

**Used Vehicle History Report Comparison
2013-2014**

Prepared By:

**Automobile Protection Association
2 Carlton Street Suite 1319
Toronto, Ontario M5B 1J3
&
292 Saint Joseph Boulevard West
Montreal (Quebec) H2V2N7**

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Research

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Executive Summary

Vehicle history searches are a comparatively recent innovation in the used car market. They have become nearly universal and are used by dealers, buyers and intermediaries like vehicle auction houses. Private companies aggregate information obtained from third-party databases to provide history reports for individual vehicles. The reports are sold to the general public and auto dealers on easy-to-use, web-based platforms.

A Vehicle History Report, or VHR, provides information critical to a buyer's purchasing decision. The widespread availability and use of vehicle history reports has the potential to address previously irresolvable issues concerning the inequality of the information available to the buyer and seller. There has been relatively little empirical research on the accuracy of the information provided in vehicle history reports. This APA study benchmarks CarProof and CARFAX, two private vehicle history search services, and the used vehicle report provided by the Ministry of Transportation of Ontario, against on-site vehicle inspections performed by an expert appraiser.

An APA-recommended expert was tasked with inspecting used vehicles offered for sale or recently sold by auto dealers and private parties to consumers. This sample included vehicles in the Canadian provinces of British Columbia, Ontario and Quebec. The APA instructed the expert to select vehicles that appeared to present material issues that would be of concern to a buyer. The APA wanted to know if the inspected vehicles had experienced the following events prior to sale:

- Prior collision damage, with repairs to three or more panels, structural damage
- Vehicle previously used as a daily rental
- Vehicle previously registered in another jurisdiction
- Odometer irregularity

In total, 133 vehicles were retained for this study. This group comprised a robust

sample of vehicles that had sustained one or more previous events that would be of concern to a buyer. Subsequently, the APA performed lookups for every vehicle in its sample in the CARFAX, CarProof, CarProof Verified BC and/or MTO (Ministry of Transportation of Ontario) databases. Lookups varied depending on the Vehicle History Report services available in each province.

The APA did not investigate the accuracy of lien registration for this project.

Findings

There was a large variability in the accuracy of vehicle history reports across providers. There was also a significant variability in the accuracy of reports from the same provider depending on the province in which the vehicle was located.

British Columbia

CarProof Verified BC was very accurate in British Columbia, identifying material issues with 24 of the 27 vehicles in the APA sample (89%). Moreover, CarProof reported collision information for some vehicles that the inspections did not, like multiple minor claims. CarProof also identified the highest number of former daily rentals (4) and out-of-province vehicles (9) among the different VHR providers. At \$71.45 per search (\$51.45 for a more limited search), the CarProof Verified BC report is the most expensive of this investigation.

CARFAX was less accurate than CarProof Verified BC. CARFAX reported material issues on 22 of 27 vehicles (81%). It achieved this relatively high score by identifying a high number of vehicles as out-of-province or former daily rentals. However collision damage records were frequently incomplete; CARFAX reported impacts or rebuilt titles on just 14 out of 25 vehicles (55%) that had collision damage that was often very significant. In APA's view, collision information is more material to a buyer than previous use as a daily rental or a previous out-of-province registration.

Vehicle history reports do not currently distinguish between a properly repaired or

rebuilt vehicle, and a poorly repaired one with compromised safety. The APA inspection identified structural integrity defects in 7 of the 25 collision vehicles inspected in the Vancouver market, which the VHR services do not record.

Ontario

In Ontario, CarProof identified 30 of 47 vehicles with prior collision damage (64%). CARFAX was less accurate, with only 24 of 47 vehicles identified (51%). CARFAX was the most likely to report an out-of-province vehicle, identifying 13 of them, compared to 10 for CarProof and four for the APA inspections.

The Ministry of Transportation of Ontario (MTO) Used Vehicle Information Package (UVIP) is accurate, but only for the narrow set of data it reports. The UVIP provided the most complete record of previous owners in Ontario and mileages at the time of sale. It identified four former daily rental vehicles, handily beating the other sources. The UVIP identified seven vehicles involved in very serious collisions, but did not report lesser collisions identified by the other reports and the APA inspector. This occurs because the UVIP does not record collisions when the vehicle is repaired and returned to the insured party.

Quebec

CarProof identified 32 of 58 vehicles with previous collision damage (55%), while CARFAX identified just 25 (43%). The two reports identified the same number of out-of-province vehicles (12 each). Quebec's was the only sample with a significant presence of vehicles with inconsistent odometer readings. The APA inspector identified seven of 59 vehicles, while CarProof found three and CARFAX two.

