

Auto Physical Damage Edition



Volume Sixteen Number Three Q3 2016 Published by Mitchell International

Industry Trends Report

FEATURED IN THIS ISSUE

2016 Update of the Mitchell Collision Parts Price Index

By Greg Horn

Editor-in-Chief, Vice President of Industry Relations, Mitchell





Industry Trends Report

Table of Contents

- 4 70 Years of Supporting Our Clients
and Their Important Work
An Interview with Alex Sun on Technology Trends
- 12 Quarterly Feature
2016 Update of the Mitchell Collision Parts Price Index
- 16 Average Length of Rental for Repairable Vehicles
- 20 Current Events in the Collision Industry
- 30 Motor Vehicle Markets
- 32 Mitchell Collision Repair Industry Data
- 39 Total Loss Data
- 40 Canadian Collision Summary
- 44 About Mitchell
- 45 Mitchell in the News


A Message from the CEO

What's Trending in Technology?

Welcome to the Q3 edition of the 2016 Mitchell Auto Physical Damage *Industry Trends Report*. As you know, we are celebrating our 70th anniversary this year. In the last issue I shared some of my thoughts around how the company has evolved throughout the years and where we're headed next. This quarter, I'm excited to share some of the current and emerging industry trends I'm following. There are so many interesting things happening in technology today, and it's fascinating to see the impact and opportunities they will bring to the collision repair industry down the road.

In our feature article, *2016 Update of the Mitchell Collision Parts Price Index*, author Greg Horn shares insights from an index created nearly a decade ago to track inflationary trends of the most replaced collision parts. For this issue, Greg added a new dimension to the index to account for changes to the General Motors parts pricing program and Toyota's expanded parts price matching program. As manufacturers continue to get more involved, Greg will provide insights into and analysis of how this influences changes in the index.

As I finish up the second half of my interview for this issue, I'd like to take a moment to remind you of how important you are to Mitchell. We certainly wouldn't be here today without you, and I'm excited for what we can achieve together in the years ahead. Enjoy the rest of your summer, and thank you for your continued readership of the *Industry Trends Report*.



Alex Sun
President and CEO
Mitchell



Alex Sun
President and CEO, Mitchell

Industry Trends Live

[Sign up](#) to hear a live presentation of the trends presented in this report from Editor-in-Chief, Greg Horn.

Don't miss the chance to get the inside scoop!



70 Years of Supporting Our Clients and Their Important Work

Mitchell was founded in Glenn Mitchell's garage 70 years ago. The world has changed a lot since 1946, and Mitchell has evolved right along with it. While remaining true to our roots in collision repair, we've expanded our reach into auto physical damage, auto casualty, workers' compensation, out-of-network solutions, and now pharmacy. Another way we've

evolved is through the adoption of technology. We've come a long way since our manuals were printed on paper—and the current explosion of both available and emergent technologies promises further change and opportunity.

As we look toward the future, we anticipate ongoing evolution, but here's what will remain the same: we'll continue to focus on *technology*, *expertise* and *connecting* to bring additional value to our clients. We'll also continue to support the important work they do by focusing on empowering better outcomes.

***Another way we've evolved
is through the adoption of
technology.***

As part of our ongoing celebration of our 70th anniversary, we asked President and CEO, Alex Sun, about some of the technology and trends that are not only changing the world we live in, but also having an impact on both insurers and collision repairers.

Read part II of our 70th anniversary interview.



Alex Sun, President and CEO



What technology and trends are you following that you anticipate will have an impact on the P&C industry?

There are a number of big trends that are affecting the entire industry. The first is a general recognition that in order to remain competitive you need to have the right technology infrastructure to do so. Many insurance companies across all lines of coverage are beginning to go through very large scale technology transformations, starting with either their claims systems, their policy administration systems or their billing systems.

Many insurance companies across all lines of coverage are beginning to go through very large scale technology transformations.

The intent is to create a unified, scalable and extensible environment so they can create new experiences and new capabilities for reaching out to their customers and managing them.

A second major trend that is really just starting to emerge, is we're all beginning to recognize there is real, tangible, practical use for things like machine learning or artificial intelligence. We're beginning to

pilot ways to leverage these types of technologies, marrying them with the vast amounts of data we captured in our systems to drive either better decisioning, or using machines to automate tasks that may have historically been done by individuals.

And the third trend I'm seeing is the focus on the digital consumer experience. Insurance, generally, is a very competitive marketplace. One area where many carriers, particularly on the personal lines side, are beginning to focus as a point of differentiation is on creating interesting consumer experiences. This encompasses everything from how they quote, to how they manage their daily interactions, to how they handle a claim. With the ubiquity of mobile smartphones and increased access to broadband, we're beginning to see clients embracing major digital consumer initiatives.

Other things that are impacting the insurance industry, both in favorable ways and in ways that need to be considered as they relate to future business models, are technologies like the Internet of Things—whether that's the connected car, the self-driving car or nanotechnology related to healthcare. These are part of a spectrum of new technologies being deployed that will not only affect how customers expect to be interacted with, in terms of either buying insurance or having their claims handled, but also how companies themselves will operate.





Alex Sun
President and CEO
Mitchell International

Watch the video of Alex Sun discussing what trends he's following closely.

3 Key Trends Impacting the Insurance Industry



Technology Transformation

90%—the amount cost performance can improve over time by scaling across siloed functions and reducing redundant processes.



Machine Learning

95—the number of the world's 100 largest enterprise software companies by revenues that will have integrated cognitive technologies into their products by 2020.



Consumer Engagement

80%—the probability that satisfied customers are more likely to renew their policies than unsatisfied customers.

1. McKinsey.com <http://www.mckinsey.com/business-functions/organization/our-insights/six-building-blocks-for-creating-a-high-performing-digital-enterprise>

2. Deloitte.com <http://www2.deloitte.com/global/en/pages/technology-media-and-telecommunications/articles/tmt-pred16-tech-cognitive-technologies-enterprise-software.html>

3. McKinsey.com <http://www.mckinsey.com/industries/financial-services/our-insights/the-growth-engine-superior-customer-experience-in-insurance>

What trends are top-of-mind for you in auto physical damage?

On the auto physical damage side, there are a number of external pressures affecting collision repair shops that are creating an incredibly complex operating environment. These trends are causing them to seek more sophisticated technology solutions to operate efficiently and meet the demands of OEMs, insurance companies and consumers.

First off, advances in automotive manufacturing—the incorporation of more sophisticated materials, technology and safety features—are making it even more complicated to repair a vehicle today. And it raises the question, for the first time in a decade or so, of whether or not cars are being repaired safely and correctly. So not only is it extremely important for repair shops to have access to the information they need to repair a car and certify that it was repaired correctly, it also increases the burden on them to invest in both training for their staff and new equipment.

The Changing Face of Automotive Materials

Advanced High Strength Steel

90%+

The projected percentage **increase in the use of advanced high strength steel** in light vehicles in North America between 2014 and 2025.¹

Aluminum

26%+

The projected **percentage of body and closure parts** for light vehicles in North America that will be made of aluminum by 2025 (measured by volume rather than weight).²

1. Ducker Worldwide. (2015). *Metallic Material Trends in the North American Light Vehicle*. Accessed online Aug. 3, 2016.

2. Ducker Worldwide. (2014). *2015 North American Light Vehicle Aluminum Content Study*. Accessed online Aug. 3, 2016.

Insurance companies, for their part, are becoming increasingly reliant on collision repair partners in their vehicle repair programs to manage more administrative and customer service-oriented tasks like estimating, coordinating vehicle rentals and ultimately, doing whatever it takes to get an owner back into their vehicle.

Today, we're really focused on the technologies collision repair shops need to employ to allow them to operate more efficiently.

In addition, many insurance companies are focused not just on the safety and quality of a repair, but also on the timeliness of the repair process. This puts significant pressure on the collision repairer to make sure they can perform their work not only cost efficiently, but also on a timely basis, and with regular status updates. As a result, collision repairers

are looking to leverage technology to do things like streamline parts procurement and manage client scheduling.

Lastly, consumers are driving another big trend that is affecting collision repair shops—and really operators of any small business. More consumers are looking for outside information sources to aid them in making decisions on what collision repair shop to work with, and social media is increasingly influencing this decision. I believe now more than ever, collision repairers are going to need to be smart about how they leverage social media and their presence on the web in order to position themselves for success.

Today, we're really focused on the technologies collision repair shops need to adopt to allow them to operate more efficiently, especially with all the increased demands placed on them by OEMs, insurance companies and consumers—as well as the changes in what is required to deliver a safe repair.



Are there any trends specific to auto casualty that you are following?

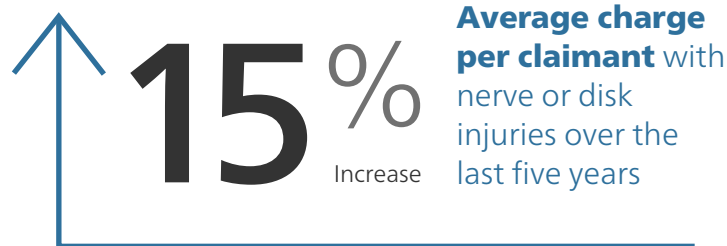
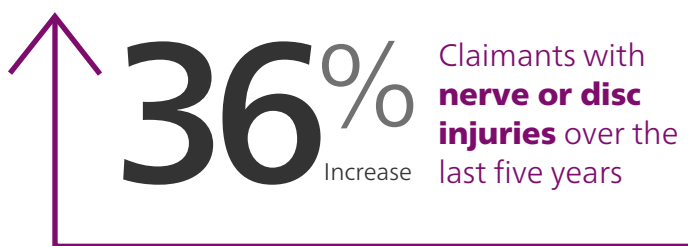
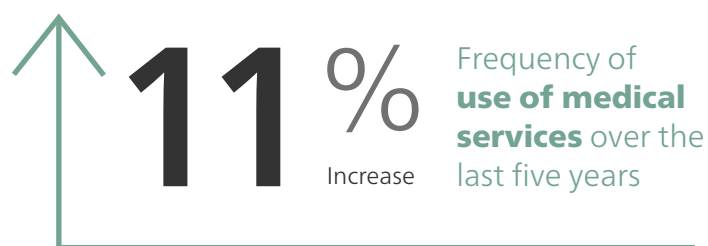
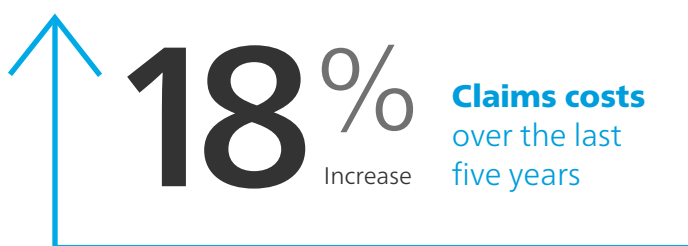
One trend that's having a big impact on auto casualty insurers is that both frequency and severity continue to rise. Cost containment solutions that address these issues are top of mind both for us and for our clients.

On the first party side, we continue to look for ways to adapt elements of a managed care cost containment model to a non-managed care setting in order to drive more efficient, accurate claims outcomes. Whether we're focusing on provider networks, out-of-network discounting capabilities, out-of-network pricing capabilities, nurse review, or even pharmacy, we're really taking a lot of the concepts that have evolved in the managed care world and adapting them for use in the auto casualty model.

On the third party side, there's been about a 12 percent increase in bodily injury claims costs over the last five years. The average use of medical services is up about 18 percent, and many injuries are becoming more expensive to diagnose and treat. As a result, our insurance carrier clients are operating in an environment in which, more than ever, they need to keep third party claims costs in check.

At the same time, the adjuster workforce demographics are starting to change. Many seasoned adjusters are now reaching retirement age, so there is a loss of expertise in an extremely complex space. It's becoming imperative for the insurance industry to adopt technologies that allow them to codify in a system the best practices of their third party adjusters. That's a big focus point for us—it's a problem we're really working to solve.

The Rising Cost of Third Party Claims



What trends are you seeing in workers' compensation?

The workers' compensation market has been dynamic for quite some time, due in part to the recession. It's further complicated by an equally dynamic market on the healthcare delivery side. The consolidation that's taking place with health insurers, health systems and managed care organizations—and, of course, the implementation of the Affordable Care Act—are all contributing factors. Despite a small decline in the volume of claims, we're continuing to see rising medical care costs.

It's become even more important for our workers' compensation clients to focus on enabling technologies that allow them to operate their organizations more effectively and efficiently.

Another trend that is contributing to this dynamic environment is the dramatic rise in opioid abuse. In fact, there were a record number of drug-related deaths in 2014, and 61% of these were caused by opioids. This prompted the CDC to issue new prescribing guidelines earlier this year. Many states and organizations such as the Work Loss Data Institute that publishes the Official Disability Guidelines are also tightening their recommendations to keep patients safe and curb the threat of addiction. Because of these factors, we're seeing an increased focus on pharmacy benefit management as a way to more appropriately manage the distribution of opioids and to keep claimants safe and on the road to recovery.

