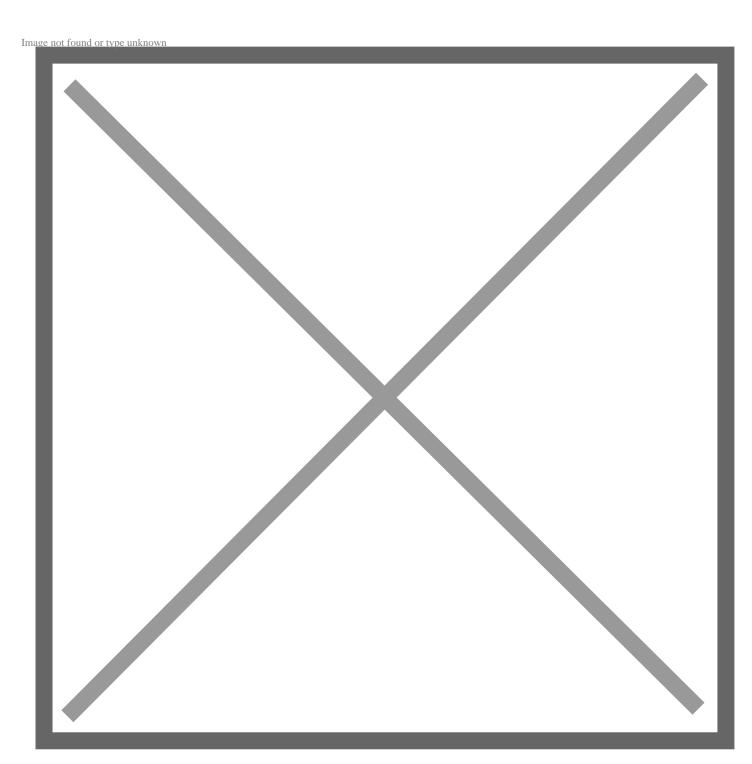
# 2016 Toyota Highlander: Leader of the Midsize Crossover Pack

September 23, 2015



The Toyota Highlander started the midsize crossover SUV category 15 years ago, so it had a head start on becoming a benchmark. The third-generation model, now entering its third year, offers room for up to eight, a choice of three powertrains and four model grades. It all adds up to the ideal family vehicle.

The Highlander didn't need much to get even better for 2016, but Toyota went ahead and made the towing package standard on all V6 models. The package includes a heavy-duty radiator with engine oil cooler, 200-watt fan coupling, supplemental transmission oil cooler and 150-amp alternator and allows the V6 models to tow a trailer up to 5,000 pounds. Other powertrain choices include a 2.7-liter 4-cylinder in the LE front-drive model, and Hybrid Synergy Drive with 280 total system horsepower. The four-cylinder and the V6 are both teamed with a six-speed automatic transmission.

The Highlander is sized for families with up to 158.7 cu. ft. total cabin volume. That includes 13.8 cu. ft. with the third seating row in use — a 34-percent increase over the previous generation (2013 model). With the 60/40 split fold-flat third-row seats lowered, cargo space expands up to 42.3 cu. ft. and then up to 83.7 cu. ft. with the 60/40 split fold-flat second row also lowered.

The second row offers bench seating for three, or two captain's chairs featuring a collapsible side tray with cup holders. Entering the third-row is easy using a one-step second-row sliding seat function on both driver and passenger sides. Third-row passengers get a standard recline function. But should those in the "way-back" need some occasional corrective instruction, there's no need to shout from the front. Driver Easy Speak (standard on XLE and Limited grades) works like a high-tech bullhorn, using a microphone to carry the driver's or co-pilot's voice through the audio system's rear speakers.

## For Families That Travel in Style

The Highlander's design turns heads, but not at the expense of function. There's excellent visibility in all directions, from all three rows. And it's a hushed cabin, too, thanks to acoustic-type glass used for the windshield that helps keep outside noise where it belongs – outside. The most insulation coverage ever applied in a Highlander ensures a serene ride for all.

Three hydraulic engine mounts, expanded coverage of the dash silencer and enhanced body sealing all help to dampen vibration. The available panoramic moonroof was designed to reduce wind noise, even when it's open.