Conclusion

Vehicle history reports have made an important contribution to transparency in used vehicle transactions; however work remains to be done, particularly in the area of collision reporting. Report accuracy varies significantly by province and provider. Auto dealers use vehicle history reports as a demonstration of their confidence in the condition of a vehicle offered for sale. In its field investigations,

the APA has learned that when the results of a history search come up “clean,” but the vehicle is not, the reports can mislead a buyer.

In the APA sample, CarProof Verified BC was very accurate. CarProof’s marketing, which allows the dealer to advertise “CarProof Verified,” next to the ad for each vehicle is tricky because it means different things to the different parties to the transaction. To the consumer, it implies “CarProof checked the car and it’s OK.” To the dealer it means only that “CarProof has a record on this vehicle in its database.” CARFAX was less accurate and probably insufficient for consumers seeking reliable information about a vehicle for sale, though CARFAX’s reporting relative to CarProof was better in Ontario than in British Columbia and Quebec. With a price of 5 VHRs for \$50 or unlimited VHRs for \$55, CARFAX is less expensive than CarProof. CARFAX reports may be more accurate for used vehicles in the United States.

The Ministry of Transportation of Ontario (MTO) Used Vehicle Information Package (UVIP) is very accurate but only for a limited set of data. Its effectiveness as a consumer protection measure is hampered by a cumbersome delivery system: MTO responds to online requests for a UVIP *by mail* – too slow for most real-world buying situations. In theory, the private seller is supposed to have a UVIP ready to show the buyer, but that rarely happens, and a car dealer is not required to present a UVIP.

Used Vehicle History Report Comparison 2013-2014

Introduction

Vehicle history reports, or VHRs, are a comparatively recent feature of the used car market and have become nearly universal in their use by sellers, buyers and intermediaries like vehicle auctions. Private companies, notably CarProof and CARFAX in Canada, aggregate information from third-party databases on the history of individual vehicles and make it available to the public and auto dealers on easy-to-use, web-based platforms. There has been relatively little empirical research on the accuracy of the information in vehicle history reports. This study by the Automobile Protection Association benchmarks two private, one government, and one public/private history search service against on-site vehicle inspections in the provinces of British Columbia, Ontario and Quebec: CarProof (based in London Ontario, but majority-owned by a U.S. investment firm), CARFAX (based in the U.S.), and MTO (Ministry of Transportation of Ontario).

VHRs can be purchased online. Information in the reports is collected from many sources, including insurance companies, police reports, vehicle arbitration programs and government transportation regulators. A report can be purchased with a credit card over the Internet using the vehicle's 17 character alphanumeric Vehicle Identification Number (VIN). VHR providers promise important information on several items of material importance to buyers regarding a vehicle's history.

APA uses CarProof and CARFAX extensively for its own used vehicle investigations, supplemented by an on-site expert inspection. Before the arrival of CarProof, vehicle records in Canada were fragmented, hard to access and incomplete. However, VHR services have occasionally been criticized for providing incomplete information, and misrepresenting their services. Complaints usually involve a media report about a buyer who had an issue with the accuracy of a report. A U.S. class action against CARFAX in 2004 found that CARFAX was

providing incomplete information; CARFAX promised to improve its data collection going forward.

In 2009, *Consumer Reports* published the results of a cleverly designed study that examined VHRs for American vehicles with unrepaired collision damage advertised on salvage-auction and other websites (“*Don't rely on used-car-history reports,*” July 2009)

“To test the veracity of history reports, we ordered them for dozens of vehicles advertised online. The vehicles' owners disclosed serious dents or other accident-related damage, along with vehicle identification numbers (VINs) and photos.

Many reports returned "clean" results, sometimes from all five services: Carfax (www.carfax.com), AutoCheck (www.autocheck.com), the free VINCheck from the National Insurance Crime Bureau (www.nicb.org), and two services providing information from the (United States) federal government's National Motor Vehicle Title Information Systems database (www.nmvtis.gov).

We found that the reports were most likely to be incorrect for vehicles that had serious damage but for various reasons were not declared a total loss.”

Consumer Reports did not publish statistics or a Pass/Fail ranking for its findings, but concluded that insurance reporting of collision damage is incomplete and sometimes non-existent in the case of self-insured (daily rental) vehicles or uninsured vehicles.

Insurance write-offs advertised on an auction or salvage yard website likely comprise a group of relatively well-documented damaged vehicles. This should have skewed *Consumer Reports*' findings in favour of the VHR services, but their investigation nonetheless uncovered incomplete reports.

To APA's knowledge, this research project funded by Industry Canada's Office of Consumer Affairs is the largest independent study that compares the information in the most popular VHRs with an on-site inspection of vehicles actually for sale, or recently sold. In contrast to the *Consumer Reports* study, the APA limited its sample to repaired vehicles, because an unrepaired insurance write-off would be apparent even to a non-expert shopper.

