

**Toyota RAV4 2019-Present** 

## **Executive Summary**

A versatile compact SUV offering hybrid and plug-in hybrid options, designed for both urban and off-road adventures.

## **Strengths**

- Excellent fuel efficiency, especially in hybrid models, with EPA ratings of 41 mpg city, 38 mpg highway, and 40 mpg combined.
- Comprehensive suite of standard safety features including Toyota Safety Sense 2.5+, adaptive cruise control, and lane-keeping assist.
- Spacious interior with ample cargo space, making it suitable for families and long trips.
- · Advanced infotainment system with options for large touchscreens, Apple CarPlay, and Android Auto.
- · Strong resale value and reliability, supported by Toyota's brand reputation

#### Weaknesses

- · Engine noise can be intrusive during highway acceleration, affecting cabin comfort.
- · Transmission may stumble during downshifts, impacting smoothness of drive.
- · Higher trims and desirable features can significantly increase the price.
- · Infotainment system can be sluggish, affecting user experience.

# **Key Figures & Stats**

## **Fuel Consumption**

Highway: 5.6-5.8 I/100 km City: 7.0-7.2 I/100 km Combined: 6.1-6.2 I/100 km

## Safety Rating

NCAP: 5 / 5 NHTSA: 5 / 5 IIHS: Top Safety Pick+ **Production Year:** 2019 - Present

CO<sub>2</sub> Range:

22-158 g/km

Power Range: 175-306 hp

**Transmission** Types: 3

Displacement Range: 2.0L to 2.5L

**Body Types:** 1

Fuel Types:

Trim Levels: 8

Recalls: 6

Battery Cap. Range: 1.6-18.1 kWh

**Performance and Efficiency**: The Toyota RAV4 offers a 2.5-liter Dynamic Force 4-cylinder engine paired with an electric motor, delivering a combined 219 horsepower. It features a high compression ratio for improved efficiency, achieving an EPA-estimated 41/38/40 MPG for city/highway/combined driving. The RAV4 Prime plug-in hybrid variant offers up to 42 miles on battery alone and a combined 94 MPGe, making it one of the most efficient in its class. These features provide strong acceleration and excellent fuel economy, benefiting both city and highway driving.

**Trim Levels and Features**: The RAV4 is available in several trims, including LE, XLE, XLE Premium, Limited, and Adventure, each offering unique features. The Adventure trim includes Dynamic Torque Vectoring AWD for enhanced handling, while the TRD Off-Road trim provides specialized off-road capabilities. Higher trims like the Limited and XSE offer premium features such as a 10.5-inch multimedia display and JBL Premium Audio system.

**Technology and Infotainment**: The RAV4 features a range of infotainment options, with standard Apple CarPlay, Android Auto, and Amazon Alexa compatibility. Higher trims offer a 10.5-inch multimedia display and JBL Premium Audio system. The vehicle also includes Toyota's Safety Connect and Service Connect for emergency assistance and vehicle locator services, enhancing connectivity and convenience.

**Safety Features**: Toyota Safety Sense 2.5 is standard across the RAV4 lineup, featuring Dynamic Radar Cruise Control, Lane Tracing Assist, and Road Sign Assist. Blind Spot Monitor with Rear Cross-Traffic Alert is available on higher trims, providing comprehensive safety coverage for driver and passenger protection.

**Drivetrain and Capabilities**: The RAV4 offers both front-wheel drive (FWD) and all-wheel drive (AWD) options. The AWD system includes Dynamic Torque Vectoring for improved traction and stability. The TRD Off-Road trim features a specialized suspension for enhanced off-road performance, making it suitable for adventurous driving conditions.

**Special Attributes**: The RAV4 stands out with its combination of fuel efficiency, advanced safety features, and off-road capabilities, particularly in the TRD Off-Road trim. It is ideal for families and individuals seeking a reliable and versatile SUV that can handle both urban and outdoor environments.

**Additiona Details**: The RAV4 is recognized for its strong resale value and brand reliability, thanks to Toyota's reputation. It offers a spacious interior with up to 69.8 cubic feet of cargo space, making it practical for everyday use and long trips. The vehicle's design and features cater to a wide range of consumer preferences, from efficiency-focused drivers to offroad enthusiasts.

