraded** within real affordability constraints. Used-import mandates must therefore be timed to when better-than-current vehicles are actually available in sufficient numbers, rather than mirroring new-vehicle timelines.

[1] We have seen exactly this effect and impact from the Clean Vehicle Standard, which is a new vehicle emissions policy applied to used imports. Supply reduced, spending on repair and parts increased, and fleet age increased.

3. About VIA and the market reality we represent

VIA represents businesses across the used vehicle import supply chain. Our members supply the vehicles ordinary Kiwi households can realistically afford (typically $12,000–$15,000 retail). Keeping that pipeline viable is not just an industry issue — it is an equity issue. If policy settings or premature mandates push prices up, the hit lands hardest on lower-income households, who are already more likely to be driving the oldest vehicles and have the least ability to absorb extra cost or delay replacement. When affordable supply contracts and turnover slows, those households stay in older, less safe vehicles for longer, locking in the very disparities we should be trying to unwind.

New Zealand's used import channel relies overwhelmingly on Japanese stock. Regulatory timelines should therefore align with the real arrival curve of safety technology into Japan's used fleet and into New Zealand's affordability band, not simply with Japan's new-vehicle rule dates. That is how safety improvements reach those most at risk at scale and pace — rather than concentrating benefits among higher-income buyers who can access newer vehicles sooner.

4. Evidence: why availability, affordability and verification are the binding constraints

4.1 Import age distribution sets the feasible supply window

The used-import market is not a random slice of Japan's fleet. It is a tightly filtered subset shaped by price, mileage, grade and household affordability. That matters because each additional regulatory requirement narrows the compliant supply set, and the impact is cumulative rather than merely additive.

In practice, small timing errors compound quickly in this market. With an age profile that is already tightly concentrated, mandate timing is not a technical detail — it directly determines whether there is enough compliant, affordable supply to sustain turnover:

- Mean import age: 11 years.
- 80th percentile (retains most supply): 12 years.
- An 11-year compliance threshold cuts 50% of supply; a 12-year threshold still cuts 20% of supply, before ADAS fitment is considered.