As a result of these trends, it's become even more important for our workers' compensation clients to focus on enabling technologies that allow them to operate their organizations more effectively and efficiently. Our clients are looking to use technology to more tightly integrate with the other service providers and partners they interact with throughout the claims resolution process. They're also looking for ways to leverage data that is captured in the use of these technologies, in a way that gives them greater insight into cost drivers and helps them deliver better outcomes for their organizations and their claimants.

For more industry insights from Alex and other Mitchell leaders, follow us on [LinkedIn](#) and read our [corporate blog](#).

2016 Update of the Mitchell Collision Parts Price Index

By Greg Horn

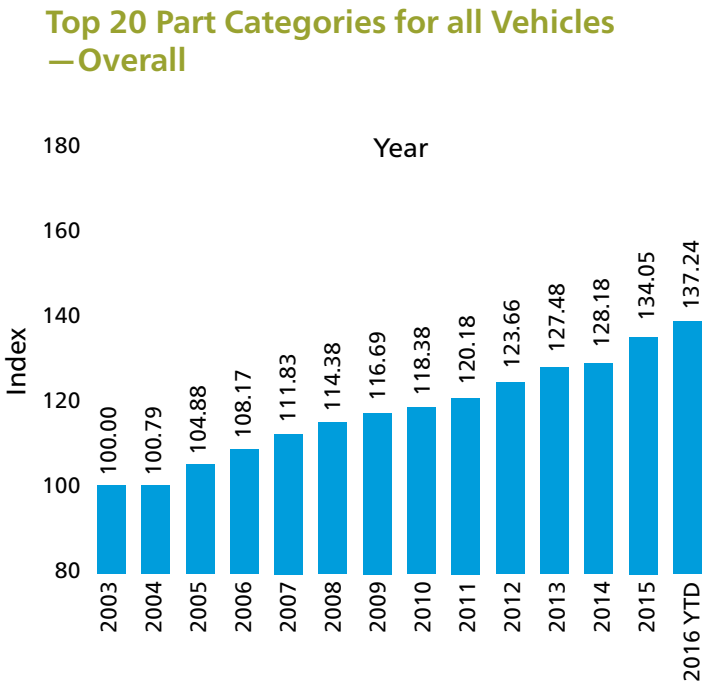
Editor-in-Chief, Vice President of Industry Relations, Mitchell



The Mitchell Collision Parts Price Index was created a little over nine years ago to track the inflationary trends of the most replaced collision parts.

The Mitchell Collision Parts Price Index (MCPPI) was created a little over nine years ago to track the inflationary trends of the most replaced collision parts. The MCPPI contains the top 20 most-replaced parts on collision estimates and is split out by part type and country of vehicle origin. We update the index annually and we have witnessed firsthand the impact of foreign currency changes as well as the effects of increasing parts added to OEM conquest programs.

Late last year, General Motors launched the “My Price Link program”, where GM will be dynamically changing parts pricing. Additionally, Toyota expanded their OEM parts price matching program. Based on those two events, we added a new dimension; the break out of General Motors and Toyota nameplate parts to benchmark the history and measure how the changes to the GM pricing program and the expansion of Toyota’s matching program will affect not only new OEM parts, but the pricing of alternative parts as well. As an additional insight, I added Ford nameplate vehicles, in order to further compare parts performance.



The overall index above shows a 3.19 point increase for the first half of the year. That increase is more than most full-year increases since the inception of the index.

When comparing the vehicle country of origin, we see that the domestic nameplate vehicles have the biggest gain since 2015, while the Asian nameplates have a sub-two-point increase.

About the author...



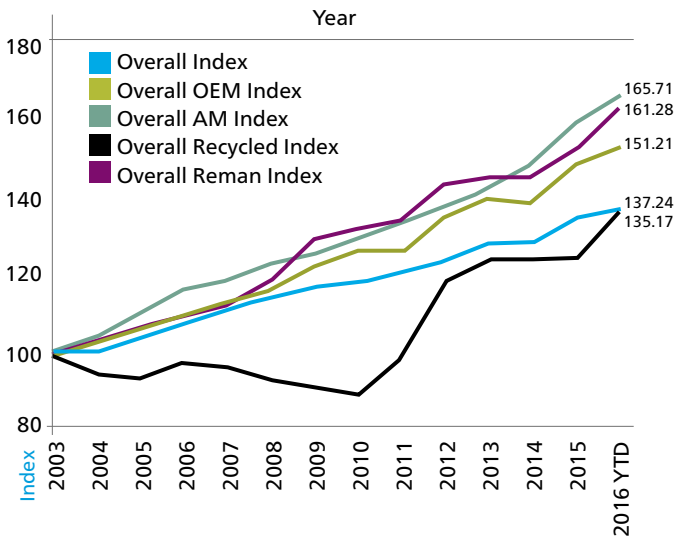
Greg Horn
Vice President, Industry Relations,
Mitchell
Greg Horn joined Mitchell
in September of 2006
as Vice President of
Industry Relations.

In this role, Greg assists the Mitchell sales force in providing custom-tailored business solutions to the Property and Casualty Claims and Automotive Collision Repair industries.

Prior to joining Mitchell, Greg served as Vice President of Material Damage Claims at GMAC Insurance, where he was responsible for all aspects of the physical damage claims process and the implementation of a unique vehicle replacement program, along with serving on the General Motors Safety Committee. Prior to GMAC, Greg served as Director of Material Damage Processes for National Grange Mutual in Keene, NH.

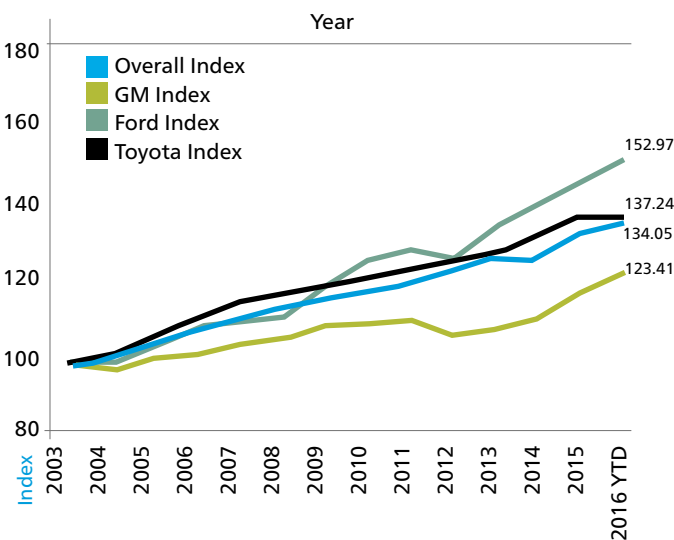
Separating the index by part type; I am surprised to see the Recycled index with a nearly 10-point increase and the fastest rising part type. Also of note is the rapid increase of remanufactured parts, which in today's collision environment consist mainly of remanufactured alloy wheels.

Top 20 Part Categories for all Vehicles
—Part Type



Now when we split out specific nameplates, Ford has the largest point increase, larger than GM by 0.29 points. The Toyota Index, actually decreased over the same time period.

Top 20 Part Categories for all Vehicles
—Nameplate



View the [Casualty Edition](#)

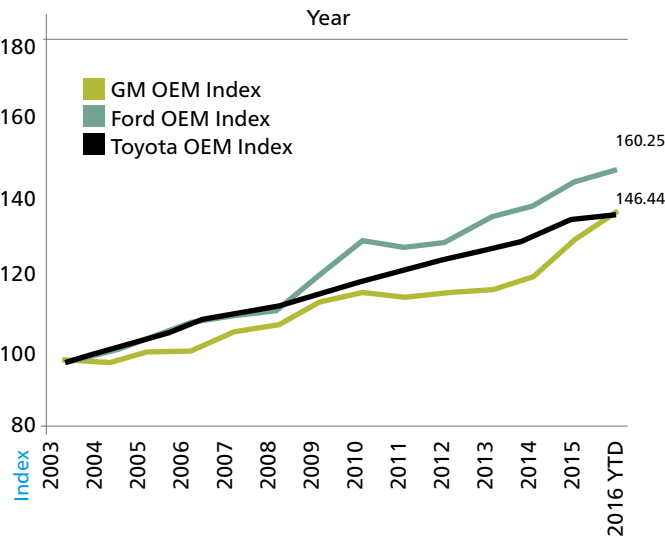


Now, looking at the GM OEM Index in detail, we see a large increase in the OEM Index; but interestingly not as large as the previous year—before MyPriceLink was launched.

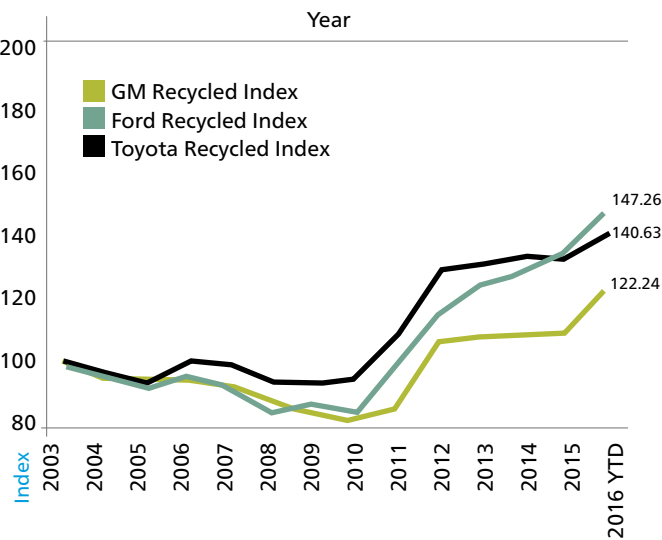
Lastly, because alternate parts prices are impacted when an OEM price is raised, we see that the Recycled Index for GM had the highest point increase of any index.

What can we conclude from this? GM parts cost more than last year, but so do Ford parts, so it's difficult to point to MyPriceLink as the driver behind the parts price index increase. Looking at Toyota, the expansion of the competition-matching program reduced the OEM parts index, but the Recycled Index and the Aftermarket Index for Toyota increased.

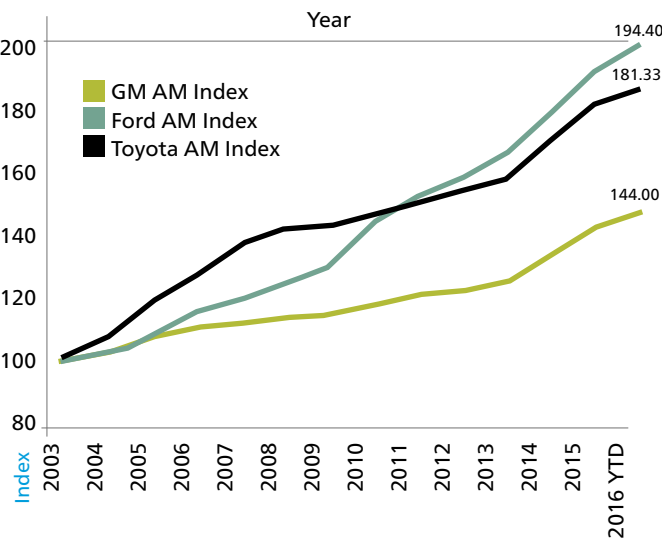
Nameplate OEM Index



Nameplate Recycled Index



Nameplate Aftermarket Index



U.S. Length of Rental Trend Continues for Q2 2016

By Dan Friedman

Assistant Vice President, Collision Industry Relations and Sales, Enterprise Rent-A-Car



In each state and region, there is a significant delta between the top and bottom quartiles which indicates the opportunity for shops to drive results by focusing on the elements they are able to control.

Overall U.S. Length of Rental (LOR) increased .5 days in Q2 2016 from 11 to 11.5, although the change varied greatly by state and region. As with Q1, a number of long term issues continued to be contributing factors, including the increasing complexity of modern vehicles combined with robust sales of new cars and a persistent shortage of collision technicians. While there were not any significant weather events in Q2, much of the repair volume was driven by the earlier weather-related catastrophes in Texas. As a result, the Southwest region increased by 1.3 days, the largest of any region. The Mountain and Northeast regions actually decreased by .1 and .4 days respectively, likely as the result of relatively mild winters.

The West Coast experienced large increases of .7 days in California and 1 day in the Pacific Northwest. Both Oregon and Washington jumped 1.1 days while Idaho remained relatively flat, only moving up .2 days.

The Mountain region's decrease was driven almost completely by Colorado which dropped .5 days. This offset an increase of .8 days in Utah and nominal increases in the other states. In the Northeast, every state experienced a decline led by Massachusetts at 1 day.