The APA design designed this project to determine the accuracy of VHRs by type of information, Canadian jurisdiction, and service provider. An APA-recommended expert was asked to inspect used vehicles offered for sale or recently sold that he believed presented an issue that would have been of concern to a buyer. The APA-recommended expert checked every vehicle for:

- Prior collision damage, with repairs to three or more panels, structural damage
- Vehicle previously used as a daily rental
- Vehicle previously registered in another jurisdiction
- Odometer irregularity (the condition of the vehicle is not consistent with the indicated mileage)

The APA selected vehicles that presented a material issue resulting from a prior event related to one or more of the four categories above. In total, 133 vehicles with material issues offered for sale in three Canadian provinces were evaluated for this project. All the criteria selected by the APA are part of the information promised in VHRs.

Research Objective

The objective of this study is to determine how accurately Vehicle History Reports correlate with the actual condition of used vehicles offered for sale. The APA vehicle sample was offered for sale in three provinces, in three large metropolitan markets (Vancouver, Toronto and Montreal).

Profiles of the VHR sources

CarProof and CarFax are well known and promoted in Canada and in the United States. Consumers are most likely not aware of the differences between the reports, nor of the high variability in accuracy across different jurisdictions.

The reports retained for this project are CarProof, CarProof Verified BC, CARFAX, and the Ontario Used Vehicle Information Package (UVIP). CARFAX is based in the United States. CarProof is based in London Ontario, with majority U.S. ownership. The UVIP is provided by the Ministry of Transportation of Ontario. were ordered online from their providers. The UVIP was ordered at a ServicesOntario counter.

CarProof www.carproof.com

The following information is excerpted from the CarProof website:

CarProof was created in 2000 and is based in London, Ontario. Paul Antony, CarProof's CEO and president, recognized through his experience running a car dealership that no service existed for a cross-Canada lien search on used cars. He, along with a team of founders, created CarProof to provide Canadians who are buying or selling used cars with accurate details about a vehicle's history as well as lien information.

CarProof is Canada's most trusted vehicle history report. A CarProof report gives you details about a vehicle's past when you buy or sell a used car.

CarProof is a Canadian provider of vehicle history reports – a critical tool when you're buying or selling a used vehicle. A CarProof report establishes trust and transparency between a used car buyer and a used car seller by removing the guesswork about a vehicle's past – replacing it with impartial, accurate and real-time data.

Buying a Used Vehicle

When you're buying a used vehicle, CarProof gives you full insight into what's happened to a vehicle over its lifetime. You can feel confident that you know the full details about a vehicle and can make the purchase with complete peace of mind.

Selling a Used Vehicle

When you're selling a used vehicle, providing potential buyers with a CarProof report shows that you're upfront and open to disclosing the full history of your vehicle, right from the start. Buyers will know that you're a seller they can trust and they'll appreciate your full disclosure – which often helps to close the sale.

Buying a Used Car from a Dealer

Our CarProof dealer members offer CarProof reports on their used car inventory and would be more than happy to show you the vehicle history report for the car you're interested in.

CarProof's Vehicle History Reports include:

- ***Real-time data.*** *Live, real-time data sources provide you with up-to-the-minute information from provincial governments, private and public insurance agencies and many other providers.*
- ***Lien details.*** *CarProof is the only service that offers cross-Canada lien and/or security interest information (look for our [Verified products](#) for this lien information).*
- ***Accident data.*** *Learn whether the vehicle has been in an accident, what type of incident occurred and the amount of damage.*
- ***Registration and branding.*** *Discover which provinces the vehicle was registered in and whether the car has been negatively branded.*
- ***Full Canadian and U.S. history.*** *See a complete picture of any vehicle history from across Canada, as well as the U.S.*
- ***Bilingual information.*** *CarProof's website, vehicle history reports and customer service is available French and English.*

The above description from the CarProof website represents the report as providing a complete picture of the vehicle, which a consumer can rely on to make a purchase with “*complete peace of mind.*” However, at the end of every CarProof report there is a disclaimer in small font:

CarProof Disclaimer (as it was in April 2013)

Information on Reports

Terms & Conditions

CarProof's Vehicle History Report is compiled from multiple sources. It is not always possible for CarProof nor its U.S. VIN data provider, Experian Automotive, to obtain complete information on all vehicles, therefore, there may be other title brands, odometer readings or discrepancies that apply to this vehicle that are not reflected on this report. CarProof and its US. data provider, Experian, search data from additional sources where possible, but

all problems and discrepancies may not be reflected on the CarProof Vehicle History Report. These reports are based on information supplied to CarProof and Experian by external sources believed to be reliable, but no responsibility is assumed by CarProof, Experian or its agents for errors, inaccuracies or omissions. The reports are provided strictly on an as is where is basis, and CarProof and Experian further expressly disclaim all warranties, express or implied, including any implied warranties of merchantability or fitness for a particular purpose regarding this report. CarProof and/or Experian shall not be liable for any delay or failure to provide an accurate report if and to the extent which such delay or failure is caused by events beyond the reasonable control of CarProof and Experian including, without limitation, acts of God or public enemies, labor disputes, equipment malfunctions, material or component shortages, supplier failures, embargoes, rationing, acts of local, state or national governments, or public agencies, utility or communication failures or delays, fire, earthquakes, flood, epidemics, riots and strikes.