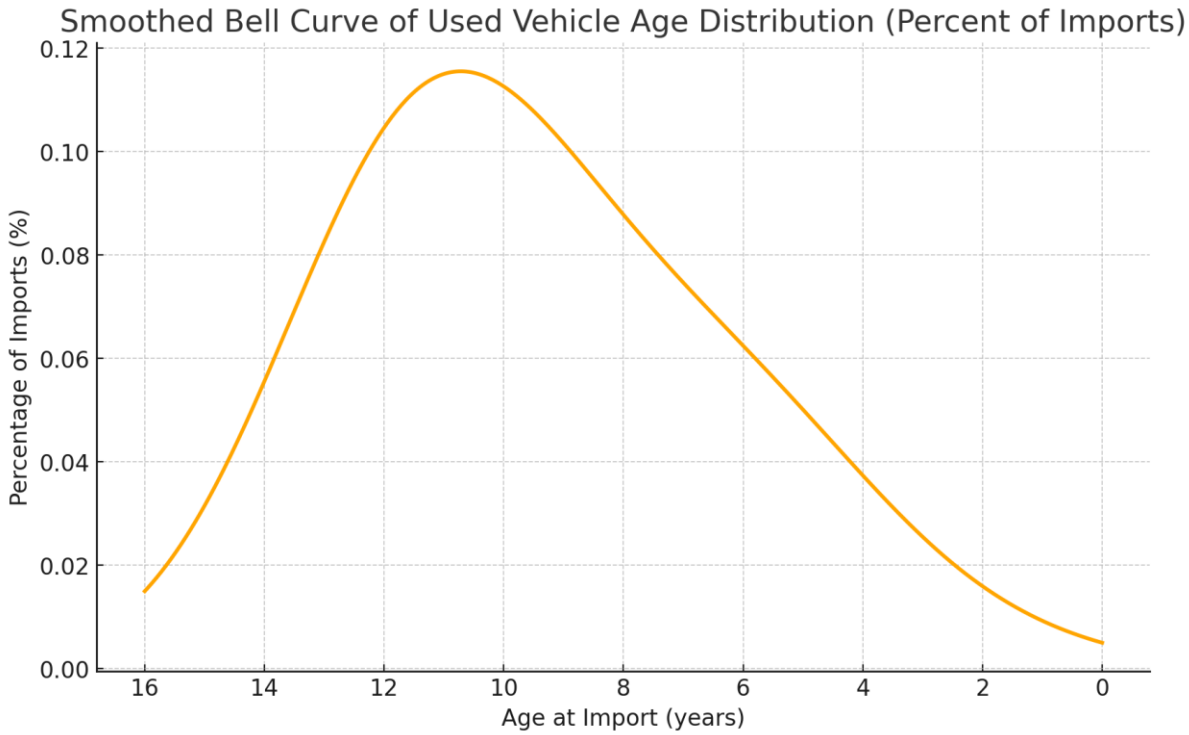

Figure 1: NZ Used-Import Age Distribution (Bell Curve) and Its Policy Relevance

*This chart shows the age distribution of light used vehicles imported into New Zealand, based on 2025 volumes. Imports are heavily concentrated between **8 and 12 years old**, with the **peak at 11 years**, reflecting affordability constraints in the New Zealand market. Although 11 years is the statistical mean (and modal) import age, using this point as a compliance threshold would automatically exclude **almost half of all available supply**, because a mandate tied to the peak year would treat every vehicle older than 11 years as non-compliant. The more appropriate reference point is the **80th-percentile availability age**, which occurs at **12 years**. At this age, approximately **80% of all imported vehicles remain accessible**, meaning that even the most lenient feasible threshold still assumes a **20% reduction in supply** before considering whether those vehicles actually carry the mandated safety technology.*

4.2 Japan adoption vs New Zealand availability: the 12-year affordability lag

VIA modelled Japan's ADAS adoption and shifted the curves forward by 11 years to illustrate the lag implied by the mean import age — in other words, when New Zealand first starts to see meaningful quantities of those technologies arriving within the affordability window. The policy implication is straightforward: the structural lag is real and persistent, so mandate timing should be based on at least a 12-year shift (and, in our view, no less than that) if the aim is to reach the mainstream used-import market rather than a thin, early tranche of higher-priced supply.

- Japan reaches 95–98% AEB fitment by 2021 (regulated).
- Meaningful AEB volumes for NZ begin around 2029; large volumes arrive around 2033; broad availability occurs in the early 2030s once the 12-year offset is applied.
- **LDW reaches only around 80% in Japan, and LKA remains highly variable and trim-dependent.** No party can know today exactly how quickly either feature will diffuse through

Japan's used fleet, or how consistently it will appear in the trims that land in New Zealand's affordability band. That uncertainty is precisely why fixed-date mandates are risky. On our current view, NZ availability for LDW/LKA does not reach "mandate-ready" volumes until the mid-to-late 2030s — if at all — which is why supply-and-price gates are essential to avoid choking off affordable compliant supply.

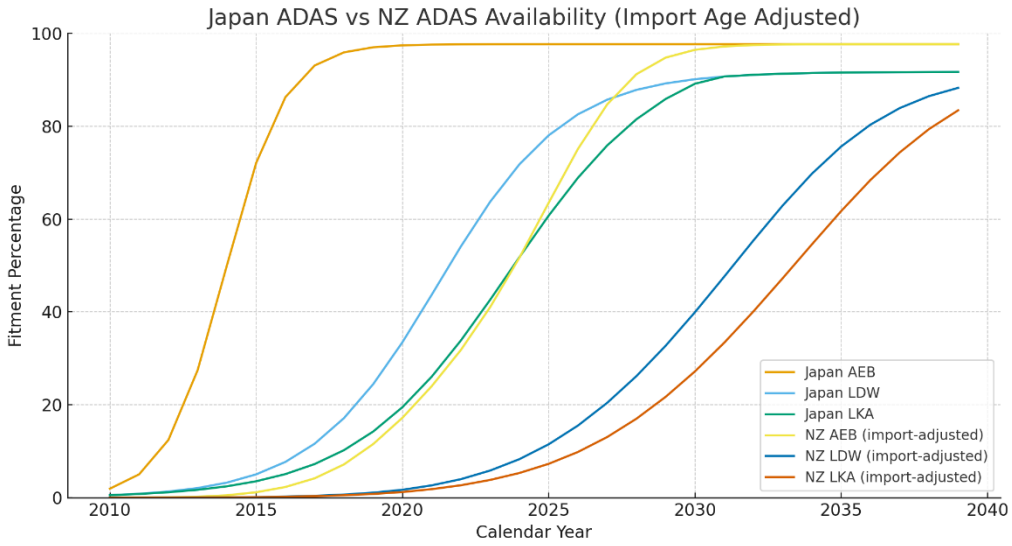

Figure 2: Japan ADAS adoption curves (AEB, LDW, LKA) compared with New Zealand's effective ADAS availability after adjusting for an 11-year age profile of used imports.

This figure shows how quickly AEB, LDW, and LKA were adopted in the Japanese domestic fleet (solid lines), and how those same technologies realistically become available in New Zealand (dashed lines) once the mean age distribution of used imports is applied. Because 80% of vehicles imported into New Zealand are 12 years old or newer, we recommend a 12-year shift for policy purposes as it should be when NZ importers can actually access vehicles equipped with each technology in meaningful volumes.

