

Insurance Quarterly Report QUARTER 4 | 2017

Insurance Auto Auctions, Inc. (IAA) helps insurance carriers dispose of total loss vehicles via a dual live and live-online auction format. Insurance vehicles sold through IAA's auctions display a range of loss types, including collision, storm or flood damage, theft recovery and more. These vehicles are purchased by public and professional buyers for a variety of purposes, including dismantling/recycling, resale, exporting and personal use.

The Insurance Quarterly Report provides an analysis of auction results for vehicles in this category, as well as an overview of economic and industry factors that influence auction returns. These include:

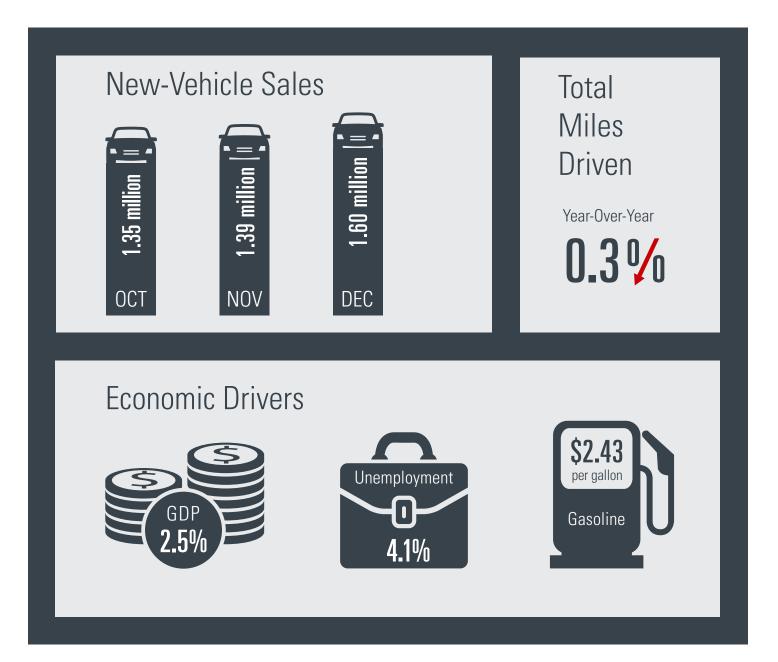
- Whole Crushed Auto-Body Prices
- Used-Car Price Index
- Vehicle Parts and Equipment Consumer Price Index
- Metals Prices
- New-Vehicle Sales and Total Miles Driven
- Fuel Prices
- Canadian Insurance Vehicles



Overview of the Automobile Industry

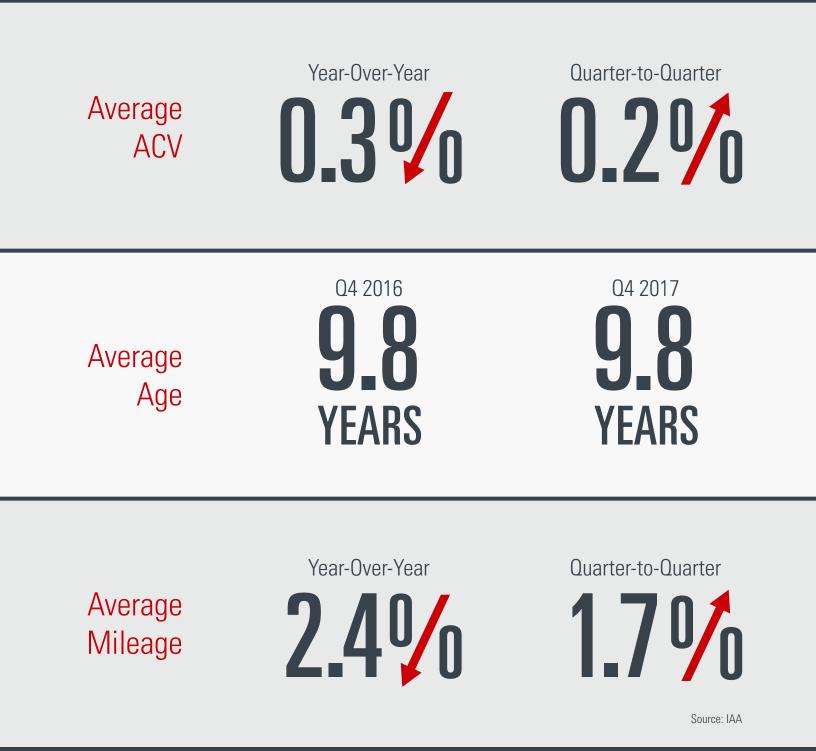
Total new-vehicle sales in Q4 2017 dropped year-over-year, but still increased 3.9% quarter-to-quarter. Consumer purchases dipped 1.5% compared to last year—unsurprising, given that Q4 of 2016 had the highest seasonally adjusted new-vehicle sales figures in more than 15 years.¹ Buyer incentives are still on the rise, with the December average reaching a monthly record of \$4,302 per vehicle to round out 2017. Incentives are certainly pushing average vehicle prices higher, but consumers preferring larger vehicles also played a significant role in rising values.²

