

# AAA CENTER FOR DRIVING SAFETY & TECHNOLOGY





#### **INFOTAINMENT SYSTEM\* DEMAND RATING**

#### **Moderate Demand**



The 2018 Chevrolet Silverado 1500 MyLink® infotainment system placed moderate demand on drivers in the study. Voice commands placed moderate levels of demand on drivers when used to make phone calls and tune the radio.

# Standard and Optional Features in the 2018 Chevrolet Silverado 1500

O Optional Standard	WT	LS	LT	LT Z71	High Country
Android Auto	•	•	•	•	•
Apple CarPlay	•	•	•	•	•
Mobile App Support			•	•	•
Text Messaging			•	•	•
Navigation			0	0	•
Touch Screen	•	•	•	•	•
Gesture Control					
Heads-Up Display					
Voice Commands	•	•	•	•	•
Console Control					

## **ABOUT THE STUDY**

Researchers evaluated 40 new 2017/2018 vehicles' infotainment systems\* to measure overall demand\*\* placed on a driver when using voice command, touch screen and other interactive technologies to make a call, send a text message, program audio entertainment or program navigation, all while driving down the road.

# **STRENGTHS**

- The voice command system helped to minimize visual (eyes-off-road) attention.
- Generally, interactions can be completed in a short amount of time, aided by quick processing and return time.

# **WEAKNESSES**

- Drivers can access the full contact list and keypad while the vehicle is in motion.
- Center stack audio entertainment tasks required very high levels of cognitive (mental) demand.

<sup>\*</sup> Infotainment System: Vehicle system that combines entertainment and information content.

<sup>\*\*</sup> Overall demand measured: visual (eyes-off road), cognitive (mental) and time-on-task.

# VEHICLE OVERVIEW: CONTROLS AND DISPLAYS





**VOICE COMMANDS** 



STEERING WHEEL COMMANDS



**INSTRUMENT CLUSTER** 



**CENTER STACK** 

# **INFOTAINMENT SYSTEM**

The MyLink® In-Vehicle Infotainment System offers the following features:

# **CALLING AND DIALING**







A driver's phone can be paired to the 2018 Chevrolet Silverado MyLink® via a Bluetooth connection. The driver will be auto-directed to the touch screen to complete the pairing process when attempting to use voice commands to pair. Pairing can be initiated on the touch screen through either the phone menu or settings menu. When the vehicle is in motion, the touch screen and voice command system allow users to dial numbers and place calls to stored contacts. Steering wheel functionality allows access to pre-programmed favorites and the full contact list.

The MyLink® infotainment system required high demand when using the center stack for calling and dialing tasks, generating very high levels of cognitive (mental) and visual (eyes-off-road) demand for an average of 19 seconds. The full contact list and keypad are accessible while the vehicle is in motion, increasing cognitive and visual demand levels. Researchers‡ noted that features, such as a disappearing menu ribbon, a lack of an obvious "call in progress" screen and small font sizes, may have contributed to the cognitive and visual demand necessary to interact with the system.

Voice command interactions imposed moderate demand on drivers, with tasks requiring an average duration of approximately 20 seconds. Researchers noted high cognitive demand was required to complete the two-step phone call process, which may have been caused by slow playback speed when confirming dialed numbers. This required the user to stay engaged in a task and less focused on driving, more so than if the system were to read the number back at a normal pace.

#### **AUDIO ENTERTAINMENT**







The 2018 Chevrolet Silverado MyLink® infotainment system provides access to FM, AM and XM radio; CD; Bluetooth; auxiliary and two USB connections. These features are all accessible via the voice command system, the touch screen and the steering wheel.

High demand was generated when engaging in center stack audio entertainment tasks, with very high levels of cognitive and visual demand for an average of 16 seconds. The screens for audio functions, researchers; noted, are often crowded with a lot of visual information.

Similar to phone functions, voice commands geared toward audio entertainment functions generated moderate overall demand on drivers. Cognitive demand was high due to relatively inflexible commands and inconsistencies in system accuracy, as users frequently had to say the command multiple times for correct interpretation, according to researchers‡. Otherwise, this system had moderate visual demand requirements and required an average interaction length of 17 seconds<sup>§</sup>.

<sup>\*</sup> Infotainment System: Vehicle system that combines entertainment and information content.

<sup>©</sup> Compared to a recommended maximum of 24 seconds.

<sup>‡</sup> Researchers with expertise about how humans interact with technology evaluated the usability of the infotainment system in stationary vehicles.

# **VEHICLE CONTROLS AND DISPLAYS**

### **VOICE COMMANDS**



The 2018 Chevrolet Silverado LT comes equipped with a voice command system that provides access to phone functions and audio entertainment. A natural-paced, female voice prompts the driver — "Command please" — upon activation using the designated button located on the steering wheel. Drivers can interact with the voice command system by speaking directly to it or by navigating the active cluster display using the steering wheel buttons. An extensive help menu, as well as lists of acceptable commands for phone and audio entertainment functions, can be accessed by the user after activation.

#### **INSTRUMENT CLUSTER**



The instrument cluster located behind the steering wheel features a 4.2-inch full color display, which drivers can control using buttons on the right side of the steering wheel. The cluster display contains a range of options of vehicle information including speed, RPM, battery life, engine temperature, fuel gauge and oil life.

#### STEERING WHEEL CONTROLS



The steering wheel contains 15 buttons on the front and back side that provide access to a variety of functions. On the front of the steering wheel, five buttons in a circular arrangement control the forward display, providing access to phone, navigation and audio entertainment. These buttons are accompanied by voice command activation and phone hang-up controls. Four buttons on the left side of the steering wheel provide access to cruise control functions. Each side of the steering wheel has two hidden up/down buttons located on the back of the steering wheel. Hidden buttons on the left seek through radio presets and media selection, while buttons on the right adjust audio volume.

#### **CENTER STACK**



The center stack is equipped with an 8-inch, full-color touch screen and nine physical buttons, two of which are dials located below the touch screen. The MyLink® home screen is organized into two rows of large, square tiles that provide the user access to audio, phone, projection (Apple CarPlay/Android Auto), OnStar and OnStar Navigation, settings, text messages and shopping functions.

Audio entertainment functions can also be accessed through the manual interface by use of the radio and media buttons and the seek/skip options, volume knob (which doubles as audio on/off) and the tuning knob located directly below the touch screen. A user can also navigate through menus and make selections with the physical controls by using the tuning knob as a scrolling wheel and selection button, in conjunction with the manual home and back buttons.

# **VEHICLE SALES SUMMARY**

The 2018 Chevrolet Silverado pickup truck is the second bestselling vehicle in the United States, with 585,864 sold during 2017 (up to November).§