

# RAB Instant Background - Auto Service and Repair

## Consumer Insights

### Who Buys

Profiling adults 18+ who had vehicle maintenance or repair work done at either a gas station/garage, car dealership or auto repair chain in the previous year.

|                                                           | Vehicle maintainance at gas station/garage in last 12 months | Vehicle maintainance at car dealership in last 12 months | Vehicle maintainance at auto repair chain store in last 12 months |
|-----------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------|
| Male                                                      | 47.5%                                                        | 48.5%                                                    | 47.8%                                                             |
| Female                                                    | 52.5%                                                        | 51.5%                                                    | 52.3%                                                             |
| 18-24                                                     | 10.5%                                                        | 9.6%                                                     | 12.8%                                                             |
| 25-34                                                     | 16.3%                                                        | 16.4%                                                    | 22.8%                                                             |
| 35-44                                                     | 15.8%                                                        | 17.2%                                                    | 17.8%                                                             |
| 45-54                                                     | 18.5%                                                        | 17.5%                                                    | 17.8%                                                             |
| 55-64                                                     | 18.9%                                                        | 17.8%                                                    | 14.3%                                                             |
| 65+                                                       | 20.1%                                                        | 21.7%                                                    | 14.5%                                                             |
| Household Income: \$100K+                                 | 43.7%                                                        | 46.5%                                                    | 40.8%                                                             |
| Household Income: \$75,000-\$99,999                       | 15.9%                                                        | 16.0%                                                    | 15.7%                                                             |
| Household Income: \$60,000-\$74,999                       | 10.8%                                                        | 9.8%                                                     | 10.6%                                                             |
| Household Income: \$50,000-\$59,999                       | 6.6%                                                         | 7.3%                                                     | 6.9%                                                              |
| Household Income: \$40,000-\$49,999                       | 6.2%                                                         | 6.1%                                                     | 7.4%                                                              |
| Household Income: \$30,000-\$39,999                       | 6.0%                                                         | 5.9%                                                     | 6.7%                                                              |
| Household Income: \$20,000-\$29,999                       | 5.2%                                                         | 4.4%                                                     | 5.7%                                                              |
| Household Income: Under \$20,000                          | 5.8%                                                         | 4.1%                                                     | 6.4%                                                              |
| Race: White                                               | 83.3%                                                        | 78.3%                                                    | 74.3%                                                             |
| Race: Black/African American                              | 7.1%                                                         | 9.6%                                                     | 12.3%                                                             |
| Race: Other Race/Multiple Classifications                 | 9.7%                                                         | 12.2%                                                    | 13.4%                                                             |
| Hispanic, Latino or Spanish Origin                        | 8.2%                                                         | 11.5%                                                    | 13.4%                                                             |
| Census Region: North East                                 | 25.2%                                                        | 18.1%                                                    | 13.7%                                                             |
| Census Region: South                                      | 32.9%                                                        | 37.0%                                                    | 39.9%                                                             |
| Census Region: Midwest                                    | 20.2%                                                        | 21.9%                                                    | 21.1%                                                             |
| Census Region: West                                       | 21.8%                                                        | 23.0%                                                    | 25.3%                                                             |
| Single                                                    | 25.0%                                                        | 23.2%                                                    | 29.3%                                                             |
| Married                                                   | 59.7%                                                        | 61.2%                                                    | 55.9%                                                             |
| Divorced/Separated/Widowed                                | 15.3%                                                        | 15.6%                                                    | 14.8%                                                             |
| Total Radio Weekly Dayparts Cume: Monday - Sunday 24-Hour | 87.4%                                                        | 87.9%                                                    | 88.4%                                                             |

(Source: MRI-Simmons, 2020 )

The major market consumer segmentation for the auto mechanic industry: Businesses, 29.7%; consumers under the age of 45, 29.6%; consumers ages 45-64, 25.8%; consumers 65-and-older, 9.0%; government, 4.5% and nonprofit organizations, 1.4%.