Average gasoline and diesel prices rose to the tune of 3.0% and 9.3% quarter-to-quarter, respectively. Rising fuel prices have largely been the result of reductions in crude oil output from OPEC member countries and strong global economic growth. Key economic drivers like unemployment, down to 4.1% in December, and high consumer sentiment, likely also offset any downward pressure put on vehicle prices from increasing fuel costs.



Insurance Carrier Vehicles

Average vehicle age decreased slightly by 0.1%, or 0.02 years. Meanwhile, average mileage jumped 1.7% from last quarter, but fell 2.4% year-over-year. Average actual cash value (ACV), a representation of a vehicle's estimated value in an undamaged state, increased 0.2% quarter-to-quarter, and fell just 0.3% compared to last year. Average ACV is tracked to serve as a benchmark for the general quality of insurance vehicles that make their way to auction.



Whole Crushed Auto-Body Prices

In October, the index started off with a drop of 5.0%, but improved over the next two months at 0.9% and 3.2%, respectively. Overall, whole crushed auto-body prices rose 18.1% relative to Q4 of 2016, but still took a hit of 3.4% on a quarter-to-quarter basis. Iron ore, a key raw material used to produce steel, saw prices drop at the end of Q3, subsequently putting downward pressure on whole crushed auto-body prices.³ However, it's notable that China's continued efforts to cut domestic pollution likely drove metal prices higher. To comply with new regulations, steel manufacturers have transitioned to using higher iron ore content in production, pushing iron ore, steel and crushed-car prices higher.⁴