U.S. Average Length of Rental (LOR) by State
Q2 2016

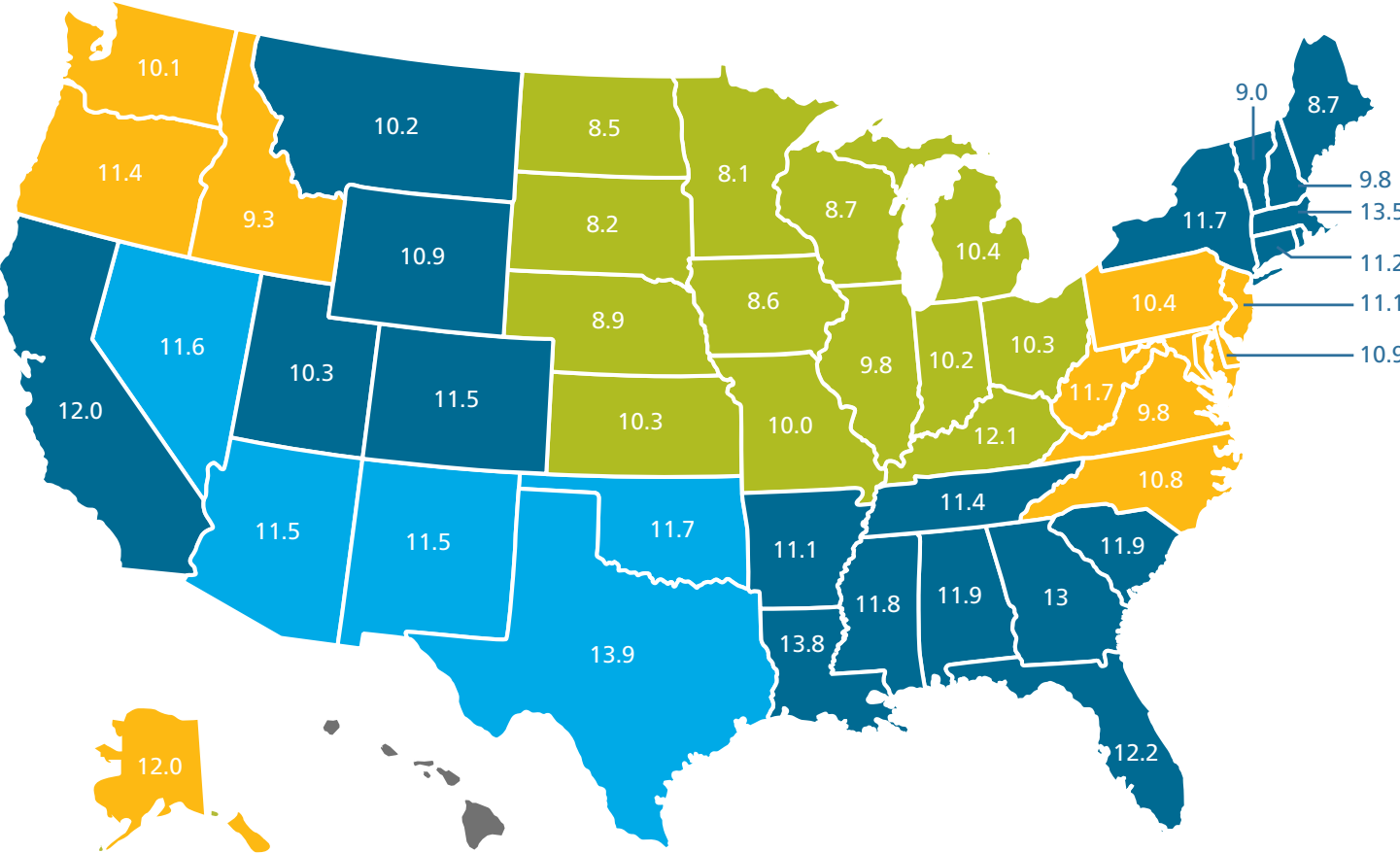


Figure 1

Average Billed Days for U.S.	
11.5	

Region	LOR
California	12.0
Mid-Atlantic	10.6
Midwest	10.0
Mountain	11.1
Northeast	11.9
Northwest	10.4
Pacific	10.5
Southeast	12.0
Southwest	13.3

The Mid-Atlantic and Midwest each moved .2 days higher driven by a combination of modest increases and decreases including -.5 days in both West Virginia and South Dakota, -.3 days in Pennsylvania and -.2 days in Ohio.

Average Length of Rental for Repairable Vehicles

The Mid-Atlantic and Midwest each moved .2 days higher driven by a combination of modest increases and decreases including -.5 days in both West Virginia and South Dakota, -.3 days in Pennsylvania and -.2 days in Ohio.

The Southeast region was up .8 days driven by a 1.2 day jump in Georgia and South Carolina, while a 1.6 day spike in Texas pushed the Southwest up 1.3 days, the largest of any in the U.S.

In each state and region, there is a significant delta between the top and bottom quartiles which indicates the opportunity for shops to drive results by focusing on the elements they are able to control.

The three most impactful pieces, based on data and feedback from best in class operations, are formal training (I-Car Gold shops outperform the market by approximately 1.3 days), utilization of the ARMS

Data Manager (approximately 1 day better) and a robust scheduling strategy.

Canada

Q2 2016 saw Canada's Length of Rental (LOR) decrease 2 percent to 9.8 days from 10 days in Q2 2015.

Provincial results were closely aligned with national metrics, although there were some significantly stronger results in Atlantic Canada.

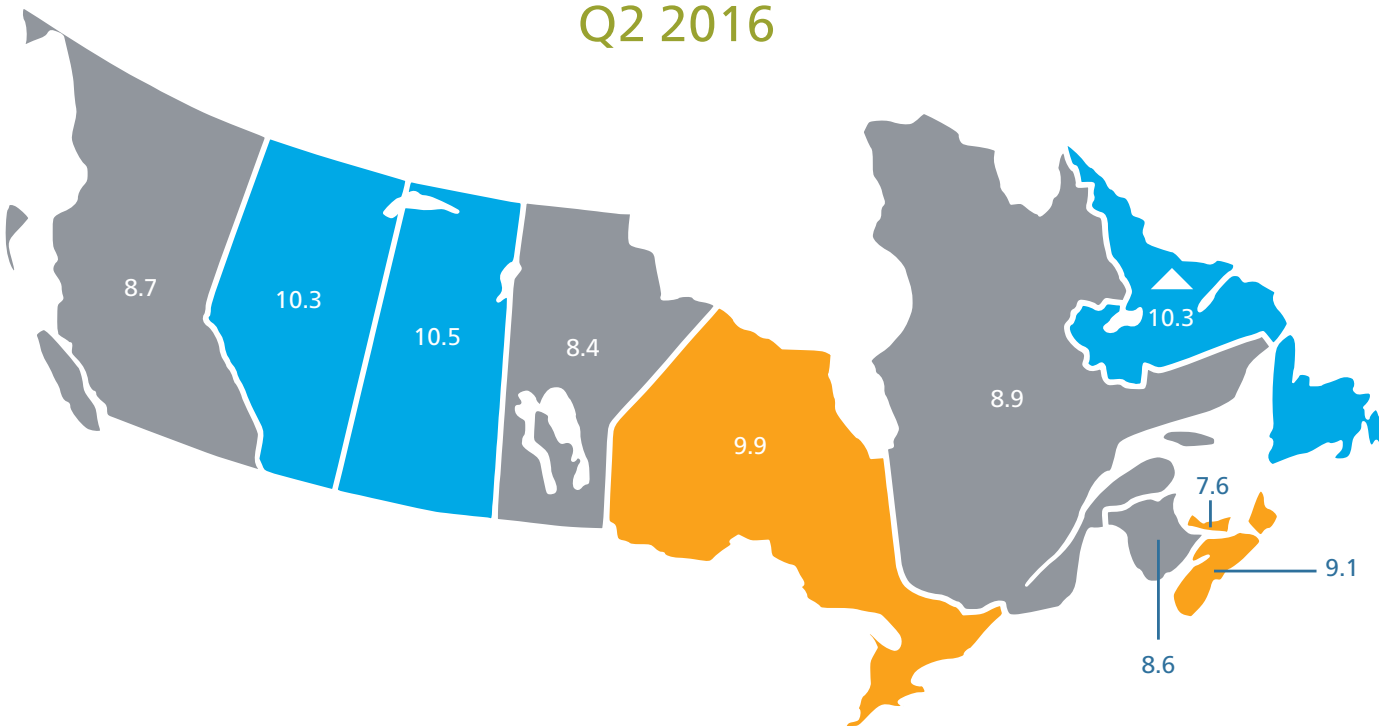
Alberta had a .8 day decrease, moved from being 1.1 days higher than the Canadian average in 2015 to just .5 days higher than Canadian average in 2016.

Ontario saw a nominal increase of .1 days to 9.9 days, and came in just above the national average. Meanwhile, Quebec was static at 8.9 days, or .9 below national average.

Atlantic Canada was home to the biggest reduction, with Nova Scotia and PEI each dropping 1.2 days. PEI led the country with a 7.6 day LOR in Q2. New Brunswick also saw strong returns, with a .6 day reduction to 8.6 days.



Canadian Average Length of Rental by Province Q2 2016



Year-Over-Year Change

Source: Enterprise Rent-A-Car. Includes ARMS® Insurance Company Direct Billed Rentals; Excludes Total Loss Vehicles.

The quarterly LOR summary is produced by Dan Friedman, Assistant Vice President Collision Industry Relations and Sales at Enterprise Rent-A-Car. Dan has 21 years of experience with Enterprise working within the collision repair industry. Through its ARMS® Automotive Suite of Products, Enterprise provides collision repair facilities with free cycle time reporting with market comparisons, free text/email capability to update their customers on vehicle repair status, and online reservations. More information is available at armsautosuite.com or by contacting Dan Friedman at Daniel.Friedman@ehi.com.

Figure 2

Average Billed Days for Canada		
Q2 2015	Q2 2016	Change
10.0	9.8	Down

Average Billed Days for Canada			
Province	Q2 2015 LOR	Q2 2016 LOR	Change
British Columbia	7.7	8.7	UP
Alberta	11.1	10.3	DOWN
Saskatchewan	11.7	10.5	DOWN
Manitoba	7.9	8.4	UP
Ontario	9.8	9.9	DOWN
Quebec	8.9	8.9	SAME
Newfoundland and Labrador	10.3	10.3	SAME
New Brunswick	9.8	8.6	DOWN
Nova Scotia	9.7	9.1	DOWN
Prince Edward Island	8.6	7.6	DOWN

Property/Casualty Insurers Report \$13.3B in Net Income after Taxes in First-Quarter 2016

By Russell Thrall III

Published by: CollisionWeek July 15, 2016

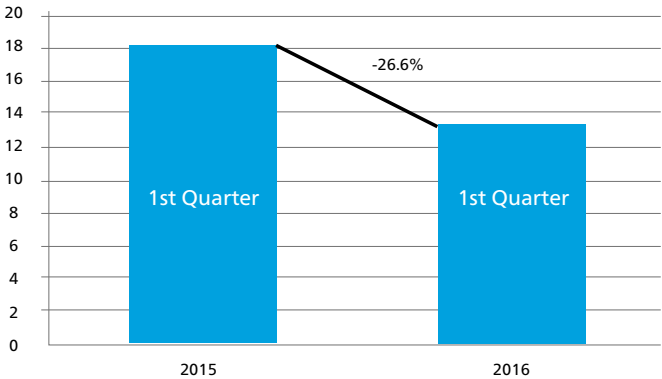


Private U.S. property/casualty insurers saw their net income after taxes fall to \$13.3 billion in first-quarter 2016 from \$18.1 billion in first-quarter 2015, a 26.6 percent decline.

Increases in catastrophe losses, higher combined ratios and declining investment income caused a 26.6 percent decline in net income from 2015.

Private U.S. property/casualty insurers saw their net income after taxes fall to \$13.3 billion in first-quarter 2016 from \$18.1 billion in first-quarter 2015, a 26.6 percent decline, and their annualized quarterly yield on investments drop to 2.9 percent, the lowest this century, from 3.1 percent a year earlier, according to ISO, a Verisk Analytics (NASDAQ:VRSK) business, and the Property Casualty Insurers Association of America (PCI).

Net Income After Taxes (\$ billions)



Private property casualty insurers net income after taxes declined 26 percent to \$13.3 billion

Honda Issues Collision Repair Position Statement Requiring Pre and Post Diagnostic Scans

By Russell Thrall III

Published by: CollisionWeek July 16, 2016



Says all vehicles involved in a collision must have scans during the estimating process and following a collision repairs.

American Honda Motor Co. Inc., has issued a position statement outlining requirements for both pre and post repair diagnostic scans of its vehicles for diagnostic trouble codes (DTC) since many do not illuminate any dashboard indicators.