## **Model Lineup**

The Toyota RAV4 is a compact crossover SUV designed for versatility and practicality. It features a rugged design with options for all-wheel drive and off-road capabilities, particularly in the TRD Off-Road trim. Known for its spacious interior, advanced safety features, and competitive fuel economy, the RAV4 is suitable for urban, suburban, and outdoor adventures.

Model Name	Engine	Power	Transmission	Key Features
RAV4	2.5L 4-cylinder	203 hp (gas), 219 hp (hybrid)	8-speed Automatic, ECVT (hybrid)	<ul><li>Dynamic Torque Vectoring AWD</li><li>Toyota Safety Sense 2.5</li><li>Spacious interior</li></ul>
RAV4 Hybrid	2.5L 4-cylinder with electric motors	219 hp	ECVT	<ul><li>Electronic All-Wheel Drive</li><li>Toyota Hybrid System II</li><li>Fuel efficiency</li></ul>
RAV4 Prime	2.5L 4-cylinder with electric motors	302 hp	ECVT	<ul><li>Plug-in hybrid capability</li><li>42 miles electric range</li><li>High performance</li></ul>

Trim Name	Highlights
LE	The LE trim offers essential features like fabric-trimmed seats and a 7-inch touchscreen, ideal for budget-conscious buyers seeking a reliable and efficient vehicle.
XLE	The XLE adds convenience features such as dual-zone climate control and a power liftgate, appealing to those who value comfort and practicality.
XLE Premium	This trim includes SofTex-trimmed seats and a moonroof, perfect for buyers looking for a touch of luxury without breaking the bank.
Adventure	Equipped with Dynamic Torque Vectoring AWD, the Adventure trim is designed for those who enjoy off-road excursions and rugged styling.
Limited	The Limited trim offers premium features like a JBL audio system and a digital gauge display, catering to buyers who want a fully equipped SUV.
TRD Off-Road	With off-road enhancements and TRD styling, this trim is ideal for adventure enthusiasts who frequently tackle rough terrains.
Hybrid Woodland	Featuring TRD-tuned suspension and unique styling, this hybrid trim is for eco-conscious buyers who also enjoy off-road capabilities.

## **Special Edition or Performance Models:**

- RAV4 Prime: This plug-in hybrid model offers 302 horsepower and an estimated 42 miles of electric-only range, making it the most powerful and efficient RAV4.
- TRD Off-Road: Enhanced with TRD-tuned suspension and off-road capabilities, this model is tailored for rugged adventures.

### Safety

The Toyota RAV4 is designed with a strong emphasis on safety, integrating advanced technologies and robust structural designs. It features high-strength steel and advanced crumple zones to absorb crash energy, enhancing occupant protection and driving confidence.

Euro NCAP 5/5 stars

5-star rating, indicating excellent performance in crash protection and safety assist technologies, with high scores in adult and child occupant protection.

NHTSA 5/5 stars

5-star rating, reflecting top-tier crashworthiness and overall safety performance.

**IIHS**Top Safety Pick+

Top Safety Pick+, the highest rating, indicating superior crash protection and advanced safety features.

The RAV4 is equipped with Toyota Safety Sense, a comprehensive suite of active safety technologies designed to prevent accidents and protect occupants. It includes features like pre-collision systems, lane tracing assist, and adaptive cruise control.

### **Active Safety Features**

- <u>Pre-Collision System with Pedestrian</u>
   <u>Detection</u> Detects potential frontal collisions and can apply brakes to avoid or mitigate impact.
- <u>Lane Departure Alert with Steering Assist</u> -Warns the driver of unintentional lane departure and provides steering assistance to stay in lane.
- <u>Dynamic Radar Cruise Control</u> Maintains a set distance from the vehicle ahead, adjusting speed as necessary.
- <u>Automatic High Beams</u> Automatically switches between high and low beams for optimal visibility.
- Blind Spot Monitor with Rear Cross Traffic <u>Alert</u> - Alerts the driver to vehicles in blind spots and approaching from the side when reversing.

#### **Passive Safety Features**

- <u>Airbags</u> Includes front, side, curtain, and knee airbags for comprehensive occupant protection.
- <u>Seat Belt Pretensioners</u> Automatically tightens seat belts to help hold the occupant in place during a collision.
- <u>Child Safety Seat Anchors (ISOFIX)</u> -Provides secure attachment points for child safety seats.
- Structural Reinforcements Crumple zones and side-impact beams to absorb and deflect crash energy.