Year-Over-Year Quarter-to-Quarter 18.10/0 3.40/0

Dollars/Gross Ton

\$300

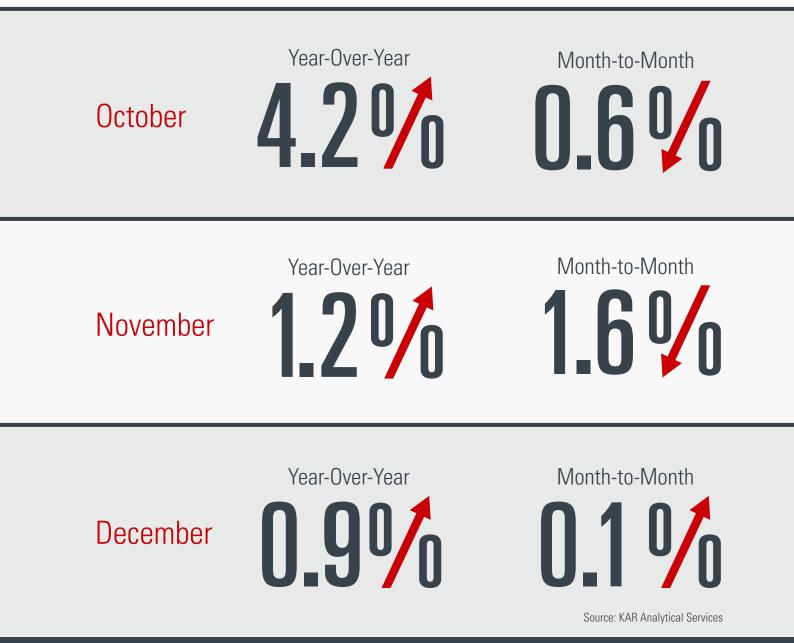
\$250



Used-Car Price Index

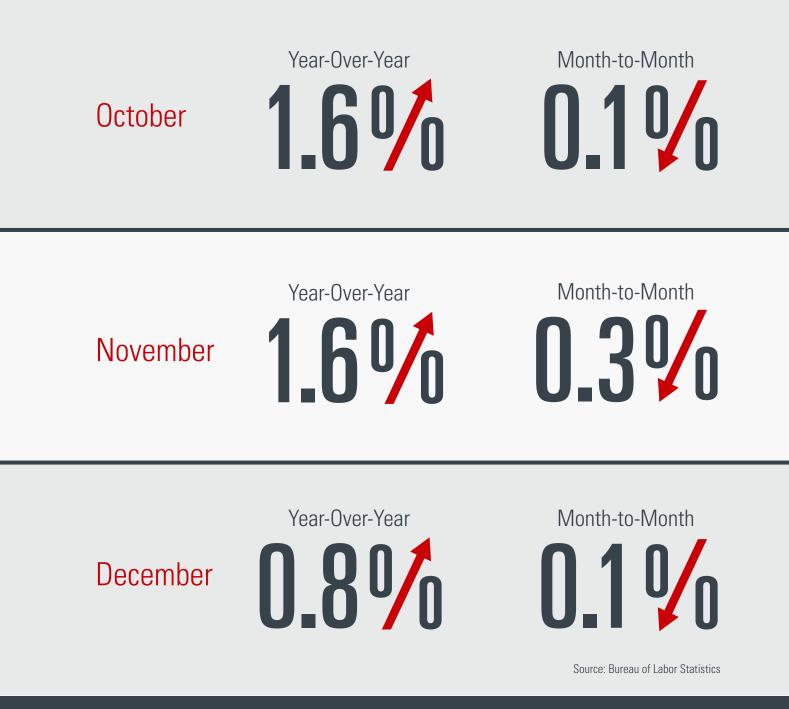
Average used-car prices were strong on a yearly basis through October, rising 4.2%, due to enduring demand from Hurricanes Harvey and Irma. Prices were up year-over-year for all vehicle segments except full-sized cars, with all seller types seeing price increases on a yearly basis as well.⁵

In November, prices retreated from October values as demand-related hurricane effects subsided. Full-sized sport utility (SUV) and crossover utility (CUV) vehicles were the only segments making monthly price gains. On a yearly basis, while controlling for sale type, model year, age and mileage, midsize-SUVs and CUVs saw prices jump 2.4%. Manufacturer consignment vehicles were the only vehicles to see month-to-month price increases, although fleet lease and dealer types did see modest price growth on a yearly basis.⁶ Car and truck price growth continued to diverge in December, with car prices softening on both a monthly and yearly basis while the truck segment posted price gains. While controlling for the vehicle characteristics noted above, mid-sized SUVs and CUVs seemed to have fully reverted back to pre-Hurricanes Harvey and Irma trends, posting very modest growth relative to December 2016. All seller types saw yearly price growth, but fleet lease and dealer consignors saw a 1.9% and 0.1% month-over-month price decline, respectively.⁷