(Source: IBISWorld, 2021 )

The major market segmentation for body shop businesses: Highest income bracket (more than \$100,000), 20.7%; middle income bracket (between \$40,000 and \$100,000), 24.0%; lowest income bracket (under \$40,000), 13.5%; businesses, 39.0%; other, 2.8%.

(Source: IBISWorld, 2021 )

The major market segmentation for businesses in the oil change services industry: Consumers ages 18-24, 6.6%; consumers ages 25-44, 24.0%; consumers ages 45-64, 29.5%; consumers ages 65+, 22.4%; businesses and farms, 14.5% and other, 3.0%.

(Source: IBISWorld, 2020 )

### What They Buy

These are the auto makes with the lowest U.S. service and warranty costs for non-premium brands in the first three months of operation: Honda, \$21; Hyundai, \$22; Buick; \$24; Toyota, \$24; Subaru, \$27; Mazda, \$29; Nissan, \$32; Kia, \$34; Volkswagen, \$39; Chrysler, \$39.

(Source: Automotive News, 2021 )

These are the auto makes with the lowest U.S. service and warranty costs for premium brands in the first three months of operation: Acura; \$30; Lexus, \$30; Infiniti, \$47; Volvo, \$69; Genesis, \$70; Audi, \$70; Lincoln, \$91; BMW, \$106.

(Source: Automotive News, 2021 )

The products and services segmentation of the auto mechanic/repair business: Powertrain repair services, 21.0%; scheduled and preventive repair and maintenance services, 23.2%; brake repair services, 12.3%; electrical system repair services, 5.8%; heating repair services, 4.4%; wheel alignment and repair services, 16.9%; muffler and exhaust repair services, 6.7%; other repair and maintenance services, 9.7%.

(Source: IBISWorld, 2021 )

The products/services segmentation for body shop businesses: Body repair services, 61.1%; painting services, 14.6%; glass replacement and repair, 16.5%; merchandise sales, 2.2%; upholstery and interior repair work, 2.5%; detailing services and body conversions, 1.6%; other services, 1.5%.

(Source: IBISWorld, 2021 )

The products and services segmentation for businesses in the oil change services industry: Conventional oil changes, 22.7%; semi-synthetic oil changes, 24.8%; full synthetic oil changes, 15.6%; diesel oil changes, 3.5%; car washing and cleaning services, 2.1%; other maintenance services, 27.1% and high-mileage oil changes, 4.2%.

(Source: IBISWorld, 2020 )

In 2019, for the first time since CarMD has reported on these rankings, "replace catalytic converter" was the most common check engine light repair, accounting for 5.69% of repairs. Catalytic converters are costly repairs that don't typically fail unless maintenance and other repairs are ignored, or a vehicle is up there in age.

(Source: CarMD, 2020 )

Diagnostic trouble codes (DTCs) are alphanumeric codes that a vehicle's computer outputs when it detects a problem. These codes are transmitted by a vehicle's on-board diagnostic (OBD) system. They can be accessed using a diagnostic scan tool or code reader that plugs into the OBD connector.

(Source: CarMD, 2020 )

CarMD's data reports an increase in mass air flow sensors (MAF sensors) needing replacement, while fuel cap issues continue to trend down.

(Source: CarMD, 2021 )

The five most common check engine light-related repairs in 2020 and the average cost to make that repair, including parts and labor. Each of these issues will keep a vehicle from passing its state emissions test and negatively impact fuel economy if ignored. 1. Replace catalytic converter(s) with new OE catalytic converter(s), \$1,383; 2. Replace oxygen sensor(s), \$243; 3. Replace ignition coil(s) and spark plug(s), \$389; 4. Replace mass air flow sensor, \$336; 5. Tighten or replace fuel cap, \$25.

(Source: CarMD, 2021 )

CarMD's diagnostic knowledge base monitors Network System (NS) diagnostic data to go beyond powertrain, ABS and SRS modules. Newer cars and trucks have hundreds of different modules that can fail. These are parts like backup camera, adaptive cruise control, adaptive headlights, lane departure alert and seat belt retractor. In addition to tracking check engine light-related issues.