Toyota's ADAS package aims to enhance driver awareness and reduce workload through features like adaptive cruise control and lane tracing assist, promoting safer and more convenient driving experiences.

- · Adaptive Cruise Control Automatically adjusts speed to maintain a safe distance from vehicles ahead.
- Lane Tracing Assist Helps keep the vehicle centered in its lane using steering assistance.
- Road Sign Assist Detects road signs and displays them on the instrument panel.
- <u>360-Degree Surround View</u> Provides a birds-eye view of the vehicle\u2019s surroundings for easier parking and maneuvering.

**Additional Safety Highlights**: Safety Connect provides emergency assistance, stolen vehicle locator, roadside assistance, and automatic collision notification.

**Safety Summary**: The Toyota RAV4 stands out with its comprehensive safety features, combining active and passive systems to protect occupants and prevent accidents. With top ratings from major safety organizations, it offers peace of mind through advanced technologies like Toyota Safety Sense, which includes pre-collision systems and adaptive cruise control. The vehicle's robust structural design, featuring high-strength steel and crumple zones, further enhances safety. These features collectively ensure that the RAV4 is well-equipped to handle real-world driving conditions, making it a reliable choice for safety-conscious buyers.

### Reliability

The Toyota RAV4 is known for its legendary reliability, particularly due to its naturally aspirated 4-cylinder engine. It is generally considered durable over time with good resistance to wear and tear, although some minor issues such as infotainment system glitches and electrical issues have been reported. Maintenance and repair costs are moderate compared to competitors.

<u>Warranty</u>				
Period	Includes	Excludes		
3 years/36,000 miles	Electrical components, hybrid systems	Wear items like brake pads and tires		
5 years/60,000 miles	Powertrain components			
10 years/150,000 miles	Hybrid components			
Extended Warranty				
Up to 8 years/125,000 miles	Engine, transmission, electrical systems	Wear items and routine maintenance		

The RAV4 has been subject to recalls for issues such as fuel pump failure, steering assist loss, suspension arm cracks, engine coolant leaks, back-up camera failure, and brake booster pump failure. These issues can affect vehicle safety and performance, requiring prompt attention.

Total Recalls
6

Major Recalls
2

**Consumer Experience**: Owners generally praise the RAV4 for its durability and reliability. However, there are some complaints about the infotainment system's responsiveness and occasional electrical issues. The interior is noted for its high-quality materials, although some find the dashboard layout less intuitive.

**Major Issues**: Official inspections have identified issues such as cracking sounds in the exhaust system, deceleration issues, and inadequate headlight performance. These are considered minor to moderate issues that may affect user satisfaction but are not typically safety-critical.

### Maintenance

The Toyota RAV4 Hybrid requires regular maintenance at predictable intervals, making it easy to plan for service. The vehicle benefits from ToyotaCare, which covers normal factory-scheduled maintenance for two years or 25,000 miles, whichever comes first. This plan also includes roadside assistance for two years, regardless of mileage. The maintenance schedule is straightforward, with regular oil changes and tire rotations, ensuring the vehicle remains in optimal condition.

Period	Inspection	
Every 10,000 miles or 12 months	Engine oil change, battery inspection	
Every 5,000 miles or 6 months	Tire rotation, brake inspection	

**Battery Maintenance**: The hybrid battery is covered under warranty for 10 years or 150,000 miles, whichever comes first, and this warranty is transferrable across ownership. Regular inspections of the hybrid battery are recommended annually to ensure optimal performance.

**Software Updates**: Software updates are performed as needed, ensuring that the vehicle's systems remain up-to-date. These updates may require a visit to the dealership, depending on the nature of the update.

**Other Important Maintenance**: Regular checks of the brake fluid level and engine/power control unit coolant level are recommended to maintain vehicle performance. These checks should be performed regularly to prevent any potential issues.

### **Fuel Efficiency**

The Toyota RAV4 is designed for efficiency and practicality, featuring both hybrid and traditional internal combustion engine options. The hybrid models offer significant fuel savings and reduced emissions, with CO\u2082 emissions as low as 22 g/km, making them an eco-friendly choice. The recommended fuel type is petrol, which supports the vehicle's efficient performance across different driving conditions.