The disclaimer conflicts with the representations made to the customer before the report is purchased.

CARFAX www.CARFAX.com

CARFAX dominates the U.S. market in the sale of VHRs, to the extent that class action lawsuits have been launched against CARFAX stating that:

“CARFAX has unlawfully acquired and maintained its market power in VHRs through exclusivity agreements with numerous major players in the auto industry,” the complaint reads, citing how AutoTrader.com and Cars.com include hyperlinks to CARFAX reports but exclude reports from other VHR providers.”

The following text is excerpted from the CARFAX website:

CARFAX is a commercial web-based service that supplies vehicle history reports to individuals and businesses on used cars and light trucks for the American and Canadian marketplaces. CARFAX is a U.S. based company. In 1984 CARFAX was founded in Columbia, Missouri, by a computer professional named Ewin Barnett III working with Robert Daniel Clark, an accountant from Huntingdon, Pennsylvania. The company is now headquartered in Centreville, Virginia, with a data center operation in Columbia. Barnett was initially trying to combat odometer fraud. By working closely with the Missouri Automobile Dealers Association, in 1986 he offered

the early version CARFAX vehicle history report to the dealer market. These reports were developed with a database of just 10,000 records and were distributed via fax machine. By the end of 1993, CARFAX obtained title information from nearly all fifty states. In December 1996, the company's website was launched to offer consumers the same vehicle history reports already available to businesses. In the fall of 1999, CARFAX became a wholly owned subsidiary of R.L. Polk & Company.

Buying a used car? Don't run the risk of buying used cars with costly hidden problems. Get a detailed vehicle history report from our nationwide database on your home or mobile device within seconds.

Every CARFAX Report contains important information that can impact your decision about a used vehicle through a detailed VIN # check. Through this VIN search, some types of information included in CARFAX Reports include:

- Vehicle registration*
- Title information, including salvaged or junked titles*
- Odometer readings*
- Lemon history*
- Total loss accident history*
- Structural damage*
- Accident indicators, such as airbag deployment*
- Services & repairs*
- Vehicle usage*
- Recall information*

CARFAX states that only “some types of information” may be found in their reports, allowing that they may be incomplete. This is reinforced by the disclaimer found near the beginning of every report in easy-to-read text:

CARFAX Disclaimer:

“This CARFAX Vehicle History Report is based only on information supplied to CARFAX and available as of 12/16/13 at 9:43:28 AM (EST). (when report was requested). Other information about this vehicle, including problems, may not have been reported to CARFAX. Use this report as one important tool, along with a vehicle inspection and test drive, to make a better decision about your next used car.”

Some CARFAX reports that are not current, or may be missing data for a year or

two, carry disclaimers that read:

... "*Hmm. we haven't received any reading on this car since August 2011. Before you buy, ask the seller for recent service or repair records*" (Example: Québec inspection no. 58).

The CARFAX customer is not warned that the report may be outdated or have gaps in data collected until *AFTER* the purchase.

At the time of compiling the researching this report, in 2013, CARFAX's disclaimer was more obvious than CarProof's, and encourages a potential buyer to complement the report with a visual inspection and test drive. Although a detailed review of the representations made on the CARFAX website is beyond the scope of this study, the disclaimer paints a more limited picture of the value of the reports than does the overall impression conveyed on the CARFAX website. For Canada, CARFAX's performance was below even the level of protection it promises in the disclaimer. Because of the extent and frequency of some of the gaps in reporting observed for vehicles inspected in Quebec, the APA believes that CARFAX was not collecting insurance data for some vehicles APA inspected, *but continued to offer its reports as if data were being collected*. A systematic failure to capture collision data is materially different from a disclaimer about possible errors or omissions in information supplied by third parties.