(Source: CarMD, 2020 )

Top 10 Network Systems Module Reporting Issues, followed by % of 2019 repairs: 1. BCM - Body Control Module, 2.92%; 2. TCM - Transmission Control Module, 2.63%; 3. IPC - Instrument Panel Cluster, 2.28%; 4. ECM - Engine Control Module, 2.14%; 5. PCM - Powertrain Control Module, 2.12%; 6. Radio, 1.93%; 7. SIR - Supplemental Inflatable Restraint, 1.79%; 8. EBCM - Electronic Brake Control Module, 1.69%; 9. RCM - Restraint Control Module, 1.38%; 10. ABS - Anti-Lock Brake / Traction Control Module, 1.33%.

(Source: CarMD, 2020 )

### When They Buy

Depending on vehicle age, type of oil and driving conditions, oil change intervals will vary. It used to be normal to change the oil every 3,000 miles, but with modern lubricants most engines today have recommended oil change intervals of 5,000 to 7,500 miles. Moreover, if your car's engine requires full-synthetic motor oil, it might go as far as 15,000 miles between services! You cannot judge engine oil condition by color, so follow the factory maintenance schedule for oil changes.

(Source: AAA, 2020 )

April has been designated as National Car Care Month.

(Source: Car Care Council, 2020 )

### Where They Buy

In 2019, car repair costs were up in three of four U.S. regions, with the exception being the Midwest where costs were down 1.6% over the past year.

(Source: CarMD, 2020 )

Chevron Corporation (formerly ChevronTexaco)'s franchise group, Havoline Xpress, operates about 230 automotive service centers across the United States in 2019. The business exclusively uses Havoline and Texaco oil products. The franchises offer oil changes; oil filter and air filter replacements; brake and power steering fluid checks and replacements; engine tune-ups and diagnostics; and maintenance and repair for transmissions, radiators, wiper blades and air-conditioning.

(Source: IBISWorld, 2020 )

States with the highest concentration of oil change businesses: Texas, 11.7%; California, 9.3%; Florida, 6.1%; Michigan, 6.0%; Illinois, 4.4%; Ohio, 3.8%; Georgia, 3.7% North Carolina, 3.6% and New York, 3.0%

(Source: IBISWorld, 2020 )

Business concentrations for auto mechanics in the US in 2020: California, 11.6%; Texas, 7%; New York, 6.4%; Florida, 6.0%; Pennsylvania, 5.3%; Illinois, 4.7%; Ohio, 3.5%; Michigan, 3.2% and North Carolina, 3.2%.

(Source: IBISWorld, 2021 )

With a market share of 10.0%, Caliber Collision Centers (Caliber Collision) is a privately owned company that operates more than 1,100 locations across 37 states. The company provides services such as online estimates, car repairs, on-site car rentals, towing services, paintless dent repair and auto glass repair and replacement. The company also works alongside dealerships and insurance companies and has an exclusive service arrangement with Enterprise Rent-A-Car to provide additional services for customers whose vehicles may be beyond repair.

(Source: IBISWorld, 2021 )

### How They Buy

In 2020, car repair costs were down 1.6% overall at an average of \$378.77. Labor costs were down 2.8% year-over-year from 2019 to 2020, and parts costs were down about 1%. Many factors likely played a role in this decrease, including the economy, competition among repair shops and an increase in DIY automotive repairs during the pandemic. CarMD anticipates an increase in parts costs next year given the material shortage resulting from shutdown-related supply chain issues.

(Source: CarMD, 2021 )

Based on research by CarMD, the 10 most common check engine vehicle repairs in the U.S. in 2019 (followed by average repair parts & labor cost): 1. Replace Catalytic Converter(s) with new OE Catalytic Converter(s), \$1,375.70; 2. Replace Oxygen Sensor(s) (O2S), \$245.88; 3. Replace Ignition Coil(s) and Spark Plug(s), \$386.89; 4. Inspect for Loose Fuel Cap and Tighten or Replace as Necessary, \$25.00; 5. Replace Mass Air Flow (MAF) Sensor, \$345.69. 6. Replace Ignition Coils(s), \$214.98; 7. Replace Evaporative Emissions (EVAP) Purge Control Valve, \$144.07; 8. Replace Fuel Injector(s), \$457.63; 9. Replace Evaporative Emissions (EVAP) Purge Solenoid, \$150.85 and 10. Replace Thermostat, \$240.46.