Vehicle Parts and Equipment Consumer Price Index

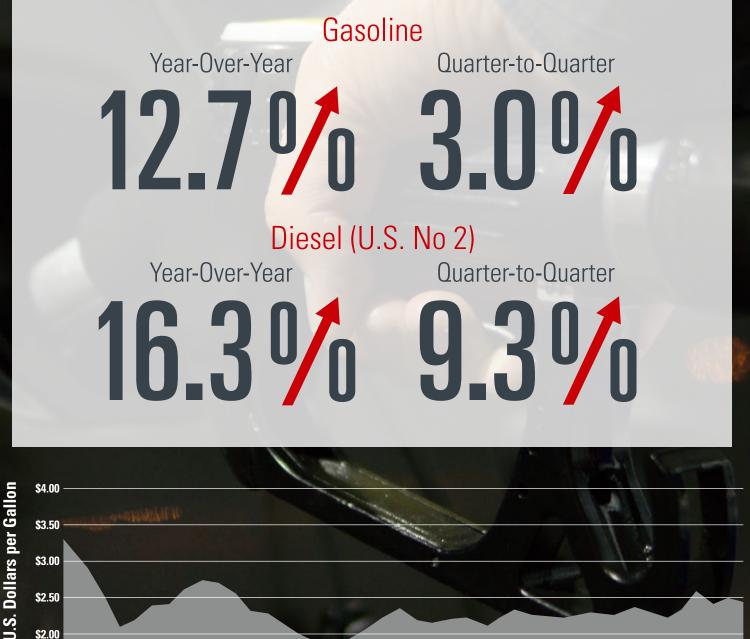
Prices fell modestly for each month of Q4 to finish down 3.2% from a strong performance the previous quarter. Trade talks among the U.S., Canada and Mexico about the future of the North American Free Trade Agreement (NAFTA) left some vehicle part suppliers uncertain about the future. In November, the White House proposed "introducing a stipulation that 50% of parts or vehicles be U.S.-made, and increasing the minimum amount of regional content needed to 85% from 62.5%." While no agreement has been made, unstable treaty requirements likely put some downward pressure on parts and equipment prices for the quarter.⁸ However, the index still grew a respectable 1.3% year-over-year.



Fuel

\$2.00

Gasoline prices reverted back to its pre-hurricane levels in October, dropping 5.5%, but the guarter finished up 3.0%. Supply and demand fundamentals played a large part in oil price increases over the quarter, with global economic growth providing demand-side pressure and the OPEC pledge to cut production reducing supply.⁹ In the U.S., a decrease in oil output and robust miles-driven figures also contributed to rising gasoline prices.¹⁰ Additionally, geopolitical risk placed uncertainty on production levels in the Middle East, yet another contributor to the quarter's heightened prices, ultimately ending the quarter with an increase of 12.7% year-over-year.¹¹





Metals

Aluminum

Aluminum had its ninth straight quarter of growth, with quarterly gains coming in at 4.6% and yearly gains jumping to 22.9%. A significant component of aluminum's price highs come from a 56.0% jump in alumina prices since August. Alumina is a raw material that makes up 40.0% of aluminum's production costs, and these increased costs were passed on to consumers in the form of higher prices. Increases in the costs of other aluminum raw materials like caustic soda, carbon anodes and pet coke also likely pushed up aluminum values.¹² In China, supply-side shifts also helped aluminum prices climb.¹³ Additionally, a U.S.-proposed duty tax on Chinese aluminum imports could increase prices for both manufacturers and consumers, and investor expectations for this scenario have been reflected in these Q4 figures.¹⁴



Quarter-to-Quarter

Source: World Bank

Platinum

After an initial month-to-month drop in platinum prices in October, platinum recovered in November and December, but not enough to offset a 3.3% guarter-to-guarter decrease in value. Year-over-year, platinum prices were down 2.5%. Consumers maintained their preference for gasoline-powered vehicles, which put downward pressure on platinum prices. Because the metal is rarely used in the production of these vehicles, the lower demand pushed platinum prices to a 22-month low.15