Ministry of Transportation of Ontario UVIP

www.ontario.ca/driving-and-roads/used-vehicle-information-package

The following text is excerpted from the MTO website:

What you get: A used vehicle information package (UVIP) contains:

- *Vehicle Identification Number (VIN)*
- *Plate Number*
- *the vehicle details (including the year, make, model, colour, body type, cylinders and power, status and brand (branding info if available))*
- *Ontario vehicle registration history (including all present and previous owners, their city of residence and odometer reading)*
- *vehicle lien information*
- *the fair market value on which the minimum tax payable will apply*
- *retail sales tax information*
- *bill of sale*

- *tips on vehicle safety standards inspections*

Representations on the MTO website align faithfully with the information delivered. However, the information found in its reports is more limited than the other reports, as it does not record prior collisions except for salvage and rebuild information, and insurance write-off. The MTO reports do provide useful information on previous owners and odometer readings for Ontario.

The Used Vehicle Information Package is an Ontario-only report; it can be purchased online, but the information is sent by mail within 5 business days. Same-day service requires a visit to a provincial Ministry of Transportation or ServiceOntario outlet. The UVIP costs \$20.

Methodology

For this research, the APA collected a sample of used vehicles for sale in Canada's three largest metropolitan markets. All vehicles in the sample presented a material issue of concern to the buyer. As described below, the process of selecting vehicles and the study methodology were designed to generate conservative results; the reported accuracy rates are likely to represent an upper bound on the true underlying accuracy.

Collecting the vehicle sample

APA inspections

The unique feature of this study is on-site inspections by an independent expert with more than 20 years of experience inspecting vehicles. For some inspections, the inspector posed as a private individual. For other inspections, he accompanied a genuine buyer, in his capacity as an expert appraiser. The inspection protocol for checking collision damage was the same for both the covert and overt vehicle inspections, though the inspector usually devoted less time per vehicle to each covert inspection.

The APA inspector retained for this project has inspected over 500 vehicles in the company of APA mystery shoppers with a high degree of reliability. He has worked on several government-funded projects and as an expert working with the media

for television and print reports. All exterior body panels were inspected with a PosiTest paint thickness gauge and measurements recorded. The inspector conducted a variety of visual checks for panel fit, uneven tire wear, and presence of aftermarket body parts (missing the factory VIN stickers). In most cases the interior was checked for service stickers, or information in the glove box that might point to an out-of-province or former daily rental vehicle. Wear of seats, steering wheel, the carpet and door panels, was checked for potential mileage issues, as well as radio station presets for potential out-of-province vehicles. "No smoking" stickers are an additional element that suggests a vehicle was in daily rental or commercial service. The hood was opened to check for signs of a frontal impact, damaged structural members, replaced air conditioner condenser, or radiator, radiator cross member, unusual welds, replacement fenders and hood. The trunk was opened to inspect for water infiltration and the trunk floor for impact damage (ripples).

From this group, vehicles found to have experienced a previous event that would reasonably impact a buyer's decision to purchase the vehicle or the price paid for the vehicle, were selected for inclusion. Material issues APA asked the expert to look for included:

- Prior collision damage, with cosmetic repairs to three or more body panels, structural damage
- Vehicle previously used as a daily rental
- Vehicle previously registered in another jurisdiction (another province or the United States)
- Possible odometer irregularity

We chose these criteria because they are potential red flags to a buyer which the VHR reports promise to identify. Dealers attach a premium to local one-owner vehicles for a reason. There is a perception that the vehicle history will be easier to determine with a local vehicle, and that a single private owner takes better care of

the vehicle. Daily rental companies do not report collision damage claims to third party databases, and their vehicles are used in an environment corresponding to “severe usage” in the industry. Collision damage or an odometer reading that is too low for the condition of the vehicle are also factors that may convince a purchaser to look elsewhere or offer less for a vehicle.

The instructions given by the APA to the expert were deliberately vague: “Pick out the hit or otherwise dodgy cars from the ads or from a quick tour of a car lot. Send us inspection reports of cars that failed for any reason other than a mechanical deficiency.” The APA selected vehicles among this cohort that presented material issues that should be captured by a history search. Failures related to the mechanical condition of vehicles inspected were excluded from this study, because that is not information promised in VHRs.

This selection process is likely conservative because the vehicles the APA chose for the project sample were those with the most conspicuous issues, and hence APA believes most likely to have had previous events reported in VHRs. Using this methodology, 133 vehicles with material issues examined by the APA expert were included in the sample. Of those vehicles, 56 presented more than one issue, usually previous collision involvement and one among the following: a former daily rental, out-of-province registration, or mileage issue.

The APA did not include any vehicle with collision damage limited to the bumpers and two body panels or less, unless the vehicle presented another material issue. The inspector did not order any VHRs himself. The selection of vehicles for inclusion in the study was made before determining any particular VHR outcome. This was done to avoid a sample contamination that would arise if vehicles were included in the sample based on the outcomes of particular searches.

