



## Freightliner Trucks Pushes Innovation with New Cascadia

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Emphasis on efficiency, driver experience drove development

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**COLORADO SPRINGS, COLO. – September 1, 2016** – The new Freightliner Cascadia® unveiled today, is the most advanced truck Freightliner has ever designed, and will further lower the Real Cost of Ownership<sup>SM</sup> (RCO) for customers.

“The original Freightliner Cascadia set unprecedented standards for aerodynamic, lightweight and maintenance-reducing features,” said Richard Howard, senior vice president of Sales and Marketing for Daimler Trucks North America. “Then, the debut of the Cascadia Evolution unleashed powerful fuel-efficiency enhancements for Freightliner customers.”

Continued Howard: “With the new Cascadia, we have not just updated past successes. Every aspect of the truck has been re-imagined. We are raising fuel efficiency, connectivity, safety, quality and uptime performance to even greater levels, and also introducing a premium driver experience as a powerful customer benefit and driver retention tool. Every element of the vehicle was examined and developed with an RCO-centric approach.”

Freightliner leveraged the global expertise of parent company Daimler AG, as well as conducted hundreds of hours of testing in Daimler Trucks North America’s (DTNA) proprietary, state-of-the-art wind tunnel and millions of miles of real-world on-highway testing, to evaluate and design the new Cascadia.

“Many of the new Cascadia enhancements are the direct result of feedback from customers, dealers, service technicians and historical data,” said Howard.

### Powering Efficiency

When developing the new Cascadia, engineers set a priority goal of achieving significant fuel savings over the already industry-leading Cascadia Evolution by conducting robust testing, research and development.

The new Cascadia is available with the integrated Detroit™ Powertrain, which combines the fuel-efficient downsized 400 hp/1,750 lb/ft. of torque Detroit™ DD15® or Detroit™ DD13® engines with the Detroit™ DT12™ automated manual transmission, Intelligent Powertrain Management (IPM4) and corresponding Detroit™ steer and rear tandem axles. The new Detroit rear axles have features such as lower sump volume, gear-set coating, friction reducing gear cutting and optional Axle Lubrication Management that reduces parasitic loss and improves fuel economy.

The new DT12 has also been updated to improve fuel efficiency and reduce friction by using super-finished gears and use of low viscosity transmission oil. It also features the latest generation of intelligent powertrain management (IPM4), which uses a GPS-based system to anticipate upcoming road terrain and maximize the powertrain’s ability to utilize fuel most effectively.

“By combining advanced aerodynamics of the new Cascadia with the power of the high-performance, high-efficiency integrated Detroit Powertrain we will help customers get the most out of every gallon,” said Howard. “We have provided an optimized, one-stop fuel efficiency solution.”

### **World-Class Aerodynamic Design**

The new Cascadia has a fresh, aerodynamic shape with dozens of sleek new updates, selected specifically to push fuel efficiency to the next level.

“When you take a look at the new Cascadia, you’ll first note its modern lines and refined styling,” said Howard. “But take a closer look, and you’ll see the attention that was given to every detail of the truck to create an aerodynamic vehicle that will reap bottom line benefits for our customers.”

Standard enhancements such as an upper door seal, elliptical-shaped mirrors, sloped hood, bumper with integrated air deflector and integrated antennas all minimize drag. The optional Aero and AeroX packages provide additional aerodynamic benefits to manage airflow, including longer side extenders, lower chassis fairings, drive wheel covers and proprietary-designed wheel fairings.

### **Focusing on the Driver Experience: Inside and Out**

The interior of the new Cascadia has received more attention than any previous Freightliner truck.

“Now more than ever, driver satisfaction, safety and comfort are essential to our customers’ success. Giving drivers a vehicle they are proud to operate – one with the latest safety features, productivity enhancements and creature comforts – was a priority,” said Howard.

The new Cascadia is loaded with improvements ranging from the layout of the gauges and switches in the driver compartment to features inside the sleeper area, including a new Driver’s Loft configuration.

Steering and handling have been improved with the driver in mind. A new front suspension provides a smoother ride and improved roll stiffness, and the steering gear is now located further forward to help improve steering precision and ultimately lead to less driver fatigue.

The ergonomically designed wraparound dashboard includes switches and steering wheel controls which allow drivers to work without leaning and stretching. In the instrument cluster, digital smart gauges and information displays keep drivers informed as they drive.

The original Cascadia is one of the quietest trucks on the road; the new Cascadia is even quieter, thanks to new noise abatement technology. To further improve the truck’s interior sound level, Freightliner engineers have developed an optional insulation package using 3M Thinsulate™ technology. Additionally, a new engine mount design provides better vibration isolation and the engine tunnel cover is now constructed using Quiet Steel® technology.

Noted Howard: “Professional drivers can spend more than 100 hours in the cab during an average work week, and the environment needs to be friendly and inviting both on the job and during downtime.”