According to the statement:

It is the position of American Honda that all vehicles involved in a collision must have the following minimum diagnostic scans, inspections, and/or calibrations done to avoid improper repair:*

- *A preliminary diagnostic scan during the repair estimation phase to determine what Diagnostic Trouble Codes DTCs may be present, so proper repairs may be included. See Background On Scan Requirements paragraph for more information.*
- *A post repair diagnostic scan to confirm that no DTCs remain.*
- *Any repair that requires disconnection of electrical components in order to perform the repair will require a post-repair diagnostic scan to confirm if the component is reconnected properly and functioning.*

- *Damage that requires body parts replacement will always require a post-repair diagnostic scan.*
- *Some safety and driver assistive systems will require inspections, calibration, and/or aiming after collision or other body repairs.*

Honda defines a collision in this instance as "... damage that exceeds minor outer panel cosmetic distortion."

According to the statement, collision repairers should not rely on dashboard indicators because many diagnostic trouble codes "do not illuminate any dashboard indicators, but an electronic control system may still operate improperly or be completely inoperative."

American Honda Position Statement

HONDA

Issued: July 2016

SUBJECT: POST-COLLISION DIAGNOSTIC SCAN AND CALIBRATION REQUIREMENTS FOR HONDA AND ACURA VEHICLES

It is the position of American Honda that **all** vehicles involved in a collision* **must** have the following minimum diagnostic scans, inspections, and/or calibrations done to avoid improper repair:

- A preliminary diagnostic scan during the repair estimation phase to determine what Diagnostic Trouble Codes (DTCs) may be present, so proper repairs may be included. See Background On Scan Requirements paragraph for more information.
- A post repair diagnostic scan to confirm that no DTCs remain.
 - Any repair that requires disconnection of electrical components in order to perform the repair will require a post-repair diagnostic scan to confirm if the component is reconnected properly and functioning.
 - Damage that requires body parts replacement will always require a post-repair diagnostic scan.
- Some safety and driver assistive systems will require inspections, calibration, and/or aiming after collision or other body repairs. See page 2 for additional information.

*A collision is defined as damage that exceeds minor outer panel cosmetic distortion.

Background On Scan Requirements

Honda and Acura vehicles include numerous electronic control systems, including those that operate safety and driver assist systems. Most of these systems include onboard self-diagnostics that monitor the state of health and/or rationality of input and output circuits. When monitored circuit values fall outside predetermined thresholds, DTCs may be set in one or more electronic control unit (ECU).

The mechanical forces encountered in a collision can damage electrical circuits and components in ways that are not easily diagnosed with visual inspection methods. Here are some other electronic control system self-diagnostic facts:

- The proliferation of electronic control systems has increased the number of potential DTCs beyond the point where a dashboard indicator can be installed and/or illuminated for every DTC. Dashboard indicators are intended for driver notification, not vehicle diagnostics.
- Therefore, the presence or absence of dashboard indicators/warning lights is **not** an acceptable method to determine if post collision diagnostic scans are necessary.
- Many DTCs **do not** illuminate **any** dashboard indicators, but an electronic control system may still operate improperly or be completely inoperative.
- Because of the complexities of serial data networking, dashboard indicators that do illuminate may appear unrelated to the actual vehicle problem.
- Some self-diagnostics require multiple failures, or other criteria such as a number of drive cycles, to be met before illuminating any indicators.
- Low battery voltage and/or repair procedures may inadvertently set multiple DTCs. Clear the DTCs and determine which ones reset after battery voltage is stabilized.

© 2016 American Honda Motor Co., Inc. • All Rights Reserved

06885

1

Collision Repair Industry Business Conditions: Q1 2016

By Russell Thrall

Published By: CollisionWeek June 29, 2016



The percentage of collision repair facility operators overall who believe business will be better in six months increased to 26.9 percent, up from 15.3 percent in the fourth quarter of 2015 research.

Shops reporting higher sales compared to 2015 increased during the first quarter. Collision repair facilities reporting higher earnings also up.

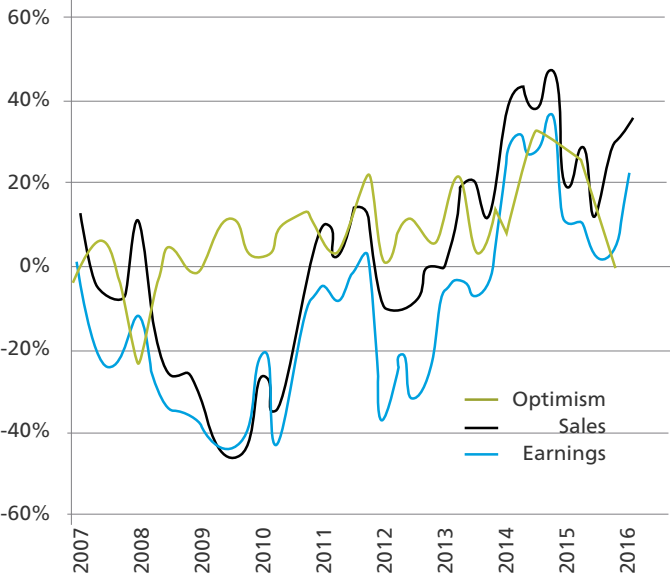
The CollisionWeek quarterly survey of business conditions reported by collision repair facility owners and managers indicates that the overall percentage of facilities with higher sales increased in the first quarter of 2016 over last year compared to last quarter's result. The percentage with higher sales is 11 percentage points above the fourth quarter

result and nearly 20 points above the average since CollisionWeek began the research in 2002.

The percentage of collision repair shops reporting higher earnings in the first quarter versus last year was also up compared to the result in the fourth quarter.

Optimism for the future improved during the quarter, reversing a decline in each of the previous four quarters.

Repairer Optimism vs. Performance
Net Increases



The percentage of collision repair facility operators overall who believe business will be better in six months increased to 26.9 percent, up from 15.3 percent in the fourth quarter of 2015 research. The majority of respondents, at 67.2 percent overall, believe that conditions will be the same six months from now. Just 6 percent of respondents felt business would be worse in six months, down from the fourth quarter result of 11.8

The result is that a net positive 20.9 percent (respondents indicating better minus those believing worse) feel conditions will be better- up from the 3.5 percent in the fourth quarter. The historical average is 12.6 percent and the record high is 38 percent.

Asked if the next three months would be a good time to expand, overall, 32.3 percent of respondents said yes. This is up slightly from the 30.1 percent of respondents who said yes in the last quarterly report. The average response since the start of our research is 18.8 percent.

Facilities with less than \$1 million in annual sales were the least optimistic over expansion with

just 11.1 percent indicating it was a good time to expand. This is down from the 37.5 percent in the last quarterly report.

Collision repair facilities with \$2 million or more in sales increased in optimism over expansion, with 47.1 percent saying yes, up from 33.3 in the fourth quarter.

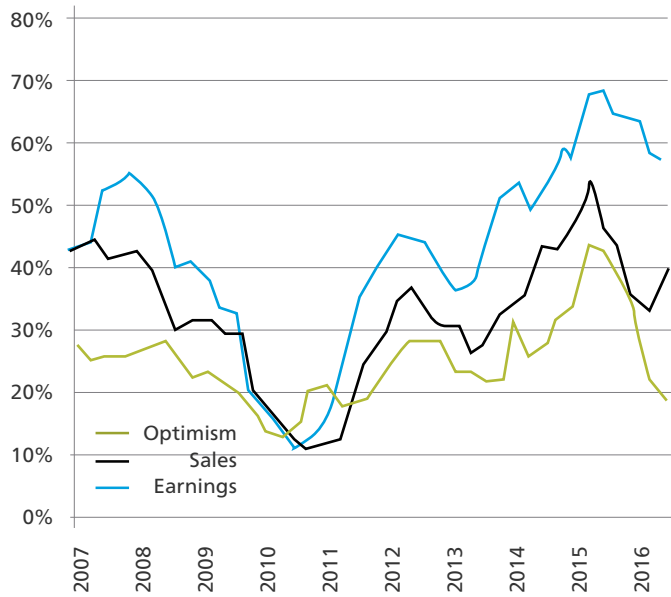
Shops with from \$1 to \$2 million in annual sales indicated it would be a good time to expand across 19 percent of respondents, up slightly from 18.5 percent in the last quarterly report.

Sales

The overall percentage of shops reporting higher sales increased in the first quarter to 52.2 percent, up from 41.2 percent of respondents overall who indicated higher sales in the fourth quarter. The historical average since we began the quarterly survey back in 2002, is 33.7 percent.

The overall percentage of respondents reporting lower sales increased to 17.9 percent, up from 16.5 percent in the fourth quarter. The result is a net

Higher Sales by Shop Size
Four Qtr Moving Average



positive 34.3 percent overall when the respondents reporting lower sales are subtracted from the respondents reporting higher sales. This is up from a net positive 24.7 percent in the fourth quarter.

The largest shops, with over \$2 million per year in gross sales, reported a net positive 48.6 percent with higher sales in the first quarter compared to 2015. Those reporting higher sales amounted to 62.9 percent of respondents, up from 50 percent in the fourth quarter.

Among the medium sized shops, those with between \$1 and \$2 million in annual sales, a net positive 31.8 percent reported higher sales, up from 24.1 percent in the fourth quarter. Those reporting higher sales totaled 54.5 percent of respondents in the first quarter, up from 44.8 percent in the fourth quarter.

The shops with under \$1 million in annual sales, had a net negative 11.1 percent compared to a net positive 6.3 percent in the fourth quarter. The facilities that reported higher sales were 11.1 percent of respondents in the first quarter, down from 18.8 percent of respondents in the fourth quarter. Those facilities reporting declines in the first quarter increased to 22.2 percent from 12.5 percent of respondents in the fourth quarter of 2015.

Net Earnings

Looking at net earnings, overall 43.9 percent of collision repair facilities reported higher net earnings in the first quarter compared to last year, up from 27.9 percent in the fourth quarter of 2015. The result is more than 14 points above the historic average of 28.1 percent. Those reporting lower earnings totaled 22.7 percent of respondents overall, down from the fourth quarter result of 25.6 percent. As a result, a net positive 21.2 percent of facilities reported higher earnings overall, up from 2.3 percent in the fourth quarter.

Looking by shop sales volume, the largest facilities reported a net positive result at 50 percent of the respondents, an increase from the net positive 20.5 percent in the fourth quarter. Those shops reporting higher earnings totaled 61.8 percent of respondents.

The mid-sized shops improved compared to the fourth quarter with a net negative 9.1 percent reporting higher earnings compared to a net negative 13.8 percent in the fourth quarter.

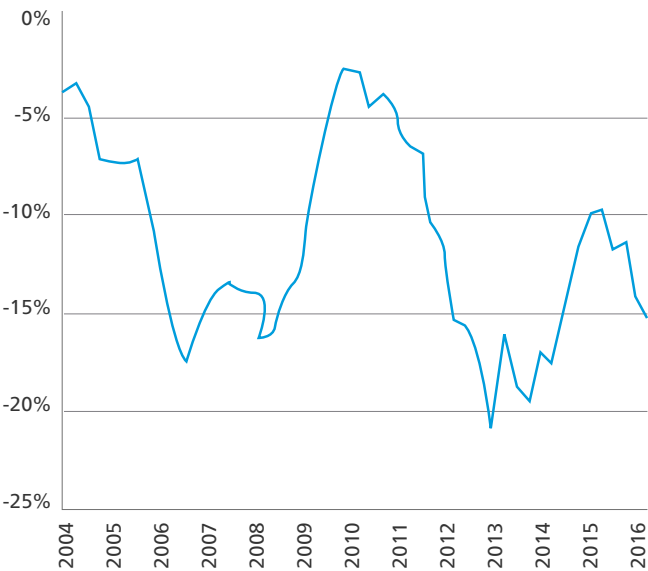
The smallest shops reported a net negative 11.1 percent with increased earnings, a continued turnaround of sorts following the erosion of their performance from the net negative 12.5 in the fourth quarter, 20 percent in the third quarter and 26.3 percent in the second quarter of 2015.

Sales vs. Earnings

Several quarters ago we began tracking the disparity between improving sales and improving earnings, a situation where earnings continue to improve at a much slower rate than the improvement in sales would otherwise suggest. This quarter’s results continue the trend.

The disparity indicates that shops, while getting more work through the door, are under cost pressures that prevent them from realizing a corresponding increase in their bottom lines.

In the chart above, we illustrate this trend by comparing the net percentage of facilities reporting sales increases to the net percentage reporting earnings increases. As the chart illustrates, the four quarter moving average of the disparity reached an historic gap of a -21.8 points in the fourth quarter of 2012. In the first quarter, the comparison has widened to -15.9 percent from -14.4 points in the fourth quarter.



In a perfect world, where every increase in sales would translate to a corresponding increase in earnings, the chart would show a line that hovers near 0 percent, indicating no difference between the percentage of shops that report increased sales, and the number of shops that report increased earnings. The negative relationship shown here indicates that a decreasing percentage of shops are reporting improved earnings, even when their top line sales improve.

You will notice that during 2009 and 2010, the chart rises to a level near zero, indicating a close relationship between sales and earnings for that period. This was because, during the height of the recession, nearly every shop, with few exceptions, was reporting a decline in both sales and earnings, creating a very close correlation.