#### A Luxury Look, with Everyday Utility

The quietness sets the stage for the premium feel throughout the Highlander cabin. High quality materials and extensive standard equipment underscore the renowned Toyota value. A soft-touch instrument panel and silver-painted, satin, and chrome-plated accents throughout the interior convey a near-luxury feel.

Seating coverage choices start with premium fabric and also include available smooth or perforated leather. The LE Plus grade and above feature contrast stitching for the seats, and on the Limited grade, wood-grain pattern trim on the dash and doors adds a touch of elegance. A high quality knit headliner and available second-row sunshades (on XLE and Limited) are reminiscent of a luxury vehicle.

A cabin highlight is the massive roll-top center console, which provides a comfortable armrest easily shared by the driver and front passenger – no arm-wrestling match needed. The console box is big enough to hold a very large handbag. An LCD Multi-Information Display within the gauge cluster puts vital information in the driver's line of sight. It's a 3.5-inch black and white screen in the LE and LE Plus grades and a 4.2-inch color screen in XLE and Limited.

#### **Power to the Parents**

The LE front-wheel drive model's standard 185-horsepower 2.7-liter four-cylinder engine uses Variable-Valve

Timing with intelligence (VVT-i) for a thick torque curve. It's teamed with a six-speed electronically controlled automatic transmission, and the combination yields EPA-estimated fuel economy ratings of 20 mpg city/25 mpg highway/22 mpg combined.

All other gas grades come with a 3.5-liter V6 equipped with dual Variable-Valve Timing with intelligence (VVT-i). The silky-smooth V6 generates 270-horsepower at 6,200 RPM and 248 lb.-ft. of torque at 4,700 RPM. It's likewise teamed with a six-speed automatic transmission, this version offering selectable manual sequential shifting. Fuel economy is EPA-rated at 19 mpg city/25 mpg highway/21 mpg combined on FWD models and 18/24/20 for AWD.

The stiff body structure, combined with finely tuned MacPherson strut front suspension and double-wishbone rear suspension, deliver the best-ever ride quality in a Highlander, and electric power steering contributes to the more dynamic character. Highlander rolls on standard 18-inch alloy wheels with 19-inch alloys standard on the Limited grade.

## **Dynamic Torque Control All-Wheel Drive (AWD)**

Driving a family crossover, nobody wants to have to think much about all-wheel drive capability; they just need it to work when needed to get the vehicle through slippery weather, snow and the occasional muddy trail. Dynamic Torque Control AWD for the Highlander helps do just that.

The system takes input from various sensors (vehicle speed, steering speed and angle, throttle angle and yaw rate) to actively govern torque distribution to the rear wheels via an electromagnetically controlled coupling in the rear differential. Dynamic Torque Control automatically shifts to AWD when accelerating to help prevent front wheel slippage, or when sensors detect wheel slippage, varying front to rear torque distribution 100:0 to 50:50. Then, under normal cruising conditions, it engages front-wheel drive to help reduce fuel consumption. An AWD LOCK switch holds the 50:50 torque split for certain low-speed driving situations in challenging conditions. And you see it all happening in real time on the multi-information display, which shows torque-distribution info.

A sophisticated, high-speed interactive management system coordinates control of the Dynamic Torque Control AWD, Vehicle Stability Control (VSC) and Electric Power Steering systems to enhance performance, handling and safety.

## **Highlander Hybrid: High Power, High Fuel Efficiency**

Toyota set out to become the hybrid leader nearly 20 years ago, and it has succeeded. The Highlander Hybrid is one of six hybrid models Toyota offers (plus another six in the Lexus luxury family). Available exclusively in the Limited grade, the Highlander Hybrid is equipped with standard electronic on-demand all-wheel-drive with intelligence (AWD-i).

The Highlander Hybrid impresses with power and efficiency. In fact, it's the most powerful Highlander, with 280 total system horsepower from a Hybrid Synergy Drive system that pairs a 3.5-liter V6 gasoline engine with a high-torque electric drive motor-generator. And it's the most fuel-efficient Highlander, too, with EPA-estimated 27 mpg city/28 mpg highway/28 mpg combined fuel economy.

#### **Making the Grade**

The 2016 Highlander starts with the high-value LE grade and progresses to the LE Plus with added equipment. Next comes the XLE with more amenities and then the top-of-range Limited with luxuries including heated and ventilated front seats, available heated second-row captain's seats and a heated steering wheel (on the Platinum Package).