Year-Over-Year **2_b**Vn Quarter-to-Quarter

Source: Johnson Matthey

Palladium

Palladium prices continued to climb this quarter, with monthly sequential gains leading to a 10.1% and 45.3% increase on a quarterly and yearly basis, respectively. For the first time in 16 years, palladium crossed the \$1,000 per troy ounce mark and finished the year as 2017's best-performing commodity. Palladium's gain is largely due to increased automobile demand-specifically for gas-powered vehicles, which isolate the use of palladium in their catalytic converters. Efforts to reduce vehicle emissions and a shift in demand toward larger sport utility vehicles also helped increase prices. Another possible reason for palladium's impressive run is momentum lending by institutional investors.¹⁶ This occurs when a commodity is outperforming its peers and generates even more demand, pushing the commodity's value higher.

Year-Over-Year **45.3%** 10.1%

Quarter-to-Quarter

Source: Johnson Matthey

U.S. Dollar

100

95

90

Source:

IAN

2015

leserve

Bank of St. L

S. Dollar Index

After a nine-month depreciation trend, the U.S. dollar managed to reverse the trend and was steady through Q4, increasing 0.6% versus the previous quarter. Year-over-year, the U.S. dollar's rally wasn't enough to offset a 5.1% depreciation. Expectations of an interest rate hike occurring near the end of the year would typically lead to an increase in the value of the U.S. dollar, but similar monetary tightening in the EU and other countries was a likely leading factor in the U.S. dollar's first year-over-year depreciation since 2012.¹⁷ Additionally, emerging markets offer enticing returns on the back of global economic growth, attracting investors seeking higher yields on their currency investments—putting downward pressure on the U.S. dollar as a result.¹⁸

Year-Over-Year **5.10**

Quarter-to-Quarter

0.6%

OCT

2017

.000

2017

2017

Furo

The euro seems to have plateaued off of its previous two guarters of appreciation against the U.S. dollar, finishing just 0.2% off of its Q3 average. Compared year-over-year, the euro appreciated 8.6%. In late October, the European Central Bank announced it would shrink its monthly bond purchases moving forward, and the euro's value dropped 1.0% on the day as a result. This announcement contributed to the euro's overall monthly depreciation as well.¹⁹ The European Central Bank also announced it would continue its asset purchase program (APP) schedule through September 2018. In a letter from the bank's president, Mario Draghi acknowledged the strong euro, but emphasized that "purchases under the APP... have not led to statistically significant euro exchange rate movements."20



Source: OANDA Corp.

Canadian Dollar

In the third guarter, the Canadian central bank announced two interest rate hikes that prompted a sharp quarter-to-quarter appreciation of the Canadian dollar. This spike eventually leveled off in Q4, depreciating 1.3% compared to Q3, but the loonie's value remained strong against 2016, with an appreciation of 4.9%. Canadian inflation and employment likely affected the Canadian dollar positively, but Greg Anderson, BMO's global head of foreign exchange strategy, believes the loonie's overall performance is more likely due to weaknesses in the U.S. dollar rather than Canadian-side factors.²¹ For example, the Bank of Canada announced plans to keep its interest rate at 1.0%, while the U.S. Federal Reserve announced plans to increase its benchmark interest rate at the same time, widening the Canada-U.S. interest rate spread and putting upward pressure on the Canadian dollar as a result.²² Additionally, higher oil prices and market expectations of tighter monetary policy at home were cited as factors in the loonie's year-over-year appreciation.23

Mexican Peso

After two quarters of consecutive currency appreciation, the Mexican peso reversed tracks and ended Q4 down 6.5%. This was mainly due to a 5.5% month-to-month decrease from September to October. Year-over-year, the peso kept its growth trend by increasing 4.8%. Concerns over whether the U.S. would back out of the North American Free Trade Agreement (NAFTA) and rising uncertainty about Mexico's presidential election in 2018 also weighed heavily on the peso.²⁴ Things started to look up later in the guarter, with the Mexican central bank's decision to raise interest rates, stabilizing the peso's value for the rest of the year.²⁵