Available in a variety of cab configurations, the new Cascadia is all about customizable living-space options that address the realities of professional drivers while they’re on the road. The sleeper area has been redesigned to include more cabinets, as well as larger spaces that can accommodate standard appliances. For entertainment, a television swivel bracket can hold up to a 26” flat panel TV for movie-theater-like viewing. Double-bunk and Driver Loft options are also available. A new cargo shelf option allows drivers to store containers or duffle bags easily. If an upper bunk is spec’d, it will come standard with an easily released telescoping ladder, making getting into the upper bunk a breeze.

A game-changer in sleeper design and options, the Driver’s Loft features a dinette table/work table and opposing seating with seat belts. These can be folded down flat quickly to allow for a murphy-style bed to swing down. The Driver’s Loft also comes standard with aircraft-inspired LED ambient lighting and dimmer switch so drivers can personalize their light levels.

### **Designed for Uptime**

Freightliner master technicians inspected and rated every single component on the truck for ease of serviceability and maintenance improvement recommendations.

New splayed frame rails create more room in the engine compartment to allow technicians easy access for maintenance tasks, and most

electronic control units are now stored securely in the cab in the new eVault for easier convenience and protection from the elements. In front of the eVault is the fuse and relay box which is easily accessible with no hand tools needed. To increase dash component accessibility, the dash panel was designed to be easily removed. Additionally, the standard two-piece front bumper of the Cascadia can be quickly removed within two minutes.

Further enhancements to serviceability will pay uptime dividends over the life of the truck. An updated, larger, engine air filter increases airflow and requires less frequent replacement intervals. Standard, interior and exterior LED lights further add to the Cascadia's ease of maintenance.

"The original Cascadia is already one of the best-built trucks on the road today, and routine maintenance is always recommended," said Howard. "With the new Cascadia, improved serviceability means less time in the shop and getting back on the road faster."

### **Delivering Safety**

"Safety is built into the fiber of everything we do," said Howard. "It's a critical concern for us, for our customers, and our trucks are designed to help drivers and other motorists on the road."

Using a full LED system, the Cascadia's innovative new headlights incorporate LEDs in the low beam, high beam, daytime running lamp, park lamp and turn signal lamp. The LED provides an impressive field of view in nighttime and bad weather conditions, which enables drivers to better distinguish objects in the road as well as reduce eye strain.

The new, one-piece windshield design increases wiper coverage by 12 percent over the current Cascadia, and is specially constructed to provide increased resistance to breakage. Both the one-piece windshield and one-piece door glass provide an unobstructed view to the mirror and road.

The optional Detroit™ Assurance 4.0 suite of safety systems includes Active Brake Assist that now provides full braking on stationary objects, Adaptive Cruise Control and Lane Departure Warning with optional video capture. This proprietary safety suite includes driver-friendly controls and is seamlessly integrated into the truck's dashboard, engine and transmission electronics and can enhance driver safety by mitigating collisions.

Detroit Assurance safety event reporting can be accessed using Detroit™ Connect Analytics, which will be available to customers starting in Q1 2017. Safety event reporting available through Analytics can be viewed using the new Detroit Connect portal, informing fleet managers and further enhancing driver safety performance.

### **Connected Performance**

"A connected vehicle is the gateway to accessing and understanding the full performance potential of the vehicle and improving daily operations," said Howard. "The ability to capture, transmit and analyze data directly from vehicles empowers our customers and can help them dramatically improve efficiency and have an immediate impact on the bottom line."

Customers will benefit from the proprietary connectivity platform introduced by Detroit exclusively for the new Cascadia. The new platform will facilitate the delivery of current Detroit Connect features, such as Virtual Technician™ remote diagnostic service, as well as new features designed to provide deeper insights on fuel efficiency and safety performance. The introduction of the new platform also marks the debut of Detroit Connect Remote Updates which enables over-the-air engine parameter programming and Detroit-initiated remote engine and other powertrain electronic controller firmware updates. Remote Updates features will be available to customers during the second half of 2017.

Also available as an option with the new Cascadia, Detroit Connect Analytics provides users with on-demand, automated fuel efficiency and safety analysis and reports featuring key insights from Detroit and DTNA engineers.

The connectivity platform will be available with start-of-production of the new Cascadia in January 2017. A five-year standard base package includes Virtual Technician, access to the new Detroit Connect portal, and later in 2017, Remote Updates.

Detroit Connect Analytics will be available within different service option packages with the new Cascadia, one that will deliver the fuel efficiency features only and one that will include both fuel efficiency and safety features. Detroit Connect Analytics will be available for use with the new Cascadia beginning Q1 2017.

Noted Howard: "We focused on the priorities identified by drivers, fleet managers and technicians. The new Cascadia was inspired by science

and driven by passion, ultimately creating a new standard for on-highway vehicles.”

For more information, go to [www.Freightliner.com](http://www.Freightliner.com).

Freightliner Trucks is a division of Daimler Trucks North America LLC, headquartered in Portland, Oregon, and is the leading heavy-duty truck manufacturer in North America. Daimler Trucks North America produces and markets Class 5-8 trucks and is a Daimler company, the world’s leading commercial vehicle manufacturer.