Employment

The employment picture was mixed during the first quarter as those respondents reporting higher staff levels increased to 22.4 percent overall in the first quarter, up from 17.4 percent in the fourth quarter. Those reporting lower staff levels also increased to 14.9 percent in the first quarter, up from 7 percent in the fourth quarter.

This resulted in a net positive of 7.5 percent in the first quarter, down from a net positive 10.5 percent in the fourth quarter.

The largest shops reported increasing employment in the fourth quarter with a net positive 20 percent, down slightly from a 20.5 percent in the fourth quarter. The mid-size collision repair shops declined to a net negative 4.3 percent in the first quarter, down from the net negative 3.4 percent in the fourth quarter. The smallest shops reported a net negative result of 12.5 percent compared to a net positive 12.5 percent in the fourth quarter. The results had been consistently a net negative since 2007 for the smallest repair facilities, with net positive employment only during the second and fourth quarter of 2015.

When asked if they planned to hire technicians during the next quarter, 42.4 percent of respondents overall said yes, down from 44.7 percent overall who

said yes in the fourth quarter. Repair facilities with \$2 million or more in sales reported hiring plans across 45.7 of respondents, down from 51.3 in the fourth quarter.

A record number of respondents reporting having jobs they have been unable to fill for more than one month. Those indicating have jobs open for more than one month increased in the first quarter to 53.7 percent, up from 44.2 percent who indicated open positions in the fourth quarter. The largest repairers reported open positions across 65.7 percent of respondents.



Sherwin-Williams Introduces Solution to Repair Hail Damage

By: ABRN Wire Reports

Date Published: July 15, 2016



Body shop owners need a product to not only fix the dings and dents, but also to increase their revenue and productivity, with an alternative to panel replacement and/or Paintless Dent Repair (PDR).

According to the National Oceanic and Atmospheric Administration, there were 5,411 major hail storms in 2015. And when hail storms hit, there's always a spike in insurance claims and that means damage that can be expensive. Body shop owners need a product to not only fix the dings and dents, but also to increase their revenue and productivity, with an alternative to panel replacement and/or Paintless Dent Repair (PDR). Sherwin-Williams Automotive Finishes has the answer...the Hail Damage Repair Process.

The new process is a turnkey solution for collision shops repairing cosmetic hail damage. Sherwin-Williams' High Build Polyester Primer Surfacers

HDR22 is an alternative to panel replacement and lets owners keep the work in-house versus subletting to PDR technicians and oftentimes giving up valuable space within the shop for the PDR work to be completed. Plus, the new Hail Damage Repair Process eliminates bottlenecks as there's no downtime in waiting for parts delivery.

HDR22 is a fast drying polyester primer that has excellent filling and sanding characteristics. In just two to three coats—only 5 to 10 minutes flash in between coats—HDR22 can fill surface imperfections and small dents up to the size of a nickel. It's ideal for Collision, Fleet and Restoration locations nationwide.

“Hail storms never come with a warning and the reparability of damage relies on size and frequency of dents. Sherwin-Williams provides an ideal solution to body shop owners when repairing hail damaged vehicles. HDR22 provides an alternative to panel replacement and PDR,” says Bryan Draga, global marketing director, Sherwin-Williams Automotive Finishes.

Draga notes that the new product is much more efficient for the automotive repair industry and makes the most of Mother Nature. HDR22 gets the

job done right the first time as the primer surfacer repairs hail dimples, as well as minor cosmetic dents. This will increase internal capacity resulting in higher throughput.

Whether a shop is using a solvent or waterborne refinish system, HDR22 can help shops process more cars, meet the cycle time demands of insurance providers and increase revenue.

[Read More](#)



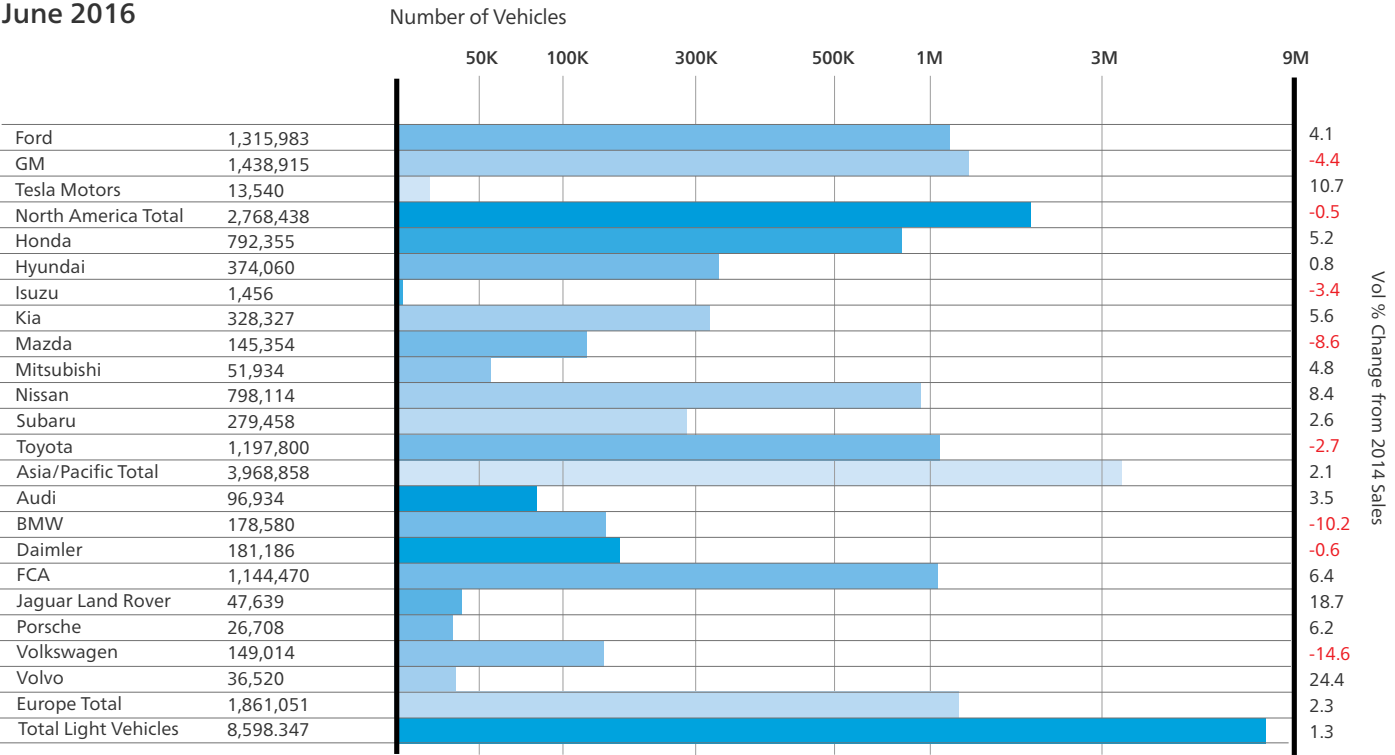
New Vehicle Sales

Figure 6—WardsAuto 10 Best-Selling U.S. Cars and Trucks
As of June 2016

Cars		Trucks/Vans/SUVs	
Camry	199,760	F-Series	366,057
Civic	189,840	Silverado	273,652
Corolla	182,193	Ram Pickup	223,616
Altima	172,695	RAV4	165,900
Accord	169,354	CR-V	159,075
Fusion	146,833	Escape	155,378
Sentra	123,014	Rogue	148,883
Malibu	120,325	Explorer	129,107
Sonata	104,401	Equinox	121,320
Focus	103,144	Sierra	106,466

Source: WardsAuto InfoBank

Figure 7—WardsAuto U.S. Light Vehicle Sales by Company
June 2016



Light vehicles are cars and light trucks (GVW Classes 1-3, under 14,001 lbs.). DSR is daily sales rate. Tesla Motors monthly sales estimated.
Source: WardsAuto InfoBank

Current Used Vehicle Market Conditions

June 2016 Kontos Commentary

By Tom Kontos
Executive Vice President,
ADESA Analytical Services

The following commentary is produced monthly by Tom Kontos, Executive Vice-President, ADESA Analytical Services. ADESA is a leading provider of wholesale used vehicle auctions and ancillary remarketing services.

As part of the KAR Auction Services family, ADESA works in collaboration with its sister company, Insurance Auto Auctions, a leading salvage auto auction company, to provide insights, trends and highlights of the entire automotive auction industry.

Figure 8—Wholesale Used Vehicle Price Trends

	Average Prices (\$/Unit)			Latest Month Versus	
	Jun-16	May-16	Jun-15	Prior Month	Prior Year
Total All Vehicles	\$10,556	\$10,718	\$10,215	-1.5%	3.3%
Total Cars	\$8,566	\$8,952	\$8,901	-4.3%	-3.8%
Compact Car	\$6,468	\$6,835	\$6,765	-5.4%	-4.4%
Midsized Car	\$7,659	\$8,045	\$7,690	-4.8%	-0.4%
Fullsize Car	\$7,354	\$7,864	\$7,820	-6.5%	-6.0%
Luxury Car	\$13,087	\$13,740	\$13,881	-4.7%	-5.7%
Sporty Car	\$14,294	\$14,207	\$13,813	0.6%	3.5%
Total Trucks	\$12,573	\$12,673	\$11,675	-0.8%	7.7%
Mini Van	\$7,823	\$7,932	\$7,353	-1.4%	6.4%
Fullsize Van	\$12,483	\$13,361	\$13,022	-6.6%	-4.1%
Compact SUV/CUV	\$10,868	\$10,851	\$10,414	0.2%	4.4%
Midsized SUV/CUV	\$11,101	\$11,484	\$10,123	-3.3%	9.7%
Fullsize SUV/CUV	\$13,639	\$13,502	\$11,770	1.0%	15.9%
Luxury SUV/CUV	\$18,850	\$19,175	\$18,655	-1.7%	1.0%
Compact Pickup	\$8,699	\$9,283	\$8,162	-6.3%	6.6%
Fullsize Pickup	\$15,797	\$15,857	\$14,420	-0.4%	9.6%

Source: ADESA Analytical Services

Summary

Average wholesale values fell again on a month-over-month basis in June, but they remain up on a year-over-year basis largely because of the continued price strength of trucks. A portion of the month-over-month price decline can be explained by the usual falloff in prices from May to June, typifying the transition from the strong spring/tax season to the less robust summer months. However, incentive activity, which has been relatively benign, may be on the rise, as manufacturers look to boost waning new vehicle sales—a pattern that bears watching. In the meantime, retail used vehicle sales were strong in June, which once again provided demand-side support for wholesale values receiving downward pressure from supply growth.

Details

According to ADESA Analytical Services’ monthly analysis of Wholesale Used Vehicle Prices by Vehicle Model Class¹, wholesale used vehicle prices in June

averaged \$10,556—down 1.5% compared to May but up 3.3% relative to June 2015. Car model classes again took the bigger month-over-month hit and were down on a year-over-year basis while trucks were up.

Average wholesale prices for used vehicles remarketed by manufacturers were up 5.7% month-over-month and up 2.0% year-over-year. Prices for fleet/lease consignors were down 1.1% sequentially but up 0.7% annually. Dealer consignors registered a 1.1% decrease versus May but a 3.6% increase relative to June 2015.

Data from NADA showed a 5.3% year-over-year increase in retail used vehicle sales by franchised dealers and a 9.1% increase for independent dealers in June, while both were up significantly up month over month. June CPO sales were up 0.8% month-over-month and up 5.0% year-over-year, according to figures from Autodata.

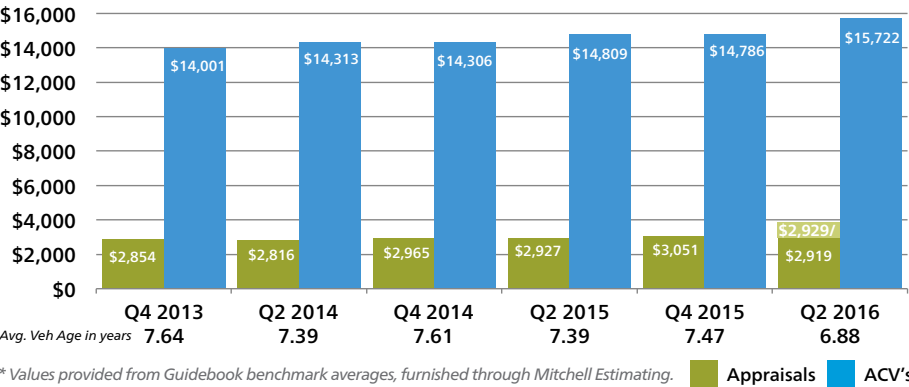
¹The analysis is based on over seven million annual sales transactions from over 150 of the largest U.S. wholesale auto auctions, including those of ADESA as well as other auction companies. ADESA Analytical Services segregates these transactions to study trends by vehicle model class, sale type, model year, etc. The views and analysis provided herein relate to the vehicle remarketing industry as a whole and may not relate directly to KAR Auction Services, Inc. The views and analysis are not the views of KAR Auction Services, its management or its subsidiaries, and their accuracy is not warranted. The statements contained in this report and statements that the company may make orally in connection with this report that are not historical facts are forward-looking statements. Words such as “should,” “may,” “will,” “anticipates,” “expects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “bids,” “promises,” “likely to” and similar expressions identify 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 the company’s Securities and Exchange Commission filings. The company does not undertake any obligation to update any forward-looking statements.