(Source: CarMD, 2020 )

Average Cost of Check Engine Light Repairs in 2019 was \$384, up from \$305 in 2010.

(Source: CarMD, 2020 )

Out of more than 1,200 different possible repairs, the most expensive repair seen in 2019 by CarMD's network was "replace engine," costing as much as \$7,300. However, drivers should not panic when their car's check engine light comes on because this repair only accounted for one-half of 1% of repairs.

(Source: CarMD, 2020 )

Some of the least expensive repairs included "replace gas cap," and "replace electronic engine control (EEC) fuse" – both which cost under \$50.

(Source: CarMD, 2020 )

10 Pricey Check Engine-Related Vehicle Repairs and Their Cost: 1. Replace Engine Block Assembly, \$7,348; 2. Replace Transmission and Torque Converter, \$5,280; 3. Replace Transmission Assembly, \$4,310; 4. Replace Hybrid Battery, \$4,330; 5. Replace Cylinder Head Assembly, \$2,625; 6. Replace Electronic Brake Control Module (EBCM), \$1,140; 7. Replace Catalytic Converter(s) with new OE Catalytic Converter(s), \$2,512; 8. Replace ABS Modulator Assembly, \$1,767; 9. Replace Engine Control Module (ECM), \$839 and 10. Replace Powertrain Control Module (PCM), \$897.

(Source: CarMD, 2020 )

10 Inexpensive Check Engine-Related Vehicle Repairs and Their Costs: 1. Tighten or Replace Fuel Tank Gas Cap, \$25; 2. Replace Electronic Throttle Control System (ETCS) Fuse, \$40; 3. Inspect Fuel Cap Gasket, \$50; 4. Adjust Tire Pressure and Reset Tire Pressure Sensor, \$51; 5. Clean Ground Wire, \$57; 6. Inspect Battery and Charging System, \$103; 7. Inspect for Leak at Exhaust Pipe and Repair as Necessary, \$25.00; 8. Inspect Cooling System and Repair As Necessary, \$105; 9. Replace Evaporative Emissions (EVAP) Hose(s), \$105 and 10 Replace Air Filter Element, \$106.

(Source: CarMD, 2020 )

Why They Buy

Demand for the auto mechanics industry stems directly from the size of the stock of vehicles, average miles driven and age of the vehicle fleet.

(Source: IBISWorld, 2021 )

The total number of vehicles is a strong indicator of demand for oil changes and related auto maintenance services. The more cars there are on the road, the more opportunities operators in the oil change services industry have to provide maintenance services. The average age of the vehicle fleet is an important indicator of auto maintenance demand. The older the vehicles on the road, the more they need oil changes and auto maintenance. According to the Bureau of Transportation Statistics, the average age of the US vehicle fleet has increased at an annualized rate of 0.9% to 11.9 years in the five years to 2019.

(Source: IBISWorld, 2020 )

An increase in the number of automobile accidents generally results in increased demand for collision repair jobs performed by auto body, paint and glass shops. According to industry publication BodyShop Business, the national average crash rate (i.e. the percentage of registered motor vehicles involved in accidents per year) is an estimated 3.0%. The level of demand for industry services also depends on the total loss rates, which are assigned to vehicles that cannot be repaired because the cost of repair is greater than a replacement vehicle.

(Source: IBISWorld, 2021 )

The number of registered vehicles correlates with demand for repairs and maintenance. As the number of registered vehicles increases, demand for automotive repair and maintenance services also grows. The number of motor vehicle registrations is expected to rise in 2020, representing a potential opportunity for the industry.