The chart illustrates a critical policy constraint: even though Japan mandated AEB for new vehicles and reached near-universal fitment by 2021, New Zealand does not receive these vehicles until they reach affordable import age—resulting in NZ AEB availability rising only from the late 2020s and reaching high coverage in the early 2030s. LDW and LKA, which have no Japanese mandate, rise more slowly and never reach full adoption; accordingly, New Zealand cannot expect high availability of these features until the mid-to-late 2030s, if ever.

4.3 Spec-level reality: ADAS visibility at sourcing is limited and inconsistent

A practical constraint sits underneath the availability curves: early ADAS adoption (including AEB in the earliest years) was often an optional extra, not a standard fitment. As a result, our curves indicate potential AVAILABILITY by model-year and market uptake, not guaranteed presence on every vehicle offered for sale. Compounding that, ADAS feature visibility at the sourcing stage is limited and inconsistent, particularly for older Japanese vehicles and lower-spec trims. At auction, and in the documents importers commonly receive, ADAS information is not

standardised or reliably recorded feature-by-feature. A mandate that assumes dependable pre-purchase verification of specific ADAS functions would therefore create substantial operational friction and cost, while still leaving importers exposed to avoidable compliance risk.

- In practice, importers cannot consistently validate ADAS at the point of purchase across older vehicles and lower-spec trims.
- Mandates that depend on pre-purchase feature confirmation risk supply loss, compliance friction, and price distortion rather than improved safety.
- This is a key reason a performance-based compliance pathway and/or standards-based evidence (where available) is needed.

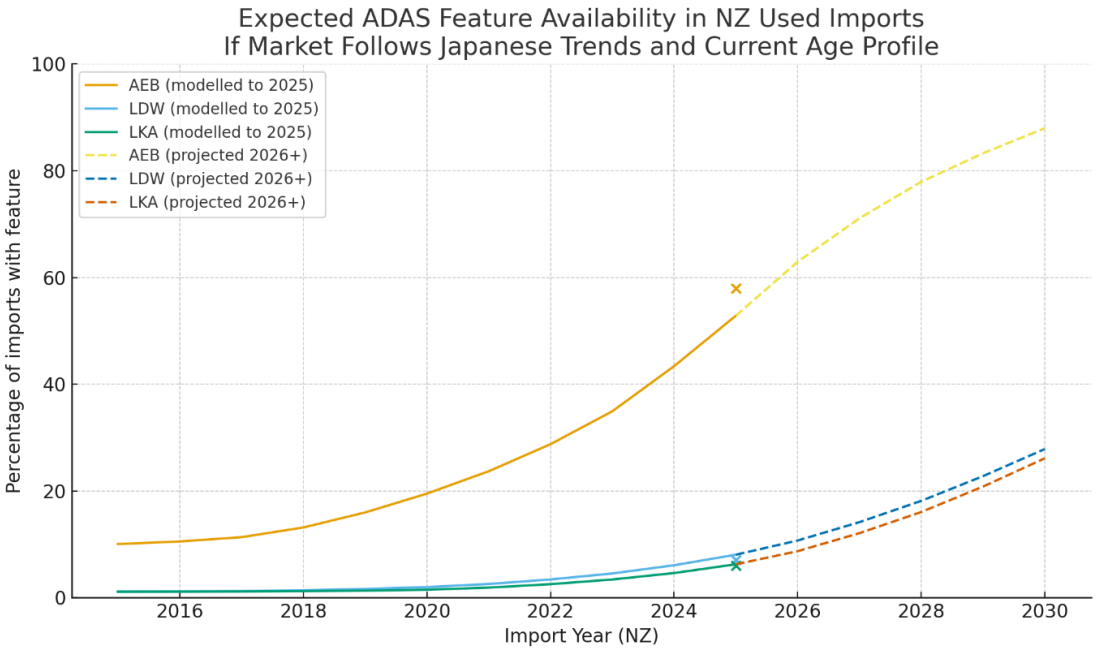

Figure 3: Expected ADAS Feature Availability in NZ Used Imports (Historical to 2025 + Projection to 2030)

*This chart shows the actual share of New Zealand used imports fitted with AEB, LDW, and LKA from 2015–2025 (solid lines), followed by projected uptake to 2030 if NZ continues to source vehicles following Japan's adoption trends and maintains its current **8–12-year import age profile**. The solid curves represent observed real-world NZ data; the dashed curves represent projected availability based on smoothed Japanese ADAS adoption patterns shifted into the New Zealand affordability window. The plotted "X" markers indicate actual 2025 fitment levels for reference.*

4.4 Why a 2027 used-import AEB mandate is misaligned with supply

NZTA's discussion document presents Rightcar-based fitment estimates for vehicles entering the fleet in 2024, including **AEB fitted in 39% of used imported light vehicles, lane departure warning in 37%, and lane keep assist in 18%**. NZTA also projects rapid uptake through to near-universal fitment in the early 2030s, and states used vehicles typically enter the New Zealand fleet **7–9 years after manufacture**. VIA is not confident these figures are suitable as the evidential basis for mandate dates or supply-impact assessments, because if the underlying

fitment assumptions are wrong, the supply and price impacts are not a rounding error — they cascade through the market.