Appraisal Values

The initial average appraisal value, calculated by combining data from all first- and third-party repairable vehicle appraisals uploaded through Mitchell systems in Q2 2016 was \$2,919, \$8 lower than the previous year’s Q2 2015 appraisal average of \$2,927

Applying the prescribed development factor of .32% to these data produces an anticipated average appraisal value of \$2,929. Also of note is the average actual cash value (ACV) of the vehicles was the highest of charted values at \$15,722 .

Fig.9—Average Appraisal Values, ACVs and Age | All APD Line Coverages*



MITCHELL SOLUTION:

Mitchell Estimating™

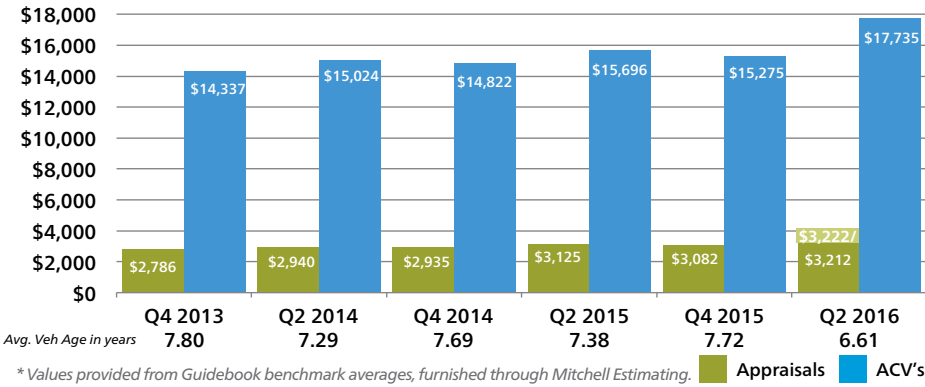
Mitchell Estimating is an advanced estimating system, combining database accuracy, automated calculations, and repair procedure pages to produce estimates that are comprehensive, verifiable, and accepted throughout the collision industry. Mitchell Estimating is an integral part of Mitchell’s appraisal workflow solutions.

Visit Mitchell’s website at www.mitchell.com

Comprehensive Losses

In Q2 2016, the average initial gross appraisal value for comprehensive coverage estimates processed through our servers was \$3,212; compared to \$3,125 in Q2 2015. Applying the prescribed development factor of .35% for this data set produces an increase in the adjusted value to \$3,222.

Fig.10—Average Appraisal Values, ACVs and Age Comprehensive Losses*

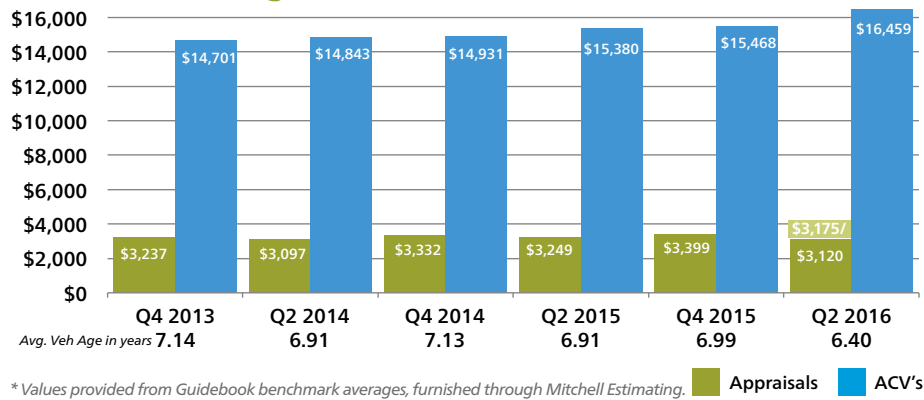


Collision Losses

Mitchell’s Q2 2016 data reflect an initial average gross Collision appraisal value of \$3,120, \$129 less than this same period last year. However, by applying the indicated development factor, suggests a final Q2 2016 average gross collision appraisal value will be \$3,175, still lower than the same quarter last year.

At the average Actual Cash Value (ACV) of vehicles appraised for Collision losses during Q2 2016 was \$16,459, the highest value of the quarters measured.

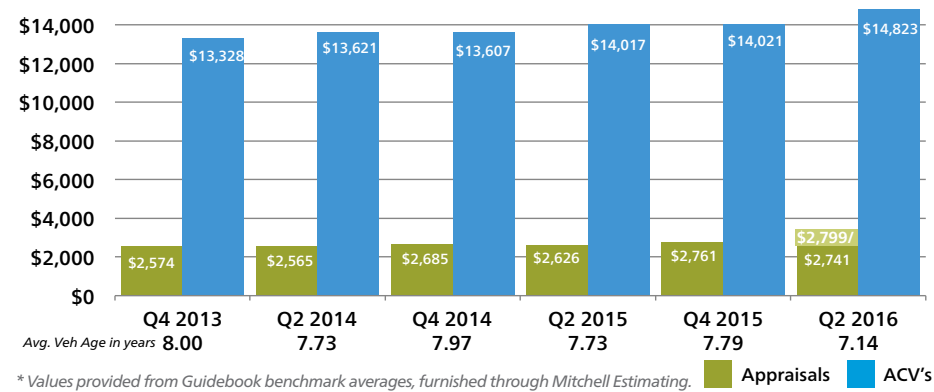
Fig. 11 – Average Appraisal Values, ACVs and Age Collision Coverage*



Third-Party Property Damage

In Q2 2016, our initial average gross Third-party Property Damage appraisal was \$2,741 compared to \$2,626 in Q2 2015, reflecting a \$115 initial increase between these respective periods. Adding the prescribed development factor of 2.16% for this coverage type yields a Q2 2016 adjusted appraisal value of \$2,799, a \$173 increase in average severity over Q2 2015.

Fig. 12 – Average Appraisal Values, ACVs and Age Auto Physical Damage*



View the [Casualty Edition](#)



Supplements

EDITOR’S NOTE

As it generally takes at least three months following the original date of appraisal to accumulate most supplements against an original estimate of repair, we report (and recommend viewing supplement information) three months’ after-the-fact, to obtain the most accurate view of these data.

In Q2 2016, 30.12% of all original estimates prepared by Mitchell-equipped estimators during that period were supplemented one or more times. In this same period, the pure supplement frequency (supplements to estimates), was 59.54% reflecting a 10.45 point increase from that same period in 2015. The average combined supplement variance for this quarter was \$753.07, \$120.72 lower than in Q2 2015.

Fig. 13—Average Supplement Frequency and Severity

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt. Change	% Change
% Est. Supplement	35.34	33	35.23	34.2	36.58	30.12	-4.08	-12%
% Supplement	47.87	46.85	49.22	49.09	52.53	59.54	10.45	21%
Avg. Combined Supp. Variance \$	763.26	764.04	814.27	873.79	904.88	753.07	-120.72	-14%
% Supplement \$	26.75	27.13	27.46	29.86	29.66	25.8	-4.06	-14%

Average Appraisal Make-Up

This chart compares the average appraisal make-up as a percentage of dollars, constructed by Mitchell-equipped estimators. These data points reflect a trade off, with parts down by 2% and labor up by 2% and paint and materials showing a 2% downward shift.

Fig. 14—% Average Appraisal Dollars by Type

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt. Change	% Change
% Average Part \$	45.25	41.23	45.25	43.23	45.91	42.26	-0.97	-2%
% Average Labor \$	43.27	47.71	43.42	45.71	42.84	46.85	1.14	2%
% Paint Material \$	10.46	10.64	10.38	10.55	10.29	10.39	-0.16	-2%

Parts Analysis

Parts Type Definitions

Original Equipment Manufacturer (OEM)

Parts produced directly by the vehicle manufacturer or their authorized supplier, and delivered through the manufacturer’s designated and approved supply channels. This category covers all automotive parts, including sheet metal and mechanical parts.

Aftermarket

Parts produced and/or supplied by firms other than the Original Equipment Manufacturer’s designated supply channel. This may also include those parts originally manufactured by endorsed OEM suppliers, which have later followed alternative distribution and sales processes. While this part category is often only associated with crash replacement parts, the automotive aftermarket also includes a large variety of mechanical and custom parts as well.

Non-New/Remanufactured

Parts removed from an existing vehicle that are cleaned, inspected, repaired and/or rebuilt, usually back to the original equipment manufacturer’s specifications, and re-marketed through either the OEM or alternative supply chains. While commonly associated with mechanical hard parts such as alternators, starters and engines, remanufactured parts may also include select crash parts such as urethane and TPO bumpers, radiators and wheels as well.

Recycled

Parts removed from a salvaged vehicle and re-marketed through private or consolidated auto parts recyclers. This category commonly includes all types of parts and assemblies, especially body, interior and mechanical parts.

EDITOR’S NOTE

While there isn’t a perfect correlation between the types of parts specified by estimators and those actually used during the course of repairs, we feel that the following observations to be directionally accurate for both the insurance and auto body repair industries. This segment illuminates the percentage of dollars allocated to each unique part-type.

As a general observation, recent data show that parts make up 45% of the average value per repairable vehicle appraisal, about (.6) points more than the average allocation of labor dollars. In addition, the current trend reflects a continued decrease in the use of new OEM parts, likely as a result of the increases in collision parts taken by the manufacturers to offset increased delivery and storage expenses.



MITCHELL SOLUTION:
Mitchell QRP™

Mitchell's Quality Recycled Parts (QRP) program is the most comprehensive source for finding recycled parts, providing online access to over 70 million salvage parts compiled from a growing network of almost 4,000 quality recyclers in North America and Canada. QRP is fully integrated with Mitchell estimating products for total ease-of-use.

For more information on QRP, visit Mitchell's website at www.mitchell.com



MITCHELL SOLUTION:
Mitchell MAPP™

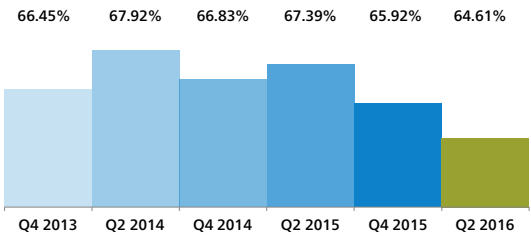
Mitchell Alternate Parts Program (MAPP) offers automated access to nearly 100 remanufactured and aftermarket part types from over 3,400 suppliers ensuring shops get the parts they need from their preferred vendors. MAPP is fully integrated with Mitchell estimating products for total ease-of-use.

For more information on MAPP, visit Mitchell's website at www.mitchell.com

Original Equipment Manufacturer (OEM) Parts Use in Dollars

In Q2 2016, OEM parts represented 64.61% of all parts dollars specified by Mitchell-equipped estimators. These data reflect a 2.78 point relative decrease from Q2 2015.

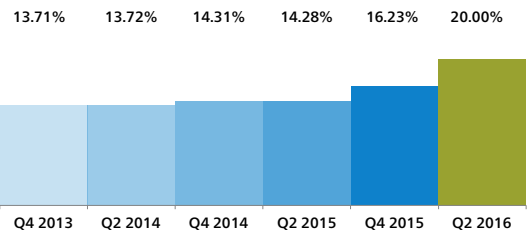
Fig. 15—Parts-New



Aftermarket Parts Use in Dollars

In Q2 2016, 20% of all parts dollars recorded on Mitchell appraisals were attributed to aftermarket sources, up 5.73 points from Q2 2015.

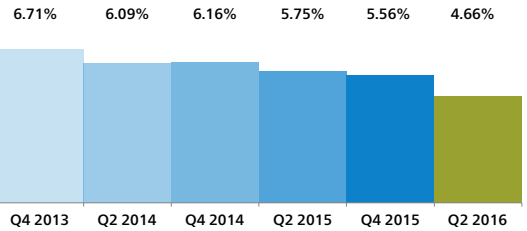
Fig. 16—Parts-Aftermarket



Remanufactured Parts Use in Dollars

Currently listed as “non-new” parts in our estimating platform and reporting products, remanufactured parts currently represent 4.66% of the average gross parts dollars used in Mitchell appraisals during Q2 2016. This reflects a 1.09 relative decrease over this same period in 2015.

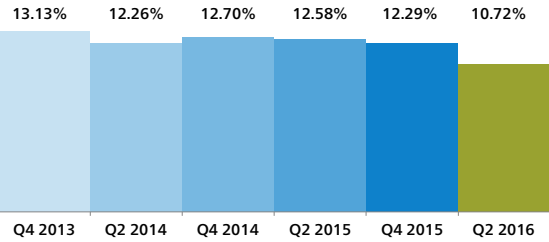
Fig. 17—Parts-Remanufactured



Recycled Parts Use in Dollars

Recycled parts constituted 10.72% of the average parts dollars used per appraisal during Q2 2016, reflecting a 1.86 decrease from Q2 2015.