(Source: IBISWorld, 2021 )

Business Information

Model year 2007 vehicles were most likely to need check engine light repairs, accounting for 9.9% of problems seen by CarMD across all models last year. As many as 29% of inspected model year 2007 vehicles had a check engine light on.

(Source: CarMD, 2021 )

According to research from IBISWorld, total revenue for automotive mechanics in the U.S. was projected to reach \$65.3 billion in 2021.

(Source: IBISWorld, 2021 )

Based on IBISWorld research, sales generated by oil change services in the U.S. was \$7.8billion in 2019, with an annual increase of 2.7% from the 2014-2019.

(Source: IBISWorld, 2020 )

As of Q2 of 2020, there were about 164,090 auto repair and maintenance centers in the U.S.

(Source: Bureau of Labor Statistics, 2021 )

According to research from IBISWorld, total revenue for oil change services is forecast to be \$8 billion in 2020.

(Source: IBISWorld, 2020 )

32,516 oil change businesses employed 93,223 people in 2020.

(Source: IBISWorld, 2020 )

The auto mechanics industry is highly fragmented with a very low level of market share concentration. Nonemploying establishments, or businesses that consist of self-employed individuals or groups of individuals, are expected to account for an estimated 65.0% of total industry establishments in 2020. While there are some companies that operate store chains, IBISWorld estimates that none control greater than 5.0% of the national market for auto mechanic services.

(Source: IBISWorld, 2021 )

An increase in new car sales has both positive and negative effects on demand for auto mechanic services. An increase in new car sales implies an increase in the number of vehicles in use, resulting in a larger stock of vehicles that may potentially require auto mechanic services. However, new cars are most often purchased in conjunction with the scrapping of older vehicles. In sum, higher new car sales tend to decrease demand for auto mechanic services. New car sales are expected to decline in 2020.

(Source: IBISWorld, 2021 )

In 2020, the average U.S. auto dealership recorded automotive service and parts sales of over \$6.69 million. As an industry, new vehicle dealerships in the U.S. raked in more than \$111 billion in service and parts sales that year.

(Source: National Automobile Dealers Association, 2021 )

Why Radio

Radio has established itself as an excellent vehicle for advertisers to deliver their messages to an increasing number of potential buyers. Each week, radio reaches 85.8% of persons ages 18+, and 57.1% of these consumers on a daily basis. In all, more than 218 million Americans ages 18-and-older listen to radio every week.

(Source: Nielsen Audio, 2021 )

Every week, radio reaches 87.4% of those who had work done at a gas station/garage, 87.9% who had their vehicle serviced/repaired at a car dealership and 88.4% of adults who had their vehicle serviced/repaired at an auto repair chain store in the last year.

(Source: MRI-Simmons, 2020 )

Miscellaneous Industry Facts or Category Trivia

According to the National Insurance Crime Bureau, the pandemic has seen a rapid rise in catalytic converter theft because they contain precious metals, such as rhodium, that can be sold to metal recyclers. In 2019, an average of 282 catalytic converters were stolen every month; in 2020 the average had risen to 1,203.

(Source: CarMD, 2021 )

The older the vehicle and the more it is used, the more likely it will need to undergo repair and maintenance. Older vehicles typically require larger, more expensive repairs. In addition, the maintenance of newer vehicles tends to be more expensive as these vehicles typically contain a large quantity of advanced electronic parts.

(Source: IBISWorld, 2021 )

### Relevant Links

National Oil & Lube News:

[www.nolin.net](http://www.nolin.net)

AutoMD.com:

[www.automd.com](http://www.automd.com)

Car Care Council:

[www.carcare.org](http://www.carcare.org)

Auto Laundry News:

[www.carwashmag.com](http://www.carwashmag.com)

AutoInc.:

[www.autoinc.org](http://www.autoinc.org)

CarMD:

[www.carmd.com](http://www.carmd.com)

Body Shop Business:

[www.bodyshopbusiness.com](http://www.bodyshopbusiness.com)

National Automobile Dealers Association:

[www.nada.org](http://www.nada.org)

(Source: RAB, 2021 )