VIA has matched vehicle **model code and year** against our own import data and applied feature definitions aligned to the functional intent described in the discussion document. Our analysis is materially more granular than a simple feature yes/no flag: for **AEB**, we differentiate low-speed vs high-speed and pedestrian/cycle/intersection performance; and for lane-keep systems we only count versions that operate meaningfully at open-road speeds. On that basis, observed fitment in the used-import stream remains materially lower. By **2025**, **LDW remains below ~10%** and **LKA remains below ~5%** in the vehicles New Zealand is actually importing, and any higher headline percentages are likely to reflect counting early or limited variants that will not deliver the safety outcomes the proposal is seeking.

This matters because there is a simple and predictable chain of effects when used-import requirements are introduced too early. A new regulation narrows the set of vehicles that qualify as compliant. That narrowing creates scarcity at Japanese auctions, which increases hammer prices for the remaining compliant vehicles. Because New Zealand retail prices are constrained by fixed household budgets, those higher costs cannot be passed on to buyers. The result is fewer viable imports, delayed vehicle replacement, and a higher average fleet age.

When turnover slows, the rate at which safer vehicles enter the fleet slows as well, reducing the overall safety gains the policy is intended to achieve:

> **Regulation → narrower compliance set → auction scarcity → higher hammer prices → unchanged NZ retail ceiling → fewer viable imports → deferred replacement → older fleet → slower safety gains.**

Given this divergence, VIA recommends NZTA and industry undertake a short, transparent data-reconciliation exercise (**Rightcar versus importer model-code data**) before relying on any fitment percentages or projections in the RIS[2]. VIA is available to sit down with NZTA to compare datasets and align on definitions. In the interim, the conservative and safer policy assumption is to treat **LDW/LKA as scarce in the 8–12-year affordability band** and to set mandate timing using demonstrable supply availability.

In **2027**, New Zealand will primarily import **2015–2016 Japanese vehicles**. In that model-year range, **AEB fitment was incomplete and concentrated in higher-spec trims**, which makes early mandates especially prone to the scarcity-and-price effects described above.

- AEB fitment in Japan in 2015–2016 was about 70%, concentrated heavily in higher-spec trims.
- New Zealand's practical AEB availability for the 2027 sourcing window is therefore around 55–60% once trim-mix and affordability effects are applied.

[2] We ask officials to provide more information about their analyses and methodology.

- Combining ~20% supply loss from the 12-year threshold with incomplete AEB penetration yields an effective 35–50% supply contraction, with auction premiums ('scarcity rents') and upward price pressure.
- **When prices rise, households either defer replacement or make compromises to stay within budget — but under an ADAS mandate the usual "trade-offs" are constrained**. Moving to higher-kilometre stock within the compliant cohort may be possible, but moving to older imports effectively is not, because older model-years are far less likely to have the required ADAS fitment. In practice, the rule functions like an age ban on affordable supply: it reduces the number of viable imports, and buyers who still need a vehicle are pushed laterally into older vehicles already in the New Zealand fleet, slowing the penetration of safer vehicles and lifting average fleet age.
- New Zealand's long-run safety objective is threatened if policy settings contribute to an older fleet (including a higher share of 15+ year vehicles), which has been a persistent theme in national fleet statistics over recent decades.

4.5 New Zealand evidence indicates safety is improving through turnover; avoid policy that slows it

Evidence cited in this submission suggests safety is already improving without a regulatory shock, and that affordability is a binding constraint on uptake.

- AMI claims data: collision claims trending down around 7% per annum in recent years.
- AMI also observes higher collision claim rates among 0–15-year vehicles relative to 16–30-year vehicles, consistent with higher exposure and urban use; technology reduces severity but does not remove human-factor risk.
- NZTA research (RR691) indicates high AEB/LKS uptake in new vehicle sales but only a small fraction of the total light fleet has these systems; for the 8–12-year affordability cohort, fitment remains uneven by model/trim and year.
- MoT elasticity work indicates household transport spend is price-inelastic in the short run: policy-driven cost uplifts are likely to be passed to consumers and can defer replacement.