Japanese Yen

The Japanese yen depreciated 1.8% quarter-to-quarter and 3.0% year-over-year. Shinzo Abe was re-elected as prime minister in Japan's parliamentary elections, which signaled to markets that Japan would likely stick to its recent loose monetary policy trends. Since the U.S. continues to tighten monetary policy, expectations of a widening interest rate gap between Japan and the U.S. has put depreciative pressure on the yen. Donald Trump also indicated he would like to reduce the trade deficit with Japan. Typically, the yen would have to raise in value against the U.S. dollar for that to happen. A Bank of Tokyo-Mitsubishi UFJ official noted that since Trump had made similar remarks before, the statement did not impact the exchange rate.26

Year-Over-Year

Year-Over-Year

Quarter-to-Quarter Source: OANDA Corp.

Quarter-to-Quarter Source: OANDA Corp.

Year-Over-Year ᡗ᠋ᡣ Quarter-to-Quarter

Source: OANDA Corp.

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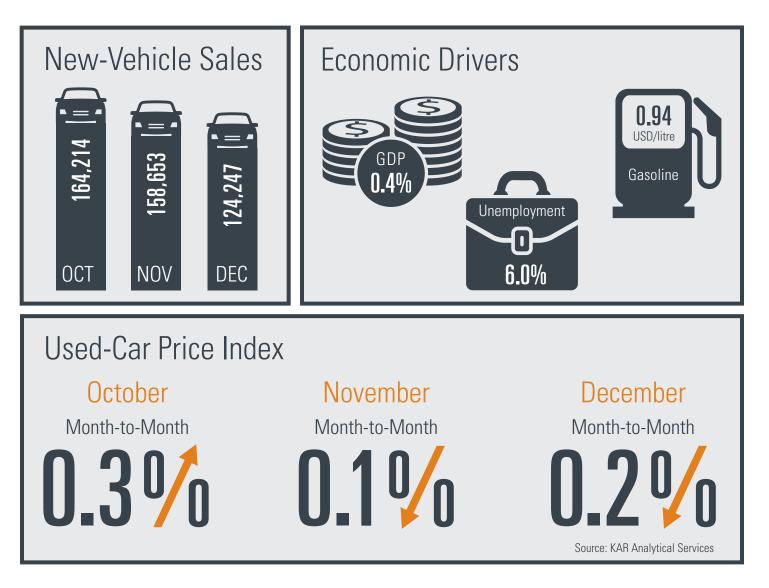


CANADA

QUARTER 4 | 2017

Overview of the Canadian Automobile Industry

Canadian new-vehicle sales dropped quarter-to-quarter, staying consistent with cyclical trends, but jumped 1.5% year-over-year. This marks the fourth sequential year-over-year quarterly gain in a row. Looking closer, Q4's performance was mainly buoyed by strong sales in October—gaining 6.3% yearly²⁷—which offset later declines in November and December.²⁸ Despite a slowed pace at the end of the year, 2017 was Canada's first year with more than two million new-vehicle units sold.²⁹ Another likely influencer on the used-vehicle front, the ADESA Canada Used Vehicle Price Index showed that prices fell slightly on a monthly basis throughout the quarter, but increased 0.5% quarter-to-quarter.³⁰ Gas prices jumped 5.3% from Q3, but any downward pressure the cost of fuel had on new-vehicle sales was offset by Canada's declining unemployment rate.^{31,32}



Insurance Carrier Vehicles

Canadian insurance carrier vehicles had a steady Q4. Average vehicle age remained at 9.5 years from last year. Average mileage also remained flat from Q3, and only slipped 0.7% year-over-year. Canadian insurance carrier vehicle average ACV, a representation of a vehicle's estimated value in an undamaged state, saw a modest 0.8% gain quarter-to-quarter and an impressive 6.1% compared to Q3 of 2016. We use these numbers as a benchmark for the general quality of insurance vehicles that make their way to auction.