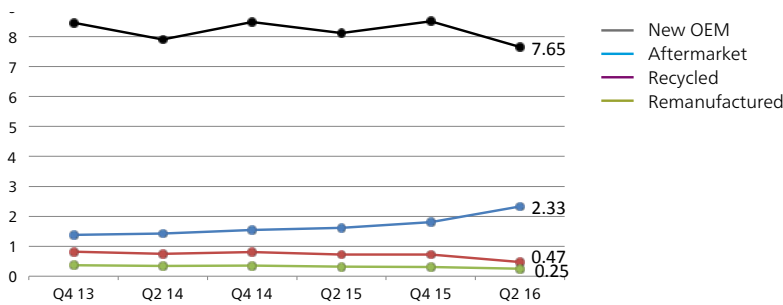
Fig. 18—Parts-Recycled



The Number of Parts by Part Type

In order to capture another aspect of parts use, we calculate the number of parts used by part type on a repairable estimate. For Q4 2015, New OEM parts use decreased again, with a significant increase in aftermarket parts and a decrease recycled parts.

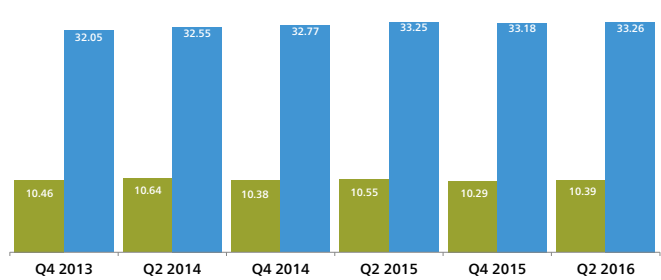
Fig. 19—Number of Parts by Part Type



Paint and Materials

During Q2 2016, Paint and Materials made up 10.39% of our average appraisal value, representing a .16-point relative decrease from Q2 2015. Represented differently, the average paint and materials rate—achieved by dividing the average paint and materials allowance per estimate by the average estimate refinish hours—yielded a rate of \$33.26 per refinish hour in this period, compared to \$32.25 in Q2 2015.

Fig. 20—Paint And Materials, By Quarter



EDITOR’S NOTE

It is commonly understood within the collision repair and insurance industries that a very large number of RECYCLED “parts” are actually “parts-assemblies” (such as doors, which in fact include numerous attached parts and pieces). Thus, attempting to make discrete comparisons between the average number of RECYCLED and any other parts types used per estimate may be difficult and inaccurate.



MITCHELL SOLUTION:
Mitchell RMC™

Mitchell’s Refinishing Materials Calculator (RMC) provides accurate calculations for refinishing materials costs by incorporating a database of more than 8,500 paint codes from eight paint manufacturers. It provides job-specific materials costing according to color and type of paint, plus access to the only automated, accurate, field-tested, and industry-accepted break-down of actual costs of primers, colors, clear coats, additives and other materials needed to restore vehicles to pre-accident condition. For more information on RMC, visit Mitchell’s website at www.mitchell.com

Adjustments

In Q2 2016, the percentage of adjustments made to estimates increased by .01 points. The frequency of betterment taken decreased by 7%, while the average dollar amount of the betterment taken increased by 11.36. Appearance allowance frequency increased by 18% and the dollar amount of that appearance allowance increased slightly to \$212.01.

Fig. 21 — Adjustment \$ and %s

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt/\$ Change	% Change
% Adjustments Est	3.05	2.75	2.89	2.82	3.02	2.83	0.01	0%
% Betterment Est	2.5	2.15	2.37	2.23	2.45	2.08	-0.15	-7%
% Appear Allow Est	0.44	0.43	0.41	0.44	0.43	0.52	0.08	18%
% Prior Damage Est	2.77	3.01	2.79	2.98	2.52	2.41	-0.57	-19%
Avg. Betterment \$	119.62	120.87	121.56	124.15	124.06	135.51	11.36	9%
Avg. Appear Allow \$	199.99	212.19	208.13	210.92	211.45	212.01	1.09	1%

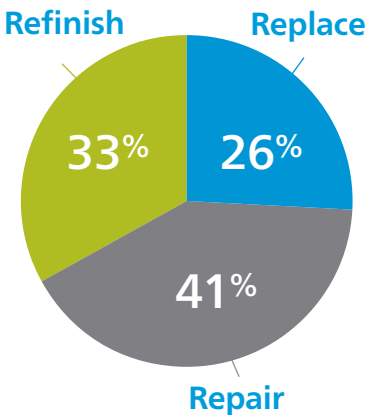
Labor Analysis

For 2016 year to date, average body labor rates have risen in less than half of survey states compared to 2015.

Fig. 22 — Average Body Labor Rates and Change by State

	2015	2015 YTD	\$ Change	% Change
Arizona	49.86	50.63	\$ 0.77	2%
California	55.67	55.56	\$ (0.11)	0%
Florida	42.83	42.94	\$ 0.11	0%
Hawaii	48.82	49.19	\$ 0.37	1%
Illinois	51.38	51.87	\$ 0.49	1%
Michigan	45.54	45.8	\$ 0.26	1%
New Jersey	48.07	48.03	\$ (0.04)	0%
New York	48.6	48.73	\$ 0.13	0%
Ohio	45.8	45.81	\$ 0.01	0%
Rhode Island	45.62	45.64	\$ 0.02	0%
Texas	45.72	45.73	\$ 0.01	0%

Fig. 23 — Percent of average labor hours by type



Total Loss

The chart below illustrates the total loss data for both vehicle age and actual cash value of total loss vehicles processed through Mitchell servers.

Fig. 24—Average Vehicle Age in Years

Vehicles	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16
	Average Vehicle Age in Years					
Convertible	12.13	12.14	12.83	12.35	12.74	12.85
Coupe	12.12	11.81	12.11	11.94	12.3	11.98
Hatchback	8.94	8.49	8.59	8.25	8.1	7.77
Sedan	10.6	10.3	10.53	10.26	10.47	10.02
Wagon	9.79	9.69	10.17	10.02	10.66	10.38
Other Passenger	12.67	12.63	12.67	13.04	12.2	11
Pickup	12.28	12.18	12.69	12.63	13.24	12.97
Van	11.32	11.04	11.49	11.29	11.76	11.45
SUV	10.39	10.09	10.42	10.2	10.47	10.15

Fig. 25—Average Vehicle Total Loss Actual Cash Value

Vehicles	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16
	Average Actual Cash Value					
Convertible	9,976.85	10,045.93	9,575.86	10,163.23	10,245.21	9,752.14
Coupe	7,205.99	7,493.71	7,686.78	7,958.80	8,074.13	8,086.73
Hatchback	8,041.86	8,569.69	8,216.17	8,477.33	8,604.16	8,497.13
Sedan	7,360.44	7,560.96	7,577.53	7,803.98	7,723.94	7,854.60
Wagon	7,162.20	7,057.93	6,870.76	6,926.95	6,762.68	6,710.67
Other Passenger	15,439.13	14,606.06	17,769.01	14,698.45	18,002.34	18,634.34
Pickup	10,052.48	10,381.83	10,508.74	11,101.02	11,375.06	11,589.77
Van	5,825.51	6,034.97	6,044.28	6,248.82	6,409.64	6,619.47
SUV	9,038.30	9,290.57	9,453.64	9,809.46	10,050.35	10,139.44



MITCHELL SOLUTION:

Mitchell WorkCenter™ Total Loss

Mitchell WorkCenter™ Total Loss gives your claims organization a statistically-driven, fully-automated, web-based total loss valuation system that generates fair, market-driven values for loss vehicles. It combines J.D. Power and Associates’ data analysis and pricing techniques with Mitchell’s recognized leadership in physical damage claims processing solutions. Mitchell WorkCenter™ Total Loss helps you reduce settlement time and improve customer satisfaction. www.mitchell.com.



At the request of our customers and friends in Canada, we are pleased to provide the following Canada-specific statistics, observations, and trends.

All dollar-figures appearing in this section are in CDN\$. As a point of clarification, this data is the product of upload activities from body shops, independent appraisers, and insurance personnel, more accurately depicting insurance-paid loss activity, rather than consumer direct or retail market pricing.

Canadian Appraisal Severity

Fig. 26—Average Appraisal Values Severity Overall

The average gross initial appraisal value, calculated by combining data from all first and third party repairable vehicle appraisals uploaded through Mitchell Canadian systems in Q2 2016 was \$3,462, a \$ 40 decrease from Q2 2015. Applying the prescribed development factor yields an increase to \$3,533, an increase of \$31 over Q2 2015.

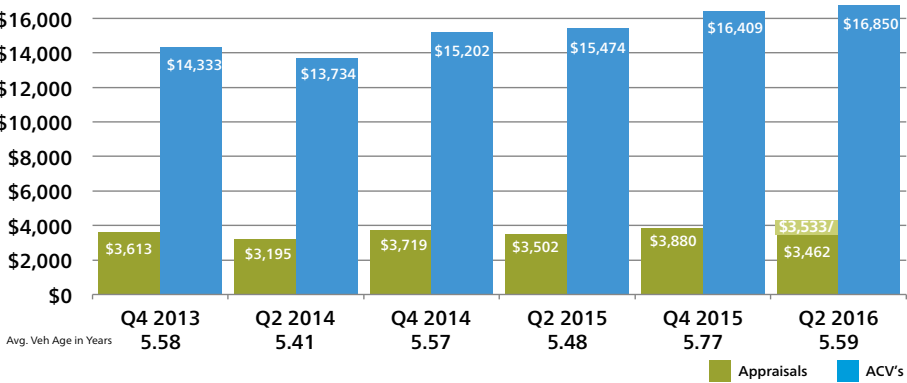
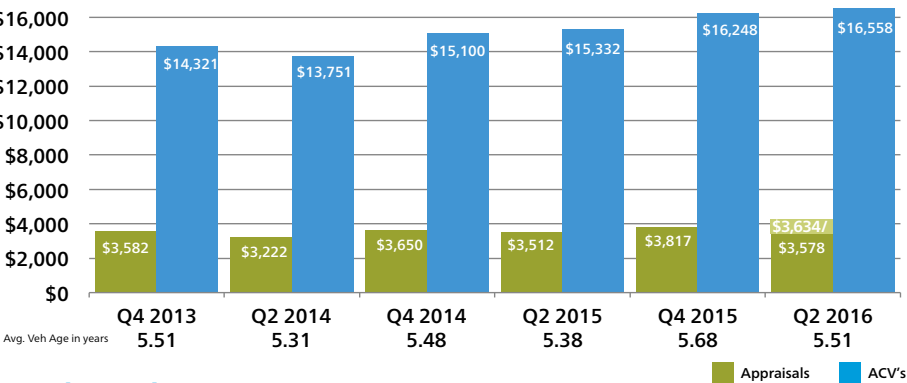


Fig. 27—Collision Losses

The average initial gross collision appraisal value uploaded through Mitchell Canadian systems in Q4 2016 was \$3,578, a \$66 increase from Q2 2015. However applying the prescribed development factor yields an anticipated final average appraisal value of \$3,634, a \$122 increase from Q2 2015.



Canadian Average Appraisal Make-Up

Fig. 28

This chart compares the average appraisal make up as a percentage of dollars. These data points reflect a slight decrease in labour with larger increases in paint and parts.

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt/\$ Change	% Change
% Average Part \$	44.36	42.63	44.65	43.65	45.68	44.75	1.1	3%
% Average Labour \$	44.12	45.37	44.16	44.33	42.78	43.43	-0.9	-2%
% Paint Material \$	8.45	9.08	8.28	8.68	8.18	9.07	0.39	4%



Fig. 29—Comprehensive Losses

In Q2 2016 the average initial gross Canadian appraisal value for comprehensive coverage estimates processed through our servers was \$3,262 or \$145 lower than in Q2 2015. Applying the prescribed development factor, the anticipated final average appraisal value will be \$3,378.