5. VIA response to NZTA proposals

5.1 Scope and sequencing

- Support in principle: AEB (light and heavy), AVAS (quiet EVs/hybrids), ESC and ABS for heavy vehicles, and lane-keep support, provided timing reflects real used-fleet availability.
- Distinguish lane-keep functions clearly: LDW is not the same as LKA. LDW should be staged ahead of LKA, with LKA only when supply and calibration consistency are demonstrated.

- AVAS should be treated pragmatically: enable an early retrofit pathway to bank benefit without constraining supply.

5.2 Compliance approach at entry: dual pathway to reduce friction and distortions

VIA recommends a dual pathway that focuses on outcomes while avoiding supply choke points caused by trim-level feature variability and inconsistent sourcing-stage information:

- **Safety-rating path (primary):** demonstrate an acceptable whole-vehicle safety rating using **ANCAP/Euro NCAP star ratings** (where applicable) and/or **UCSR outcome risk bands**.
    - **ADAS should not be a prerequisite to access the base rating.** Instead, verified ADAS fitment should operate as an **incremental uplift** (for example, **"adds a star"** or an equivalent uplift within the rating framework), recognising that ADAS is an enhancer of safety performance rather than the sole gateway to compliance.
- **Feature/standards path (secondary):** where safety ratings are not available or do not translate cleanly to specific JDM variants, allow compliance to be demonstrated via **recognised technical standards** (e.g., **UNECE/Japan/Australia**) where documentation is available.
- **Equivalency for JDM variants:** where no rating exists for a specific JDM variant, allow reasonable equivalency using **platform/model-family evidence** accepted by the Registrar, with a transparent evidential threshold.

Implementation measures:

- **Publish an annual equivalence schedule (NZTA + industry):** mapping common JDM models/grades to (a) base safety rating status, and (b) the documented ADAS "uplift" status where evidence is available.
- **Keep border/entry checks administratively simple:** avoid reliance on auction-list feature fields that are not standardised and avoid feature-by-feature mandates that assume reliable pre-purchase verification.
- **Use consumer information settings to lift uptake without choking supply:** Rightcar-style explanations of what each system does, and consistent point-of-sale disclosure (including for used imports), with clear separation between **base safety rating** and **additional ADAS uplift**.

5.3 Phasing and lead times

VIA supports a minimum 16-month lead time and the sequencing of:

- new-model -> existing-model -> used.

We oppose a 2027 start for used light vehicles (AEB/AVAS/LDW) because it precedes the practical supply window for affordable 8–12-year Japanese vehicles relied upon by households and SMEs.

5.4 Exemptions and pragmatism (including mobility vehicles)

VIA supports exemptions for disability and mobility vehicles and recommends transitional relief for segments that are disproportionately affected yet essential for households, community services and SMEs.

- Explicit exemption/alternative compliance pathway for mobility vehicles (including disability transport), to avoid constraining access and specialised conversions.
- Targeted, time-limited exemptions or deferrals for people-movers and light commercials where compliant variants are demonstrably scarce or attract outsized premiums.
- Heavy trailers: NZTA's survey asks whether class TC trailers up to 10,000 kg should be exempt from any ABS mandate. VIA supports an exemption (or, at minimum, a substantially longer lead time) because this segment is likely to face retrofit and cost barriers that are not well-aligned with the policy objective and could create disproportionate compliance friction.
- Exemptions should be paired with periodic review and a clear path to transition once supply is demonstrated.

5.5 In-service settings: move beyond dash tell-tales to ECU-based health checks

For all mandated systems fitted to a vehicle (AEB, LDW/LKA, ESC, ABS, AVAS), in-service inspections should include an electronic health check via diagnostic interrogation (e.g., OBD-II/EOBD or manufacturer-approved methods).

- Fail if any mandated system reports an active or pending critical fault, malfunction request, or is detected as disabled/coded-out.
- Record concise pass/fail outcomes and code identifiers (minimal data).
- Where standardised PIDs are unavailable for specific JDM variants, use manufacturer-approved methods; if technically infeasible, fall back to visual/tell-tale checks with an attestation noted.

5.6 Safeguards: supply-and-price gates, monitoring, and an early review

Regulatory timing determines price and supply outcomes. Safeguards should be written into the Rule/RIS to prevent scarcity rents and fleet ageing effects.