Model Name	Engine	Body Type	Fuel Type	Consumption Combined	CO <sub>2</sub> Emissions
RAV4 V 2.0 AWD	2.0L 4-cylinder	SUV	Petrol (Gasoline)	6.2-6.4 l/100 km	142-145 g/km
RAV4 2.0 VVT-iE 2WD Dynamic	2.0L 4-cylinder	SUV/Crossover	Gasoline	7.1 l/100km	160 g/km
RAV4 2.5 Hybrid 2WD	2.5L 4-cylinder Hybrid	SUV	Hybrid / Petrol	5.6-5.8 l/100 km	126-130 g/km
RAV4 V Prime	2.5L 4-cylinder Plug-in Hybrid	SUV	Petrol / electricity	6.2 l/100 km	22 g/km

**Emissions Standard**: The RAV4 models comply with Euro 6d and Euro 6d-ISC-FCM emissions standards, ensuring they meet stringent environmental regulations.

Fuel Tank Capacity: The fuel tank capacity is generally 55 liters, providing a good range for long-distance travel.

Battery Powered Range: The RAV4 V Prime offers an electric-only range of 68 km, supported by a lithium-ion battery.

**Eco Features**: The RAV4 features various driving modes, including Eco and Sport, to optimize performance and efficiency. The hybrid models also include regenerative braking to enhance fuel economy.

**Owner Reports**: Owners report that the hybrid models deliver excellent fuel efficiency, often exceeding official figures, particularly in urban driving conditions.

## **Technology & Features**

The Toyota RAV4 features a comprehensive technology package that includes advanced driver assistance systems, a robust infotainment setup, and efficient powertrain options. Notable innovations include the Toyota Safety Sense suite, which offers a range of safety technologies, and the integration of a hybrid powertrain for enhanced fuel efficiency and performance.

**Infotainment**: The RAV4 is equipped with a range of infotainment options, starting with a standard 7-inch touchscreen, with higher trims offering an 8-inch or even a 10.5-inch display. It supports Apple CarPlay, Android Auto, and Amazon Alexa. Connectivity is enhanced with features like Wi-Fi Connect and dual Bluetooth phone connectivity. The premium JBL audio system is available on higher trims, providing a rich audio experience, while navigation and over-the-air updates are also offered on select models.

**Driver Aids Safety Tech**: The vehicle comes standard with Toyota Safety Sense 2.0, which includes features such as Pre-Collision System with Pedestrian Detection, Dynamic Radar Cruise Control, Lane Departure Alert with Steering Assist, and Automatic High Beam. Higher trims add Blind Spot Monitor, Rear Cross Traffic Alert, and Parking Assist with Automatic Braking. Advanced systems like Road Sign Assist and Lane Tracing Assist further enhance driving safety and convenience.

**Comfort Convenience Features**: Comfort features in the RAV4 include dual-zone automatic climate control, available heated and ventilated front seats, and SofTex-trimmed seating surfaces. The vehicle offers ample cargo space with 69.8 cubic feet available with the rear seats folded. Convenience is further enhanced with features like a power liftgate, Smart Key System, and remote start capabilities.

**Additional Highlights**: Unique features include the TRD Off-Road model's trail-focused suspension and off-road tires, as well as the hybrid model's Predictive Efficient Drive system that optimizes battery usage. Select trims offer a panoramic sunroof and premium audio systems, while future over-the-air updates may enhance vehicle functionality.

**User Impressions**: The RAV4's tech systems are generally user-friendly, with intuitive interfaces and minimal lag reported. The infotainment system's integration with smartphones is seamless, and the driver assistance features are praised for their reliability and effectiveness in real-world driving scenarios. Overall, the RAV4 is seen as a practical and technologically advanced choice in its segment.

## **Performance & Driving Experience**

The Toyota RAV4 is a versatile compact SUV that combines practicality with advanced technology. It features a range of powertrains including a plug-in hybrid model, offering impressive performance with a combination of gasoline and electric power. The vehicle is equipped with an 8-speed automatic transmission or a manual option, providing smooth and efficient driving experiences. The RAV4's design focuses on both urban and off-road capabilities, making it suitable for a variety of driving conditions.