Accuracy of the APA inspection

Very low possibility of false positives

As described above, the finish on the body was measured on all panels and the depth compared to the factory finish. Structural damage was assessed visually. The inspection summaries that follow at the end of this report show clearly that several observations were usually made for each vehicle before a determination that it had sustained a prior event. The APA has used this same procedure for its widely-reported investigations of used-car retailers for many years and it has proven reliable, even when sellers have challenged the findings or taken legal action.

Moderate possibility of false negatives

There is a small likelihood of a false negative when it comes to repaired collision damage. The inspector could miss cosmetic damage to a vehicle or damage to panels where the factory finish was duplicated. The inspector could miss hidden structural damage. There is a greater likelihood that the inspector could miss one of the three other prior material events: The inspector may miss a discrepancy with the indicated mileage, or not determine that the vehicle was previously registered outside the province or used as a daily rental.

As mentioned earlier, these factors are likely to generate conservative results in the sense that the APA measure represents an *upper bound* on VHR accuracy. The study is designed to ensure that a false negative would be favourable to the VHR services compared to their true accuracy:

- i) If the inspection and the VHRs both failed to identify a material issue when one was actually present, then the vehicle would either not appear in the sample or if it were in the sample because of an additional material event, the failure to identify an issue would not penalise the VHR.
- ii) Among vehicles in the sample, if the inspection did not identify a particular material issue that was picked up in the VHRs (most likely a former daily rental or out-of-province vehicle), then the VHR is assumed to be correct and the inspection incomplete.

Vehicle History Reports

VHRs were obtained by the APA for every vehicle included in the study. Reports were purchased from CarProof, CARFAX, and the Ministry of Transportation of Ontario. The retail price paid varied from \$20 for the MTO Used Vehicle Information Package (UVIP) to \$71.45 for the CarProof Verified BC Report.

Reports collected varied for each of the three provinces:

British Columbia: CarProof Verified BC and CARFAX

Ontario: CarProof, CARFAX, and UVIP

Quebec: CarProof and CARFAX

Findings

The accuracy of the VHRs varied greatly. This study is the first to demonstrate the wide variation in accuracy in VHRs across provinces. CarProof's reporting accuracy was highest in British Columbia picking up material issues in 24 out of 27 vehicles in our sample (89%), including information on multiple claims, former daily rentals and salvage titles that the inspector occasionally missed. CarProof's accuracy in Ontario and Quebec was lower, with material issues identified in 72% of vehicles in Ontario, and 66% in Quebec.

CARFAX provided less information, reporting a prior material event on 81% of vehicles for sale in British Columbia, 70% in Ontario, and just 56% in Quebec. These statistics belie an important compositional difference in identified problems: CARFAX was less likely to identify and/or accurately describe prior collisions. CARFAX grossly understated dollar values for collisions reported in Quebec. CarProof and CARFAX were equals when it came to identifying vehicles from out of province,

CarProof and CARFAX identified more former daily rentals and out-of-province vehicles in British Columbia and Ontario than the on-site inspector. This is as expected because these two vehicle traits are harder to spot visually than collision damage. The inspector identified almost as many out-of-province vehicles as the VHRs in Quebec, because out-of-province vehicles in Quebec carry a mandatory

government inspection sticker on a corner of the window glass, which the inspector always looked for.

Accuracy varied significantly depending on what data were being collected. For collision information, the APA on-site inspections were the most accurate, with the excellent CarProof Verified BC report a close second.

For the more limited information it records, the Ontario UVIP was very accurate, but is too limited to be relied upon as the exclusive report for a consumer. For vehicles registered exclusively in Ontario, the UVIP offers the most complete information on previous owners, including daily rental companies that may have previously owned the vehicle.

Summary of Results								
All provinces: (n=133 vehicles)	APA Inspection		CARPROOF		CARFAX		MTO	
	number	rank	number	rank	number	Rank	Number	Rank
British Columbia (n=27 vehicles)								
Collision	25	1 st	22	2 nd	15	3 rd	n/a	--
Possible mileage issue	0	--	0	--	0	--	n/a	--
Former daily rental	2	2 nd	4	1 st	2	2 nd	n/a	--
Out of province	2	3 rd	*9	1 st	8	2 nd	n/a	--
Ontario (n=47 vehicles)								
Collision	47	1 st	30	2 nd	24	3 rd	7	4 th
Possible mileage issue	0	--	1	--	1	--	1	--
Former daily rental	0	3 rd	2	2 nd	0	3 rd	4	1 st
Out of province	4	4 th	10	2 nd	13	1 st	5	3 rd
Quebec (n=59 vehicles)								
Collision	58	1 st	32	2 nd	**25	3 rd	n/a	--
Possible mileage issue	7	1 st	3	2 nd	2	3 rd	n/a	--
Former daily rental	2	1 st	0	2 nd	0	2 nd	n/a	--
Out of province	11	3 rd	12	1 st	12	1 st	n/a	--

* Includes one vehicle identified as being in Seattle after the date of the APA inspection.