Toyota made the LE and LE Plus grades mono-spec, offered with no option packages. The standard equipment rosters are quite extensive, with the LE featuring:

- 18-inch alloy wheels
- Entune<sup>®</sup> Audio featuring a 6.1-inch touchscreen
- Bluetooth® phone and music streaming;
- an integrated backup camera
- Seating for eight with second- and third-row 60/40 split fold-flat seats
- Heated side mirrors with turn signal indicators
- Ample storage compartments including a massive roll-top center console
- In-dash shelf with easy access to power and USB ports
- Windshield wiper de-icer, and much more.
- Tow Package on V6 models

The "Plus" for the LE Plus grade means:

- Fog lights
- A height-adjustable power rear liftgate with flip-up rear hatch window
- 8-way power driver seat with lumbar support
- Entune Audio Plus with SiriusXM Satellite Radio and HD radio featuring an 8-inch display monitor
- Three-zone automatic climate control
- Leather-wrapped steering wheel and shift knob

The XLE grade edges the Highlander into luxury territory with:

- Leather-trimmed seats
- Heated front seats
- Smart Key with push button start
- Tilt-slide moonroof
- Driver Easy Speak
- Second-row integrated sun shades
- Chromtec<sup>®</sup> roof rails
- 4.2-inch color multi-information display
- Anti-theft system
- Homelink<sup>®</sup>

The XLE's standard Entune Premium Audio with Navigation and App Suite features an 8-inch touch screen display. The Highlander XLE offers the option of seating for seven with second-row captain's chairs, and a Bluray<sup>®</sup> DVD rear-seat entertainment system is also available.

# **The Highlander Reaches New Heights**

There's no mistaking the added luxury in the Highlander Limited. The design goes even further uptown with 19-inch Chromtec<sup>®</sup> alloy wheels and LED daytime running lights. Inside, ambient lighting around the dash and doors adds a touch of high-tech elegance, and numerous amenities raise the comfort quotient considerably. Seating for seven includes second-row captain's chairs, perforated leather-trimmed seats, heated and ventilated front seats, a 4-way power passenger seat and memory settings for the driver seat and side mirrors.

Safety technology features include Blind Spot Monitor with Rear Cross-Traffic Alert and rear parking sonar, while entertainment is upgraded with Entune Premium JBL® Audio with Navigation and App Suite. There are three option packages available to take the Highlander Limited (gas or Hybrid) higher still. One is a Bluray DVD rear-seat entertainment system. Second is the Driver Technology Package which adds more safety

#### features, including:

- Safety Connect (Emergency Assistance, Stolen Vehicle Locator, Roadside Assistance and Automatic Collision Notification. Available by subscription.)
- Pre-Collision System with Dynamic Radar Cruise Control
- Lane Departure Alert with Automatic High Beam Headlights

Adding the Platinum Package takes Highlander to the top with the Driver Technology Package plus a panoramic moonroof, heated steering wheel and heated second-row captain's chairs and, newly added for 2016, rainsensing windshield wipers.

#### **Safety Star**

All 2016 Highlanders have eight standard airbags and, like every 2016 Toyota, the Star Safety System<sup>™</sup>, which includes Enhanced Vehicle Stability Control, Traction Control, Electronic Brake-force Distribution, Brake Assist, Anti-lock Braking System, and Smart Stop Technology. All Highlanders also come equipped with a standard backup camera and Hill-start Assist Control.

Toyota Motor Manufacturing, Indiana (TMMI) in Princeton, Ind., which employs over 4,000 American workers, assembles all Highlanders and exports them to 12 countries.

## **Limited Warranty**

Toyota's 36-month/36,000 mile basic new-vehicle warranty applies to all components other than normal wear and maintenance items. Additional 60-month warranties cover the powertrain for 60,000 miles and corrosion with no mileage limitation. The hybrid-related components, including the HV battery, battery control module, hybrid control module and inverter with converter, are covered for eight years/100,000 miles, whichever comes first.

The Highlander also comes standard with Toyota Care, a complimentary plan covering normal factory-scheduled maintenance and 24-hour roadside assistance for two years or 25,000 miles, whichever comes first.