Model Name	Acceleration 0-60 MPH	Acceleration 0-100 KPH	
RAV4	8.4 sec	9.9 sec	
RAV4 Hybrid	5.7 sec	N/A	
RAV4 Prime	5.5 sec	6.2 sec	

Braking Distance: 185 ft from 70-0 MPH

**Brake Performance**: The RAV4's braking system provides reliable stopping power, with a braking distance of 185 feet from 70 mph to 0, ensuring safety and control during emergency stops.

**Acceleration & Responsiveness**: The RAV4 offers responsive acceleration, particularly in the hybrid and plug-in hybrid models, which deliver quick power delivery for confident overtaking and merging on highways.

**Handling**: The RAV4 is equipped with Dynamic Torque Vectoring AWD in some trims, enhancing cornering stability and steering precision. The system adapts to various driving conditions, providing excellent handling.

**Ride Comfort**: The RAV4's suspension is tuned to balance comfort and sportiness, offering a smooth ride on both city streets and rougher terrains. The TRD Off-Road model features enhanced suspension for better off-road performance.

**Driving Modes**: The RAV4 includes multiple driving modes such as Eco, Sport, and Trail, allowing drivers to adjust the vehicle's performance based on their preferences and driving conditions.

**Real World or Test Drive Impressions**: Owners and reviewers praise the RAV4 for its smooth ride and comfortable interior. The hybrid models are noted for their fuel efficiency and quiet operation, while the plug-in hybrid model stands out for its powerful acceleration and electric-only driving capability.

## **Design & Comfort**

The Toyota RAV4 is designed with a rugged and modern aesthetic, featuring a bold grille and sharp lines, emphasizing both style and practicality. Its design philosophy caters to families and individuals seeking a reliable and versatile SUV with a focus on comfort and usability across urban and off-road environments.

**Exterior Design Highlights**: The RAV4's exterior features include LED headlights, a bold grille, and dynamic lines that enhance its rugged look. It also offers practical elements like a power liftgate and a design that facilitates easy entry and exit, making it user-friendly for various lifestyles.

**Interior Comfort Quality**: Inside, the RAV4 offers a premium feel with options for SofTex-trimmed seats, power-adjustable features, and dual-zone automatic climate control. The dashboard is designed with soft-touch materials and intuitive controls, providing a comfortable and ergonomic experience for both driver and passengers.

**Space Practicality**: The RAV4 boasts ample legroom and headroom, with a spacious cargo area that can be expanded by folding the rear seats nearly flat. This makes it suitable for carrying large loads or accommodating family needs. Storage solutions like a large console and side-by-side cup holders add to its practicality.

**Unique Design Elements**: Unique features include a panoramic glass roof in higher trims, and a variety of color options including two-tone schemes. The RAV4 also offers advanced climate controls and a Smart Key System for added convenience.

**Real World Impressions**: Users appreciate the RAV4 for its spacious interior and comfortable ride quality, though some note that the infotainment system can be slow. The vehicle's design allows for good visibility and ease of maneuverability, making it a practical choice for daily driving and long road trips.

## Conclusion

### **Recaps Major Points:**

- Advanced safety features with Toyota Safety Sense 2.0, including Pre-Collision System, Lane Departure Alert, and Dynamic Radar Cruise Control.
- Good fuel economy, especially in hybrid variants, with a combined output of up to 306 horsepower for the plug-in hybrid model.
- Spacious interior with ample cargo space and comfortable seating, offering up to 69.8 cu. ft. of cargo capacity.
- Versatile performance with options for all-wheel drive and driving modes like Eco, Sport, and Trail for different conditions.
- Comprehensive infotainment system with options for JBL audio, Apple CarPlay, and Android Auto connectivity.

### **Potential Drawbacks or Considerations:**

- Infotainment system can be sluggish at times, which may affect user experience.
- Engine noise can be noticeable during highway driving.
- Limited towing capacity compared to some competitors.
- Some optional features, like a panoramic glass roof, are only available on higher trims, potentially increasing cost.

**Buyer Alignment**: The RAV4 is ideal for families and individuals seeking a reliable, versatile SUV that offers a balance of comfort, efficiency, and safety. Its hybrid options make it particularly appealing to eco-conscious buyers.

**Overall Verdict**: The Toyota RAV4 is a strong choice for those looking for a dependable and efficient SUV with advanced safety features and a spacious interior. While some may find its infotainment system sluggish, its overall package of features and Toyota's reputation for reliability make it a compelling option in its class.