** Includes 11 badly undervalued collision reports; only 14 accurate Collision records in Quebec.

Findings by type of record

Collision damage records

Of the vehicles inspected on-site by the APA expert, 130 had bodywork resulting from a prior incident considered material. APA defined “material” as paint and some bodywork to three panels or more of the vehicle. CarProof reported 84 (73%) and CARFAX 64 (51%).

The Ontario MTO report (UVIP) reports on more limited collision data than the private VHR services. The MTO history search records a vehicle “brand” (no mention equals normal, a brand shows as Salvage or Rebuilt). The UVIP identified four Ontario vehicles in the sample with Salvage or Rebuilt brands. An additional three records (40, 41 and 42) had histories that included an insurance company among the previous owners; this indicates a likely insurance write-off, which puts a potential buyer on notice if they know how to interpret the report. All four Salvage brands in Ontario were picked up by CarProof and CARFAX, as was the significant damage in records 40 and 41. CarProof underreported the damage to record no. 42, and CARFAX missed it entirely. This vehicle sustained structural damage according to the on-site report, and the UVIP shows it was repurchased by an insurance company.

Dollar value estimates of damage:

The on-site inspector did not estimate dollar values when performing on-site inspections. However, APA was able to correlate the damage observed during the inspections with dollar values in the history reports, and determined that the latter were sometimes inaccurate.

CARFAX’ dollar values were very inaccurate in Quebec. CARFAX Quebec report nos. 2, 10, 14, 32, 46 and 52 (report summaries appear in the table for Quebec vehicles that follows) all indicate “damage over \$1,000.” This information is too imprecise to effectively describe the collision repairs observed during the APA inspection. An additional four reports on vehicles with significant collision damage

read “damage over \$2,000”, which is also too general, with the potential to mislead a non-expert. CARFAX Quebec report no. 1 is described as a “light impact” but then more accurately records a claim for \$14,888. Report no. 36 is described as “damage over \$1,000”, but also more accurately as “Rebuilt”. Report no. 42, a VW Golf involved in a side impact with structural damage according to the on-site vehicle inspection, is described as “damage under \$2,000” (very undervalued).

Overall, CARFAX missed or badly undervalued collision information in three out of four vehicles for sale in Quebec that had sustained previous collision damage (44 of the 58 collision-damaged vehicles). The table above counts incidents with underreported dollar values as valid collision records because they do report a collision. After deducting the severely undervalued collision records from the CARFAX total of 25 collision vehicles above, just 14 out of 58 Quebec reports had accurate collision records. Was CARFAX actually collecting claims information rigorously? It doesn’t appear so.

CarProof BC Verified reported dollar values in eight VHRs obtained for vehicles offered for sale in Vancouver (Report nos. 1, 2, 3, 5, 8, 9, 13, and 22 in the table for British Columbia that follows), and also indicated the area of damage. Many were small claims, sometimes more than one claim per vehicle, which the APA inspection missed. This was more detail than the APA on-site inspection provided for those vehicles, and indicates the potential for VHRs when reporting is done with integrity.

Structural damage AFTER collision repairs

Determining that major repairs have been performed correctly is beyond the information currently offered in VHRs. CarProof, CARFAX, and the UVIP all identify vehicles branded as “Rebuilt” but are not able to identify the badly rebuilt vehicles. The APA on-site inspector identified at least seven badly repaired wrecks that had passed the government-mandated rebuild inspection in British Columbia. These are vehicles that do not meet the applicable industry standard for structural repairs on a vehicle, and present a safety concern. Defects noted by the inspector on

Vancouver vehicles included non-factory welds, welds concealed by undercoating, re-stretched hi-strength steel, bent or hammered structural members, and lit air bag warning lights. This is a collateral finding that suggests one cannot rely on a history report alone when shopping for a vehicle branded as “Rebuilt” if the provincial safety inspection program is compromised.

APA field investigations in the Vancouver market reveal that dealers claim rebuilt vehicles sustained minor damage (a misrepresentation) or that the “Rebuilt” designation is evidence of a rigorous repair and inspection process by the government insurer (also a misrepresentation). To a lesser extent, the APA has observed the same phenomena in the Toronto market. Poor oversight in both provinces results in badly rebuilt vehicles being put back on the road under the authority of their respective provincial transportation ministries.

Vehicle from another jurisdiction

An on-site inspection cannot determine systematically if a vehicle was previously registered in another jurisdiction. The inspector identified 17 vehicles from out of province, when he was able to make an observation.