- Supply & affordability gate before each used-import phase-in: verify that >=70% of likely NZ target segments at 8–12 years old in Japan are available with the required safety performance or features, and that the expected landed price impact at the $15k retail band is <= $1,500. If not met, auto-defer the step by 12 months.
- Price-monitoring dashboard: track Japanese hammer-price differentials for key NZ models/grades with vs without the targeted capability/rating plus NZ landed/retail medians. If a persistent policy premium emerges for 3 consecutive months, pause the next step.
- Stage LDW -> LKA: begin with LDW; add LKA only when supply and calibration consistency are verified.
- Retrofit first for AVAS: certify retrofit kits where available to bank benefits without constraining supply.
- 12–18-month post-implementation review of fleet age movement, import volumes, price differentials, inspection friction, and crash-type trends.

6. VIA recommended timing for used-import mandates

Principle: align mandates with Japan's existing-model coverage and the actual arrival of ADAS-equipped vehicles into New Zealand's 8–12-year affordability band. Avoid dates that force importers and buyers into a narrower, higher-priced slice of Japanese supply.

Recommended start dates (used light vehicles):

- AEB (light): 2035.
- LDW (light): 2035.
- LKA (light): 2037.
- AVAS (EVs/hybrids): two-step—approved retrofit from 2028; full fitment expectation by 2031–33.

Heavy vehicles: confirm current settings for ESC and ABS (expected to be immediate / business-as-usual given mature availability).

Rationale:

- AEB: tracks Japan existing-model compliance (approx Dec 2025) plus New Zealand's ~12-year affordability lag; avoids the 35–50% effective supply contraction associated with a 2027 mandate and supports stable supply once AEB is broadly available in the early 2030s.
- LDW: not mandated in Japan and often bundled into higher trims; meaningful volumes for NZ occur mid-2030s; phase ahead of LKA.
- LKA: highly variable and trim-dependent; may never be universal without a Japanese mandate; allow additional time for uptake, calibration stability, and supply verification gates.

- AVAS: retrofit-first pathway secures early benefit without constraining core family and SME segments; move to full fitment once supply is broad.

7. International reference: Australia's approach (sequenced and standards-based)

Australia provides a relevant comparator because it is also a standards-taker. It applies national vehicle standards (ADRs) at first supply to market for new vehicles and, where applicable, imported used vehicles (noting Australia's used-import channel is far less market-significant than New Zealand's). Australia's approach shows two useful disciplines: (1) anchoring requirements to recognised standards and staged implementation, and (2) backing the regulatory settings with clear consumer education.

It is also a useful counterpoint to the common claim that New Zealand risks "falling behind internationally" if it does not mandate ADAS earlier. That argument conflates **new-vehicle policy** with **used-import reality**. New Zealand does not manufacture vehicles and sources the vast majority of used imports from Japan. **AEB will be fully mandated in Japan from the end of this year**, which means New Zealand will inevitably receive AEB-equipped vehicles as they age into the used market. In practical terms, New Zealand cannot "fall behind" Japan in used-import safety standards; it can only **mis-time access** by setting requirements ahead of when those vehicles are actually **available and affordable** in the source market's used fleet. The real policy risk is not falling behind, but **introducing mandates before supply exists** in the used-fleet pipeline.

Key Australian reference points:

- **ADRs apply at first supply** to the Australian market for locally manufactured and imported vehicles (and, where relevant, second-hand imports).
- **AEB (car-to-car)** is required for newly introduced models from **March 2023** and for **all new vehicles from 1 March 2025**; **pedestrian-capable AEB** becomes mandatory for all new vehicles from **1 August 2026**[3].
- **Lane-keeping systems** are regulated under **ADR 107/00 (Emergency Lane Keeping Systems)**, with sequencing and scope that differs from AEB; Australia has staged introduction rather than assuming universal immediate availability.
- **Consumer education**: Australia (through Austroads) has invested in public-facing guidance via **ADAS Assist** as a central hub explaining ADAS functions and safe use.

[3] VIA's current mapping for AEB in our analysis was **high-speed vehicle-to-vehicle AEB only**. If the policy target shifts to **pedestrian AEB**, the practical "mandate-ready" timing would be **materially later** than our current graphs imply.

8. Data gaps and information requests (to support evidence-based policy)

To ensure the mandate is targeted, proportionate and aligned with affordability constraints, VIA recommends NZTA (and MoT where relevant) address the following evidence gaps:

- **Problem statement and quantified benefit:** publish expected DSI reductions by crash type attributable to the proposed ADAS mandates, and the cost–benefit analysis (including sensitivity to import price increases and supply impacts).
- **Fleet/market monitoring:** demonstrate how NZTA/MoT monitors the vehicle market and fleet-turnover impacts of regulatory settings in practice (not just annual snapshots).
- **Buyer-type breakdown (new vs used):** publish a breakdown of new-vehicle registrations by buyer type (private vs corporate), including rentals and fleet registrations, and the equivalent for used imports.
- **Source-market availability method (Japan):** publish the methodology and data sources used to calculate ADAS availability in the Japanese market (and how those estimates are translated into expected availability in New Zealand's used-import stream), including definitions and any assumptions about trim-level fitment. NZTA's published figures diverge materially from VIA's model-code-based analysis, so this step is essential before mandate dates are set.
- **Operational feasibility:** consult with importers and auction/intermediary providers on the practical availability of ADAS information at sourcing, and design verification pathways that do not rely on non-standardised feature fields.
- **Consultation process:** provide adequate lead time for affected sectors (including mobility providers) and allow staged release of guidance so submitters are not forced to respond before practical implementation detail is available.