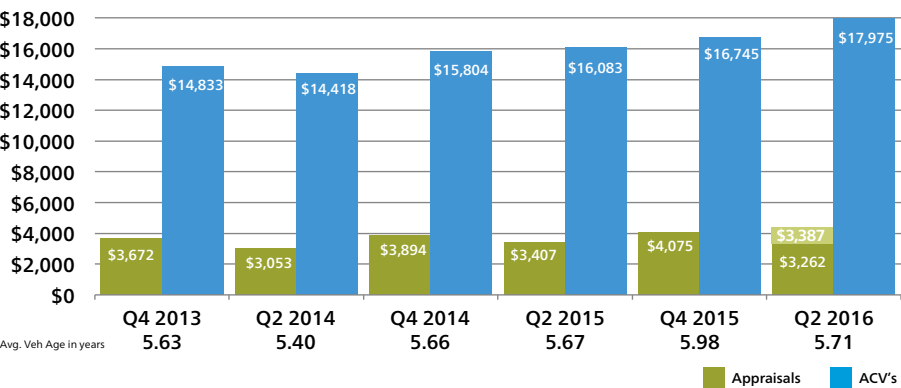
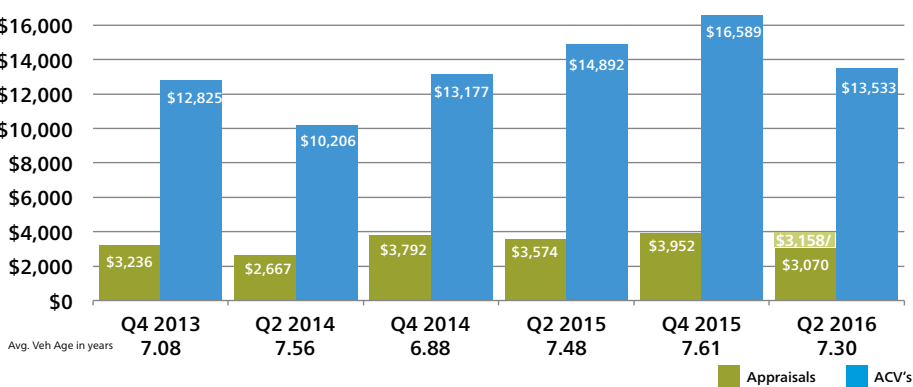


Fig. 30—Third-Party Property Damage

In Q2 2016, our Canadian industry initial average gross third party property damage appraisal was \$3,070, a decrease of \$504 from Q2 2015 on vehicles that were slightly newer. Applying the prescribed development factor, we end up with a final value of \$3,158.



Canadian Supplements

Fig. 31

In Q2 2016, 38.34% of all original estimates prepared by Mitchell-equipped Canadian estimators were supplemented one or more times. In this same period, the pure supplement frequency (supplements to estimates) was 82.9%, reflecting an increase from the Q2 2015. The average combined supplement variance for this quarter was \$761.28, \$81.30 lower than in Q2 2015.

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt/\$ Change	% Change
% Est Supplements	51.38	49.2	49.51	51.4	52.65	38.34	-13.06	-25%
% Supplements	70.07	79.24	67.86	78.79	82.1	82.9	4.11	5%
Avg Combined Supp Variance	609.05	710.28	841.31	842.58	831.93	761.28	-81.3	-10%
% Supplement \$	16.86	22.23	22.62	24.06	21.44	21.99	-2.07	-9%

About Mitchell in Canada...

For more than 20 years, Mitchell’s dedicated Canadian operations have focused specifically and entirely on the unique needs of collision repairers and insurers operating in the Canadian marketplace. Our Canadian team is known for making itself readily available, for being flexible in its approach to improving claims and repair processes, and for its ‘second to none’ commitment to customer support. Headquartered in Toronto, with offices across Canada, Mitchell Canada delivers state-of-the-art, multi-lingual collision estimating and claims workflow solutions (including hardware, networks, training, and more), world-class service, and localized support.



Canadian Adjustments

Fig. 32

In Q2 2016, the average frequency betterment was taken on estimates decreased by 3% and the dollar amount of that betterment was down by 1%. Appearance allowances were flat and the dollar amount of those allowances decreased by 7%.

Date	Q4/13	Q2/14	Q4/14	Q2/15	Q4/15	Q2/16	Pt/\$ Change	% Change
% Adjustments Est	1.96	1.93	1.77	1.8	1.97	1.76	-0.04	-2%
% Betterment Est	1.72	1.68	1.58	1.5	1.71	1.46	-0.04	-3%
% Appear Allow Est	0.24	0.25	0.2	0.3	0.25	0.28	-0.02	-7%
% Prior Damage Est	0.05	0.06	0.11	0.23	0.19	0.25	0.02	9%
Avg. Betterment \$	255.8	234.92	247.54	273.76	371.18	271.54	-2.22	-1%
Avg. Appear Allow \$	229.34	276.2	208.21	236.69	277.13	297.32	60.63	26%

Canadian Labour Analysis

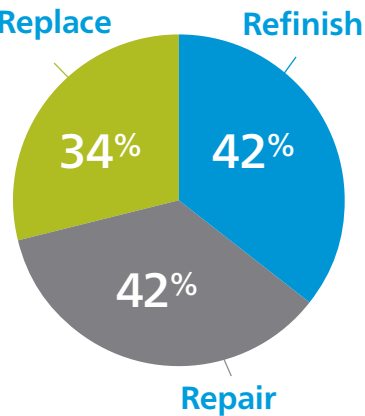
Fig. 33

All data reflects the percentage of labour dollars utilized in the creation of Mitchell appraisals by Canadian estimators. Labour rates were fairly flat in all provinces.

Average Body Labour Rates and Change by Province

	2015	YTD 2016	\$ Change	% Change
Alberta	75.11	75.17	\$ 0.06	0%
British Columbia	67.32	67.43	\$ 0.11	0%
Newfoundland & Labrador	62.62	62.87	\$ 0.25	0%
Nova Scotia	59.32	59.31	\$ (0.01)	0%
Ontario	56.89	57.34	\$ 0.45	1%
Yukon Territory	95.24	96.39	\$ 1.15	1%

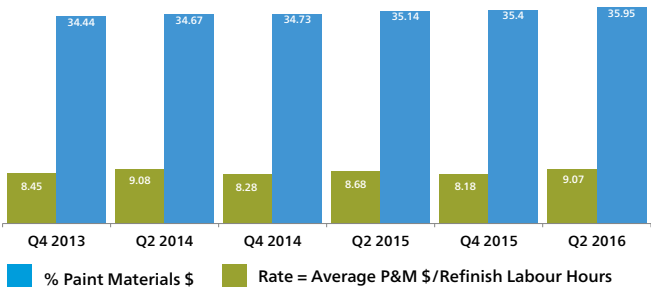
Fig. 34—Labour Operations



Canadian Paint and Materials

Fig. 35

During Q2 2016, paint and materials made up 9.07% of our average appraisal value. Represented differently, the average paint and materials hourly rate rose to just under \$35.95 per hour.

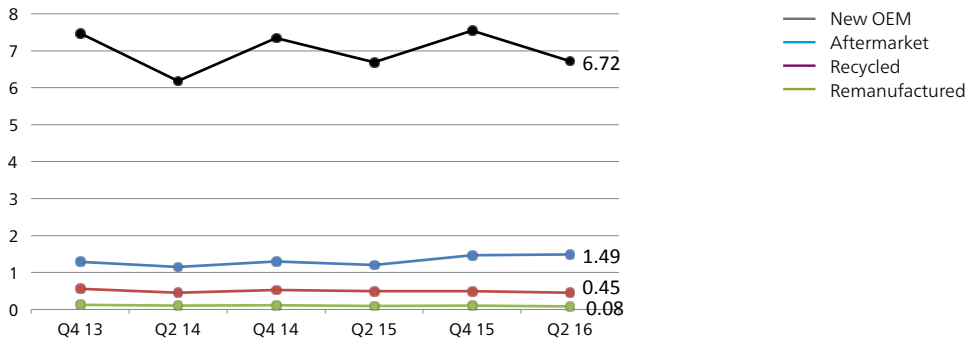




Canadian Number of Parts by Part Type

Fig. 36

We continue to see a fluctuation of OEM parts used in the average repairable estimate and see an increase in the last few quarters in aftermarket parts.



Canadian Parts Utilization

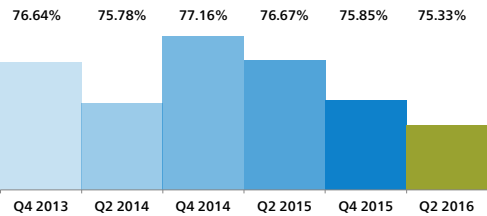
All data reflect the percentage of parts-type dollars utilized in the construction of Mitchell.

Original Equipment Manufacturer (OEM) Parts Use in Dollars

In Q4 2015 Canadian OEM parts

In Q2 2016, Canadian OEM parts use decreased only slightly compared to Q2 2015.

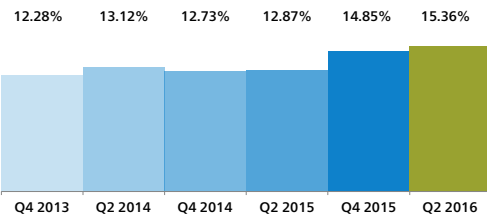
Fig. 37 — Parts-New



Aftermarket Parts Use in Dollars

Aftermarket parts use in Canada rose in Q2 2016, topping 15%.

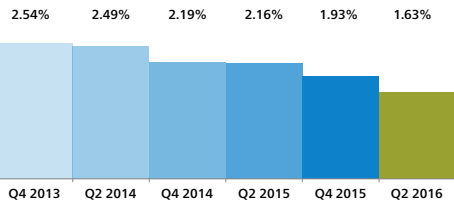
Fig. 38 — Parts-Aftermarket



Remanufactured Parts Use in Dollars

Remanufactured parts use in Canada was 1.63% for Q4 2016 compared to 2.16% in Q4 2015.

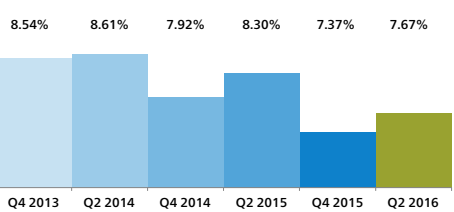
Fig. 39 — Parts-Non-New



Recycled Parts Use in Dollars

Recycled parts use in Canada has decreased in terms of percentage of dollars of parts from Q2 2016 and is the second lowest percentage of parts dollars in the charted quarters.

Fig. 40 — Parts-Recycled





**Mitchell San Diego
Headquarters**

**6220 Greenwich Dr.
San Diego, CA 92122**



Mitchell empowers clients to achieve measurably better outcomes. Providing unparalleled breadth of technology, connectivity and information solutions to the Property & Casualty claims and Collision Repair industries, Mitchell is uniquely able to simplify and accelerate the claims management and collision repair processes.

As a leading provider of Property & Casualty claims technology

solutions, Mitchell processes over 50 million transactions annually for over 300 insurance companies/claims payers and over 30,000 collision repair facilities throughout North America. Founded in 1946, Mitchell is headquartered in San Diego, California, and has approximately 2,000 employees. The company is privately owned primarily by KKR, a leading global investment firm.

For more information on Mitchell, visit www.mitchell.com.

Mitchell in the News



Inside view: Debbie Day of Mitchell on customer-driven enhancements

Debbie Day joins Mitchell as General Manager of the Auto Physical Damage business unit and shares her excitement for joining a company with a long history.

[Read More](#)



Mitchell Partners with ForeSight Medical for Surgical Implantable Device Mgmt

Mitchell partnership with ForeSight Medical will help manage utilization, facility, surgeon and procedural trending related to surgical procedures involving implantable hardware.

[Read More](#)



Parsing sales data for collision repair insights

Greg Horn explains how analyzing sales data can provide insights for helping improve cycle time in collision repair facilities.

[Read More](#)



Round and round. Do Self-Driving Cars Need Morals?

Greg Horn discusses the "trolley problem" as it applies to a self-driving car scenario.

[Read More](#)



Mitchell Honors Industry's Best Shops

Recipients of the 2015 AutocheX™ Premier Achiever Awards are recognized for going above and beyond to honor their commitment to their customers to deliver the industry's best service on a daily basis.

[Read More](#)

For More Mitchell News:

Press Releases



[Mitchell International](#)



[Mitchell Intl](#)



[MitchellRepair](#)



[Mitchell Claims](#)



Industry Trends Report

The Industry Trends Report is a quarterly snapshot of the auto physical damage collision and casualty industries. Just inside—the economy, industry highlights, plus illuminating statistics and measures, and more. Stay informed on ongoing and emerging trends impacting the industry, and you, with the Industry Trends Report!

Questions or comments about the Industry Trends Report may be directed to:

Greg Horn
Editor in Chief, Vice President of Industry Relations
greg.horn@mitchell.com

Additional Contributors:

Kontos Kommentary is produced monthly by Tom Kontos, Executive Vice-President, ADESA Analytical Services. ADESA is a leading provider of wholesale used vehicle auctions and ancillary remarketing services. As part of the KAR Auction Services family, ADESA works in collaboration with its sister company, Insurance Auto Auctions, a leading salvage auto auction company, to provide insights, trends and highlights of the entire automotive auction industry.

For more information about Enterprise Rent-A-Car Average Length of Rental and to access your market and shop numbers please contact daniel.friedman@ehi.com.

The Industry Trends Report is published by Mitchell.

The information contained in this publication was obtained from sources deemed reliable. However, Mitchell cannot guarantee the accuracy or completeness of the information provided.

Mitchell and the Mitchell logo and all associated logos and designs are registered and unregistered trademarks of Mitchell International, Inc. All other trademarks, service marks and copyrights are the property of their respective owners.