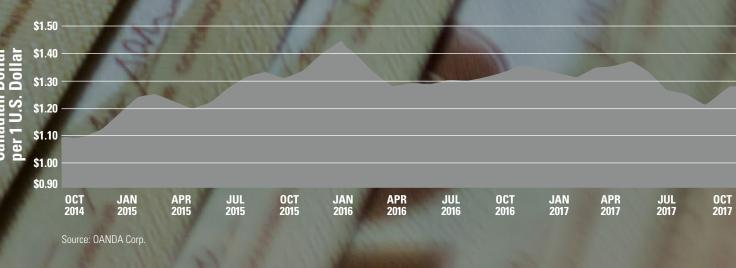


Canadian Dollar Effective Exchange Rate Index

Tracked by the Bank of Canada, the Canadian Dollar Effective Exchange Rate Index dropped 1.2% quarter-to-quarter but still gained a respectable 3.9% compared to Q3 of 2016. Despite the quarterly decline, it's important to note that two Canadian benchmark rate hikes occurred last quarter that significantly boosted Q3 2017 results. In December, the U.S. Federal Reserve bumped interest rates 25 basis points, which would usually put downward pressure on the Canadian dollar. However, statements from the Bank of Canada's governor Stephen Poloz saying that he was "increasingly confident" about future tightening of monetary policy³³ was enough to offset any downward pressure and leveled off the loonie's value month-to-month.

> Year-Over-Year 3.90_{0}

Quarter-to-Quarter 1.70



Canadian Used-Vehicle Price Index

The Canadian Used-Vehicle Price Index saw a small month-to-month boost in October, but shrank in the last two months of the quarter, just barely squeaking out a 0.5% increase quarter-to-quarter. Light truck sales still make up the majority of consumer purchases.³⁴ Labor force participation was steady, with the unemployment rate falling 0.2 percentage points compared to Q3 2017. Preferences toward expensive vehicles, tighter labor market conditions and higher average wages all applied upward pressure to used-vehicle prices.³⁵



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About Insurance Auto Auctions, Inc.

Founded in 1982, Insurance Auto Auctions (IAA), the leading live and live-online salvage vehicle auction company, is headquartered in Westchester, IL and employs over 2,800 employees in more than 170 auction facilities throughout the U.S. and Canada. IAA is a business unit of KAR Auction Services (NYSE: KAR), a FORTUNE 1000 company with approximately 17,500 employees and more than 300 operating locations. IAA is part of an end-to-end remarketing solution providing global buyers opportunities to bid on and purchase total loss, donated, higher mileage, damaged and clean-title vehicles utilizing cutting-edge technology. IAA's multiplatform model enables insurance companies, fleet and rental companies, banks, finance companies, car dealerships and the general public to simultaneously participate in multiple auctions online and in person. Additional services include registration, financing, towing and title services. Go to <u>IAA-Auctions.com</u> to learn more, and follow IAA on <u>Facebook</u> and <u>Twitter</u>.

About the Author

Meggan O'Malley is the Director of Business Analytics at Insurance Auto Auctions, Inc. (IAA). Mrs. O'Malley leads the organization's efforts in monitoring and reporting on customer performance and analyzing industry trends. Mrs. O'Malley joined IAA in 2007 and held several positions before assuming her current responsibilities. Prior to joining IAA she served as a financial analyst at Grant Thornton, one of the world's leading organizations of independent audit, tax and advisory firms. Mrs. O'Malley holds bachelor's degrees in finance and marketing from Marquette University, and an MBA with a concentration in management from Argosy University.



The auto salvage industry as discussed in this document refers to the industry as experienced by IAA. IAA does not possess data on the performance of other salvage companies; therefore, the analyses are based on how different economic factors affect the performance of vehicles sold through IAA's auctions.

The statements contained in this report and statements the company may make orally in connection with this report that are not historical facts are forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from the results projected, expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include those matters disclosed in KAR Auction Services, Inc.'s Securities and Exchange Commission filings. KAR and IAA do not undertake any obligation to update any forward-looking statements.

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