Proposed next steps for NZTA

To progress ADAS policy in a way that delivers real safety gains without unintended supply or affordability impacts, VIA recommends that NZTA undertake the following actions within the next 6–12 months:

1. **Jointly reconcile supply data**
   Work with industry to reconcile Rightcar, NZTA, and importer-level data on ADAS fitment in the Japanese used fleet, so that mandate timing is grounded in the vehicles New Zealand actually imports rather than theoretical availability.
2. **Publish draft supply-and-price gate metrics**
   Set out, in advance, the quantitative thresholds that would trigger or defer used-import phase-ins (for example, minimum availability within the 8–12-year fleet and acceptable price impacts at key retail bands). Publishing these metrics early provides certainty to industry and allows transparent monitoring.
3. **Commit to a formal 2030 review milestone**
   Confirm a scheduled review in 2030 to reassess ADAS uptake in Japan's used fleet, with particular focus on LDW and LKA availability, pricing effects, and verification practicality. This allows policy to adjust to real-world outcomes rather than relying on long-range assumptions.
4. **Co-design verification guidance with industry**
   Engage with importers, compliance centres, and inspection providers to develop practical, consistent guidance for identifying and verifying ADAS features on used imports, including treatment of Japanese documentation and model- or trim-level variation.

Taken together, these steps provide a clear, evidence-based pathway forward. They allow safety objectives to be advanced while ensuring that mandate timing reflects actual supply, affordability, and fleet-renewal dynamics, and they position NZTA and industry as partners in delivering durable safety improvements.

9. Conclusion

VIA backs safer vehicles. The fastest route to a safer fleet is to keep turnover moving, because safety technology only helps once households can actually replace vehicles. The evidence in this submission shows a structural supply lag: New Zealand accesses Japan's ADAS technology roughly 12 years after adoption, and LDW/LKA remain non-universal and trim-dependent.

Mandating ahead of that window risks a 35–50% contraction in accessible used-import supply, price spikes at Japanese auctions, and deferred replacement, aging the fleet and undermining safety outcomes. A staged, evidence-gated programme (dual compliance pathways, supply-and-price gates, AVAS retrofit, LDW then LKA, mobility exemptions, and a tight monitoring and review loop) achieves the safety objective without pushing ordinary New Zealanders out of the market.

Appendix A: NZTA survey question crosscheck

This table cross-references NZTA's online survey questions to the sections in this submission where each issue is addressed.

Survey question	VIA position (summary)	Where addressed
1. Should AEB be mandated in most light vehicles entering the fleet?	Support in principle; timing must align with used-import availability and affordability; apply supply/price gates.	5.1, 5.3, 5.6, 6
2. Should AEB be mandated in most heavy vehicles entering the fleet?	Support in principle; confirm scope for heavy trucks and trailers; ensure exemptions for specialist/mobility use where relevant.	5.1, 5.3, 5.4
3. How should AEB be required at entry? (standards-based or definitions-based)	Prefer standards-based, with a dual pathway (feature compliance or equivalent safety-performance/rating outcome) to reduce friction.	5.2
4. What phased introduction dates for AEB?	Used imports: align to realistic supply window; proposed dates in Section 6 (with deferral triggers if gates not met).	5.3, 6
5. What exemptions should apply for AEB?	Mobility/disability vehicles; limited-supply segments (time-limited); other pragmatic exemptions subject to review.	5.4
6. Should in-service inspections check AEB?	Yes: move beyond dash tell-tales to ECU/OBD-based health checks for system status and faults.	5.5
7. Should lane departure warning be mandated in most light vehicles?	Support in principle; stage after AEB with realistic timing.	5.1, 5.3, 6
8. Should lane keep assist be mandated in most light vehicles?	Support in principle; stage after LDW due to trim variability and calibration sensitivity.	5.1, 5.3, 6
9. Should lane departure warning be mandated in most heavy vehicles?	Support in principle; consistent with NZTA's approach (no LKA mandate for heavy).	5.1, 5.3
10. How should lane keep support be required at entry?	Standards-based + dual compliance pathway to avoid reliance on inconsistent sourcing-stage feature fields.	5.2, 4.3
11. What phased introduction dates for lane keep support?	Proposed staged LDW then LKA dates in Section 6, with gates and review.	5.3, 6
12. What exemptions should apply for lane keep support?	Mobility/disability vehicles; time-limited relief for constrained segments; periodic review.	5.4