The history search services reported an out-of-jurisdiction registration more consistently and generally were in agreement. CARFAX reported 33 vehicles registered in more than one jurisdiction. Among those, 25 were from another province and eight were from the U.S. CarProof identified 31 vehicles that were registered previously in a jurisdiction other than the location of the vehicle. Among these, 21 were from another province and 10 from the United States.

The MTO UVIP history search can be hard to interpret. It identified five vehicles for sale in Ontario originally from another jurisdiction, which is less than CARFAX (13) and CarProof (10). The on-site inspector identified just four Ontario vehicles from another jurisdiction.

Former Daily Rentals

The APA expert recorded this information anecdotally when he was able to make an observation. His on-site inspection identified four former daily rentals. CarProof identified six vehicles as former daily rentals and CARFAX just 2. In British Columbia, CARFAX reported zero former daily rentals, compared to four (CarProof) and two (APA-inspection). The result raises questions about whether CARFAX collects this data for B.C. vehicles.

Inaccurate odometer reading, possible mileage issue

The on-site inspection identified 7 vehicles with potential mileage issues in Quebec and none in the other provinces (this is not inconsistent with Quebec's reputation for odometer rollback activity). Overall, CarProof identified four vehicles with a possible mileage issue, CARFAX three. These are vehicles whose observable wear during the inspection was not consistent with the indicated mileage on the odometer.

Two Ontario vehicles generated reports with mileage issues. CARFAX and the UVIP noted that the odometer reading on Vehicle no. 8, a 2005 Honda Civic, dropped by about 20,000 km over a two week period in 2013. CARFAX indicated this was due to a possible "clerical error", which is likely. Vehicle no. 40, a Pontiac G5, showed just 13,990 km at its five-year DriveClean inspection in the CarProof report (also likely an input error).

Ownership History

The MTO UVIP is by far the best source for information on previous owners. It is the only source that lists the names of both Commercial and Personal owners, including their municipality. All 47 of the acquired MOT reports listed this detailed information.

CARFAX presents ownership data inconsistently. Reports sometimes list the number of owners and the type of owner (Commercial or Personal) and the duration of ownership. In many cases, the data are absent.

CarProof has no specific section for the number or type of owners. Multiple ownership can sometimes be inferred from the report. “New registration issued” is the indication of registration activity, but it can be difficult to determine if this is a renewal by the current owner or a new owner. CarProof does not make this limitation clear to a non-expert on its website.

Timing

At the outset, the APA suspected that reporting of more recent events would be superior to older events, because of improvements in record gathering over time by the VHR services. The findings don't appear to support this: CARFAX remained inaccurate for both the newer and older vehicles. After APA reported weaknesses with CarProof's reporting in Quebec in 2012, CarProof stated they were improving their data collection in Quebec, but this appears to be a work in progress. CarProof appears to be consistently very accurate in BC both for older and recent events.

Recommendations for consumers

VHRs have made a very important contribution to market transparency and efficiency in used vehicle transactions between private and commercial buyers and sellers. However, more work needs to be done to improve the accuracy of the VHRs and to inform the public of their limitations. The term “CarProof Verified” as currently used by authorized CarProof retailers is misleading.

To APA’s knowledge, this project is the first to provide a clear indication of the variable performance of VHR services depending on the province where the vehicle is registered. CarProof was much more accurate in British Columbia than in Ontario and Quebec; APA believes this may be due to their partnership with ICBC, the single-payer government-created insurer.

CARFAX is a hit-or-miss proposition: A consumer relying on the findings in CARFAX reports for the vehicles inspected by the APA would likely overlook significant collision damage and other material issues in the provinces of British Columbia and Quebec. CARFAX data was somewhat more reliable for vehicles offered for sale in Ontario. CARFAX misrepresents the poverty of its reporting. CARFAX offers multiple requests (5 for \$50) and still offers a comparatively low-priced search option (unlimited requests for \$55) that could allow a consumer to do a “fast pass” for several vehicles before narrowing their choice.

Some published sources advise consumers that an inspection should always supplement the report(s). However this is making the assumption that a qualified inspection for collision damage and hidden structural repairs is available in the marketplace. During its own fieldwork in Vancouver and Toronto, APA mystery shoppers found it was very difficult for someone posing as a consumer to find anyone local who is both a) qualified and b) prepared to perform an inspection for prior collision damage. A general mechanical or a safety standards inspection mandated by the transportation regulators in Ontario, B.C., and likely most other provinces with similar programs, is too superficial to pick up the type of damage noticed by the specialized expert retained for this project.

The CarProof report in its current form, with incomplete collision information in

Quebec, and more complete information in British Columbia and Ontario, provides substantially better information on previous collision repairs, and vehicles from out of province than the information a consumer will obtain after a typical pre-purchase used vehicle inspection at an auto repair facility.

Appendix

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