Survey question	VIA position (summary)	Where addressed
13. Should in-service inspections check lane keep support?	Yes: ECU/OBD health checks; treat disabling/fault states as fails.	5.5
14. Should ESC be mandated in most heavy vehicles entering the fleet?	Support in principle; confirm practical impact and scope (trucks/trailers) and align with source-market standards.	5.1, 5.3
15. How should ESC be required at entry?	Standards-based requirements with clear evidence pathways (manufacturer/approval evidence).	5.2
16. What phased introduction dates for ESC?	If mature availability is confirmed, implement with adequate lead time; otherwise align to verified supply window.	5.3, 6
17. What exemptions should apply for ESC?	Special purpose/low-volume heavy vehicles where technology fitment is impractical; review-based exemptions.	5.4
18. Should in-service inspections check ESC?	Yes: ECU/OBD health check approach; avoid superficial indicator-only tests.	5.5
19. Should ABS be mandated in most heavy vehicles entering the fleet?	Support in principle, subject to trailer and retrofit constraints being addressed.	5.1, 5.3
20. How should ABS be required at entry?	Standards-based, with clear compliance evidence at first entry to fleet.	5.2
21. What phased introduction dates for ABS?	Implement with sufficient lead time and after confirming practical feasibility across vehicle categories.	5.3, 6
22. What exemptions should apply for ABS?	Support exemption (or extended lead time) for class TC trailers up to 10,000 kg; other pragmatic exemptions as needed.	5.4
23. Should in-service inspections check ABS?	Yes: ECU/OBD diagnostics and functional checks as part of inspection settings reform.	5.5
24. Should AVAS be mandated in most light vehicles entering the fleet?	Support in principle; adopt retrofit-first approach to bank early benefits without constraining supply.	5.1, 5.4, 6
25. How should AVAS be required at entry?	Standards-based; allow approved retrofit pathway as compliance route.	5.2, 5.4
26. What phased introduction dates for AVAS?	Two-step: approved retrofit from 2028; full fitment	6

Survey question	VIA position (summary)	Where addressed
	expectation once supply is broad (early 2030s).	
27. What exemptions should apply for AVAS?	Mobility/disability vehicles and other edge cases where AVAS fitment is impractical; review-based exemptions.	5.4
28. Should in-service inspections check AVAS?	Yes: functional verification (including system status) using feasible test methods.	5.5
29. Should NZTA mandate additional features beyond those proposed?	Not at this stage; focus on the highest-benefit features and avoid adding costly, low-availability technologies.	5.1, 8
30. If other features were mandated, which should they be?	Only if NZTA can demonstrate high benefit, broad fitment, and manageable compliance; otherwise rely on outcome/rating pathway.	5.1, 8
31. Should requirements be standards-based or definitions-based overall?	Standards-based, with an outcome/performance pathway to reduce distortions and reliance on feature lists.	5.2
32. Are the proposed introduction dates workable?	For used imports, not without gates/deferral mechanisms; require >=16 months lead time and evidence thresholds.	5.3, 5.6
33. Any other feedback?	Policy sequencing and affordability: avoid settings that slow fleet turnover; require monitoring, review and early adjustment triggers.	2, 5.6, 8
34. Should AVAS be mandated in most heavy vehicles entering the fleet?	Support where quiet heavy vehicles (EV/hybrid) are entering; apply the same retrofit-first pragmatism.	5.1, 5.4
35. How should AVAS be required at entry for heavy vehicles?	Standards-based with an approved retrofit compliance route where practical.	5.2, 5.4
36. Should class TC trailers up to 10,000 kg be exempt from ABS?	Yes: exemption or extended lead time is appropriate given retrofit and cost barriers.	5.4
37. If ABS is mandated in heavy vehicles, should in-service inspections check ABS?	Yes: ECU/OBD health check and functional verification as practicable.	5.5
38. If AVAS is mandated in heavy vehicles, should in-service inspections check AVAS?	Yes: functional verification and system-status checks.	5.5

Appendix B: Selected references (public)

- Australia Department of Infrastructure: Australian Design Rules (ADRs) overview and lists.
- ANCAP media release (Nov 2021) on ADR requirements for AEB (new models March 2023; all models March 2025).
- Austroads: ADAS Guidance Service / ADAS Assist consumer education platform.
- ADR 107/00 (Lane Keeping Systems / Emergency Lane Keeping Systems) documentation (Australia).